OECD Economic Surveys
COLOMBIA

OCTOBER 2019

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OECD Economic Surveys: Colombia 2019

BETTER POLICIES FOR BETTER LIVES

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Please cite this publication as:
OECD (2019), *OECD Economic Surveys: Colombia 2019*, OECD Publishing, Paris,
https://doi.org/10.1787/e4c64889-en.

ISBN 978-92-64-65664-2 (print)
ISBN 978-92-64-40645-2 (pdf)

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

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This Survey was prepared for the Committee by Alberto González Pandiella and Paula Garda under the supervision of Piritta Sorsa. Statistical research assistance was provided by Marnix Dek and editorial assistance by Carolina González. The Survey also benefited from contributions from Andrew Chapman, Julien Gourdon, and Daniela Rodríguez in Chapter 1 and Veerle Miranda as a co-author in Chapter 2.

The Survey was discussed at a meeting of the Economic and Development Review Committee (EDRC) on 29 November 2018 and is published on the responsibility of the Secretary-General of the OECD.

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Basic statistics of Colombia, 2018

(Numbers in parentheses refer to the OECD average)*

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	48.3		Population density per km² (2017)	44.2	(35.6)
Under 15 (%, 2017)	23.4	(17.9)	Life expectancy (years, 2017)	74.6	(80.7)
Over 65 (%, 2017)	7.6	(16.8)	Men	71.0	(78.1)
			Women	78.2	(83.4)
Latest 5-year average growth (%)	0.5	(0.6)	Latest general election	June 2018	
ECONOMY					
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	331.5		Primary sector	6.9	(2.5)
In current prices (trillion COP)	978.5		Industry including construction	29.4	(27.0)
Latest 5-year average real growth (%)	2.7	(2.3)	Services	63.7	(70.5)
Per capita (000 USD PPP)	15.3	(45.8)			
GENERAL GOVERNMENT					
Per cent of GDP					
Expenditure	27.4	(40.6)	Gross financial debt (OECD: 2017)	52.6	(112.3)
Revenue	25.2	(40.2)	Net financial debt (OECD: 2017)	36.2	(69.8)
EXTERNAL ACCOUNTS					
Exchange rate (COP per USD)	2 951.3		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	1 322.2		Mineral fuels, lubricants and related materials	57.9	
In per cent of GDP			Food and live animals	12.1	
Exports of goods and services	15.9	(56.2)	Chemicals and related products, n.e.s.	7.7	
Imports of goods and services	20.8	(52.0)	Main imports (% of total merchandise imports)		
Current account balance	-3.9	(0.3)	Machinery and transport equipment	33.9	
Net international investment position	-46.4		Chemicals and related products, n.e.s.	20.3	
			Manufactured goods	15.6	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate for 15-64 year-olds (%)	66.4	(68.4)	Unemployment rate, Labour Force Survey (age 15 and over) (%)	9.7	(5.3)
Men	78.6	(76.0)	Youth (age 15-24, %)	19.7	(11.1)
Women	54.6	(60.9)	Long-term unemployed (1 year and over, %)	0.9	(1.5)
Participation rate for 15-64 year-olds (%)	73.8	(72.4)	Tertiary educational attainment 25-64 year-olds (%, 2017)	22.5	(36.5)
Average hours worked per year	2 236	(1 734)	Gross domestic expenditure on R&D (% of GDP, 2017)	0.2	(2.4)
ENVIRONMENT					
Total primary energy supply per capita (toe, 2016, OECD: 2017)	0.8	(4.1)	CO_2 emissions from fuel combustion per capita (tonnes, 2016)	1.8	(9.0)
Renewables (%, 2016, OECD: 2017)	24.1	(10.2)	Water abstractions per capita (1 000 m³, 2012, OECD: 2016)	0.8	(0.8)
Exposure to air pollution (more than 10 μg/m³ of PM2.5, % of population, 2017)	93.2	(58.7)	Municipal waste per capita (tonnes, 2015, OECD: 2017)	0.2	(0.5)
SOCIETY					
Income inequality (Gini coefficient, 2017)	0.476	(0.317)	Education outcomes (PISA score, 2015)		
Relative poverty rate (%, 2017)	19.3	(11.8)	Reading	425	(492)
Median gross household income (000 USD PPP)[a]	6.3	(23.3)	Mathematics	390	(490)
Public and private spending (% of GDP)			Science	416	(493)
Health care (2017)	7.2	(8.8)	Share of women in parliament (%)	18.1	(29.7)
Pensions (OECD: 2015)	3.5	(8.5)	Net official development assistance (% of GNI, 2017)	-0.3	(0.4)
Education (primary, secondary, post sec. non tertiary, 2016)	4.0	(3.5)			

* The year is indicated in parenthesis if it deviates from the year in the main title of this table. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

a. Data refers to a preliminary value of the median gross (i.e. before subtracting taxes) household income for Colombia from 2015-16. Data refers to the median disposable (i.e. net of taxes) household income for the OECD for 2016.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, UNESCO, UN Comtrade, World Bank, IMF and Inter-Parliamentary Union, DGPM - Ministerio de Hacienda y Crédito Público, DANE, Banco de la República.

Executive summary

Growth is firming up

Growth has been resilient and poverty and informality have fallen. Thanks to sound and credible macroeconomic policies, adjustment to the large oil price shock of 2015-16 has been smooth. Education and social policies have improved social outcomes. Yet, challenges remain to maintain performance and further improve living standards. Productivity growth has followed a declining trend and the still high level of informality is a major economic and social challenge. Regional inequalities remain large. Exposure to global financial conditions has increased.

GDP growth is projected to pick up supported by domestic demand (Table A). Investment will be a key driver of growth, aided by infrastructure projects, recent tax reforms and low interest rates. Inflation will remain near the 3% target, supporting real incomes and consumption.

Table A. Growth is projected to strengthen

Percentage change unless indicated

	2018	2019	2020
Gross domestic product	2.6	3.4	3.5
Private consumption	3.6	4.7	3.9
Government consumption	5.6	2.9	3.5
Gross fixed capital formation	1.5	4.6	5.3
Exports	3.9	4.0	4.0
Imports	7.9	8.8	5.5
Consumer price index	3.2	3.5	3.6
Fiscal balance (% of GDP)	-3.1	-2.4	-2.2
Current account balance (% of GDP)	-4.0	-4.2	-4.2

Source: *OECD Economic Outlook 105 database* updated with most recent available information.

Macroeconomic policies strike an appropriate balance. Fiscal policy is expected to be moderately contractionary to reduce the structural fiscal deficit to 1% of GDP by 2022, in line with the fiscal rule. This strikes an appropriate balance between meeting social needs, supporting gradual recovery, the need to ensure debt sustainability and creating space for dealing with future shocks. Monetary policy remains moderately accommodative, as inflation is near the target and inflation expectations are anchored.

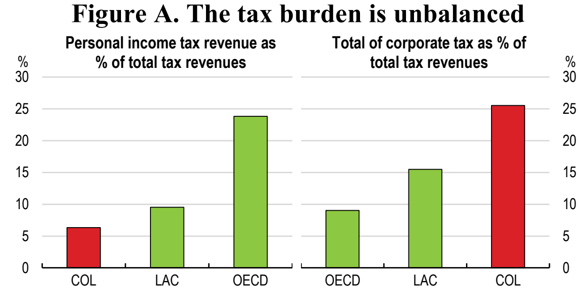
A key downside risk to the outlook is a spillover of financial volatility experienced by some emerging markets. International volatility driven by the trade and political tensions could impact growth. Stronger (weaker) oil or coal prices could boost (reduce) investment. The tourism sector holds potential for upside surprises.

Complying with the fiscal rule requires revenue and spending measures

The dependence on volatile revenues and exposure to global financial shocks requires putting debt on a declining path relative to GDP. Current fiscal plans are expected to achieve this, but the debt trajectory is highly sensitive to interest rates, growth, exchange rate and oil prices. Spending needs, such as those related to infrastructure gaps, social programmes or the peace process, are high. Further measures to improve spending efficiency and the tax mix are needed.

The tax mix could be further improved (Figure A) by broadening the bases of personal and VAT taxes, reducing the corporate tax rate and eliminating its numerous tax exemptions. Further revenue could come from environmental taxes and from strengthening tax administration to reduce tax evasion.

Figure A. The tax burden is unbalanced



Note: OECD refers to year 2016 and the rest 2017.
Source: OECD, *Revenue Statistics database.*

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Social programmes and tax exemptions benefiting households and firms contribute little to boost equity or productivity. A spending review would help to identify inefficient programmes with lack of cost-effectiveness in terms of impact on equity or productivity. These should be reformed or phased out.

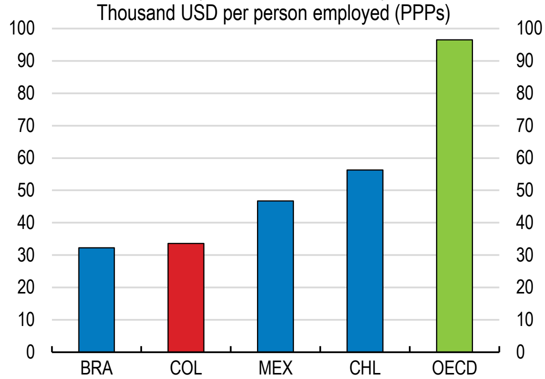
Making productivity and trade engines of growth

Growth potential has fallen substantially in the last decade, indicating that the traditional drivers of growth, largely capital-intensive extractive industries and favourable terms of trade, have reached their limits. Further advances in living standards will hinge on raising productivity, which in turn requires improvement in the business regulations, more competition and further openness to trade.

Labour productivity is low, even compared to other countries in Latin America (Figure B). Productivity is hindered by lack of competition in key sectors, such as transport or telecommunications. The competition framework has improved but would be reinforced with higher and more dissuasive sanctions against anti-competitive behaviours. Widening the scope of regulatory impact assessments and making a greater use of one-stop shops would reduce high regulatory burden.

Figure B. Labour productivity is low

Labour productivity levels, 2018 or latest year available
Thousand USD per person employed (PPPs)



Source: *OECD Productivity database.*

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Trade openness is low. Despite efforts to promote trade integration via trade agreements, exports remain low and large parts of the economy are shielded from international competition. The use of non-tariff barriers has increased. Tariffs have fallen but remain higher than in regional peers. There is room to diversify exports and make trade a source of growth and productivity enhancing competition.

Costs to exporting are high due to infrastructure gaps and weak logistics. Good progress is being accomplished to improve primary roads, via the 4G initiative. Yet, gaps in infrastructure remain large. Improving customs and ports logistics would improve competitiveness. Eliminating the trucks scrap scheme and improving regulations in freight transport are also priorities.

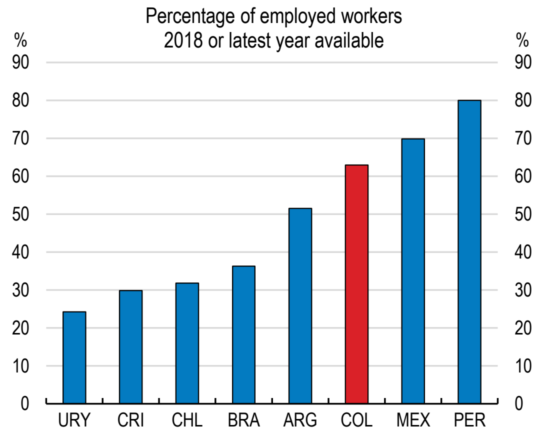
Innovation performance is hampered by low investment in R&D and complex support programmes. Additional funding has become available, but a large part remained unused due to weak governance. Efforts to simplify the innovation system and reduce the fragmentation of support programmes are warranted. Going digital, by promoting further adoption and use of ICT technologies, would also boost firms' competitiveness and the connectivity of regions.

Access to finance has improved but financial markets are less developed than in other countries in the region. Domestic credit to the private sector has increased but interest rate margins are high. Inducing more competition in the banking sector, phasing out the financial transaction tax and reducing regulatory requirements for banks to hold certain instruments, would help to reduce the cost of bank finance.

Curbing informality: win-win for inclusiveness and productivity

Informality has been decreasing but remains high (Figure C). Actions are needed in several policy areas, including reducing non-wage labour costs, still one of the highest in Latin America. Decreasing firms' registration costs and simplifying the registration of workers to social security would facilitate formalisation of firms and jobs. Reviewing the minimum wage to achieve a more job-friendly level and improving quality and relevance of education and training should be also part of the strategy.

Figure C. Informality remains high



Note: Informal workers defined as not contributing to the pension system.
Source: IADB SIMs database.

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Ensuring adequate support for workers to get high-quality jobs

Access to high-quality education and training is a powerful tool to increase access to high-quality jobs. While Colombia has made great progress in increasing attainment, there is still a long way to go to improve access and quality and reduce dropout rates, notably in rural areas.

There is a need to ensure that schools deliver high-quality education to those in need. The Government needs to prioritize increasing coverage and quality in early education to improve student performance and reduce gaps in learning achievement. Improving quality of basic education, especially in rural areas, is needed. Shaping the working conditions and professional opportunities in rural schools and providing adequate supply of high-quality initial teacher education is essential to attract high-quality teachers to rural areas.

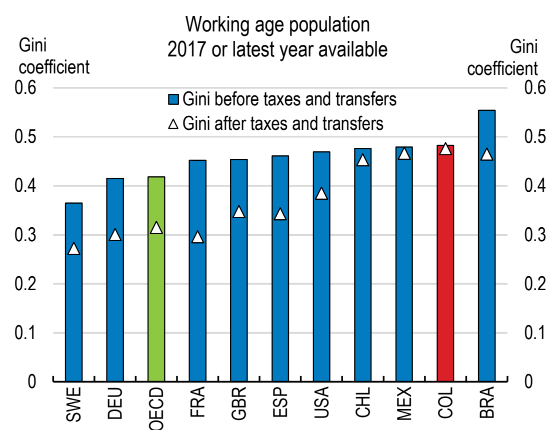
Enhancing the vocational education and training system can improve skills and inclusiveness. Strengthening governance of the vocational and training system would increase quality and relevance. This implies reducing fragmentation and developing a single institutional framework with a coherent and transparent set of objectives. Strengthening quality assurance and accreditation, and implementing the national qualifications framework should also be priorities.

Despite progress, gender gaps at work and education remain sizeable. Actions to strengthen parental leave for mothers and fathers, flexible work arrangements and improving access to childcare, notably in rural areas, would support women to access high-quality jobs.

Social policies could do better to decrease inequality

Social policy is not well targeted (Figure D). Cash transfers to the poor are low and a large share of subsidies, such as those related to pensions and housing, goes to the relatively rich. Coverage in rural areas is low. Higher equity could be achieved by reallocating more spending, such as higher cash transfers, towards vulnerable populations, with a focus on rural areas and ethnic minorities. Concentrating public resources into few well-evaluated programmes, would also help.

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



Source: OECD Income Distribution and Poverty database and OECD calculations.

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Reforming the pension system is urgent to reduce old-age poverty and ensure sustainability. Increasing the low retirement age, notably for women, and tying it to increases in life expectancy, would foster sustainability. Coverage and the level of benefits of *Colombia Mayor*, the non-contributory component of the system, should be increased. Raising the number of years of earnings on which pensions income are based would help to finance an increase in old-age income support.

MAIN FINDINGS	KEY RECOMMENDATIONS
Further improving macroeconomic policies and governance	
Public debt has increased and fiscal revenues are volatile. Exposure to global financial conditions has increased. Fiscal targets have been revised frequently in recent years.	Adhere to the fiscal rule and aim at a structural deficit of 1% by 2022. Establish an independent fiscal council to monitor fiscal risks and provide additional technical analysis on fiscal targets and its revisions.
Spending efficiency is hampered by rigidities. The government has room to adjust only spending related to investment. Social programmes and tax exemptions contribute little to boost productivity or equity.	Reduce budget rigidities by cutting mandated spending and earmarking of revenues. Evaluate social programmes and tax exemptions and retain only those with a positive impact on productivity or equity.
Non-oil revenues are still relatively low and the tax mix is unbalanced. Taxes are paid predominantly by firms and contribute little to reduce inequality. Tax evasion is widespread.	Broaden the base of the personal income tax by lowering the income threshold where taxpayers start paying income taxes and eliminating exemptions. Replace VAT reduced rates with cash transfers to low-income families. Lower the rate and broaden the base of corporate taxes. Reinforce tax administration and establish a limit for large cash transactions.
Appropriate and timely action by the Central Bank has brought inflation back to the target.	Keep the interest rate around current levels provided inflation remains close to the 3% target. Raise it once the economy starts closing the output gap.
Despite good progress to foster integrity, corruption remains the main concern for citizens.	Introduce whistle-blower protection procedures. Bring all purchases by subnational governments into the central procurement entity (Colombia Compra Eficiente). Regulate the financing of political parties and campaigns.
Boosting productivity and integration in the world economy	
The competition framework has improved but competition remains weak in key areas of the economy and sanctions are modest. Regulatory burden remains high.	Grant the competition authority the ability to impose higher and more dissuasive sanctions. Widen the scope of regulatory impact assessments, including also the stock of regulations. Make a greater use of one-stop shops and online tools for administrative procedures.
Colombia remains relatively closed to trade with high dispersion in tariffs and increasing non-tariff barriers.	Phase out import restrictions and review other non-tariff barriers with a view to reducing them. Reduce tariff dispersion.
Costs to export are high, due to infrastructure gaps and weak trade facilitation and logistics.	Prioritise improving multi-modal transport connectivity of ports and customs, and reduce barriers to entry and competition in transport. Improve customs logistics, including by increasing inter-agency cooperation and making further use of paperless online solutions for permissions and payments.
Improving equality of opportunities and job quality	
Informality is high, hampering productivity, job quality, public finances and access to pensions. Skills gaps are large, driving informality.	Establish a comprehensive strategy to reduce the cost of formalisation, including reducing non-wage costs, reviewing the minimum wage to achieve a more job-friendly level, reducing firms' registration costs and simplifying the registration of workers.
Cash transfers to the poor are small. A large share of social programmes goes to the relatively rich.	Improve targeting and focus spending on social programmes targeted at low-income individuals. Target higher cash transfers towards the most vulnerable, especially those in rural areas.
Education has improved but regional disparities are large. Grade repetition and dropout rates remain high.	Prioritise spending on education that increases coverage in early education. Reallocate more resources to the most vulnerable territories. Make teaching in rural areas more attractive by shaping the working conditions and professional opportunities in these areas.
Demographic trends put pensions sustainability at risk. Retirement age is low, especially for women. Old-age poverty is high. The pension system has low coverage and is very unequal, as it mostly benefits high-income formal workers. Pensions are based on the last 10 years of earnings.	Gradually increase and align the retirement age of women and men. Boost coverage and benefit levels in the non-contributory scheme (*Colombia Mayor*). Extend coverage in the public scheme and finance it by increasing the number of years of earnings on which pensions are based.
Strengthening green growth	
Biodiversity is jeopardized by deforestation.	Ensure technical capacity and resources to allow for proper enforcement and management of forests. Grant the status of protected areas to a greater proportion of the forestland.

Key policy insights

Colombia has made good economic and social progress over the last two decades. Sound macroeconomic policies boosted confidence, which together with favourable demographics and external conditions underpinned resilient economic growth (Figure 1, Panel A). This has contributed to higher living standards (Panel B and C), and, together with improving access to education and social transfers, brought significant social improvements. Poverty has fallen markedly in recent years, while progress in reducing inequality has been more muted (Figure 2, Panel A and B). On 25 May 2018, Colombia was invited to become a member of the OECD.

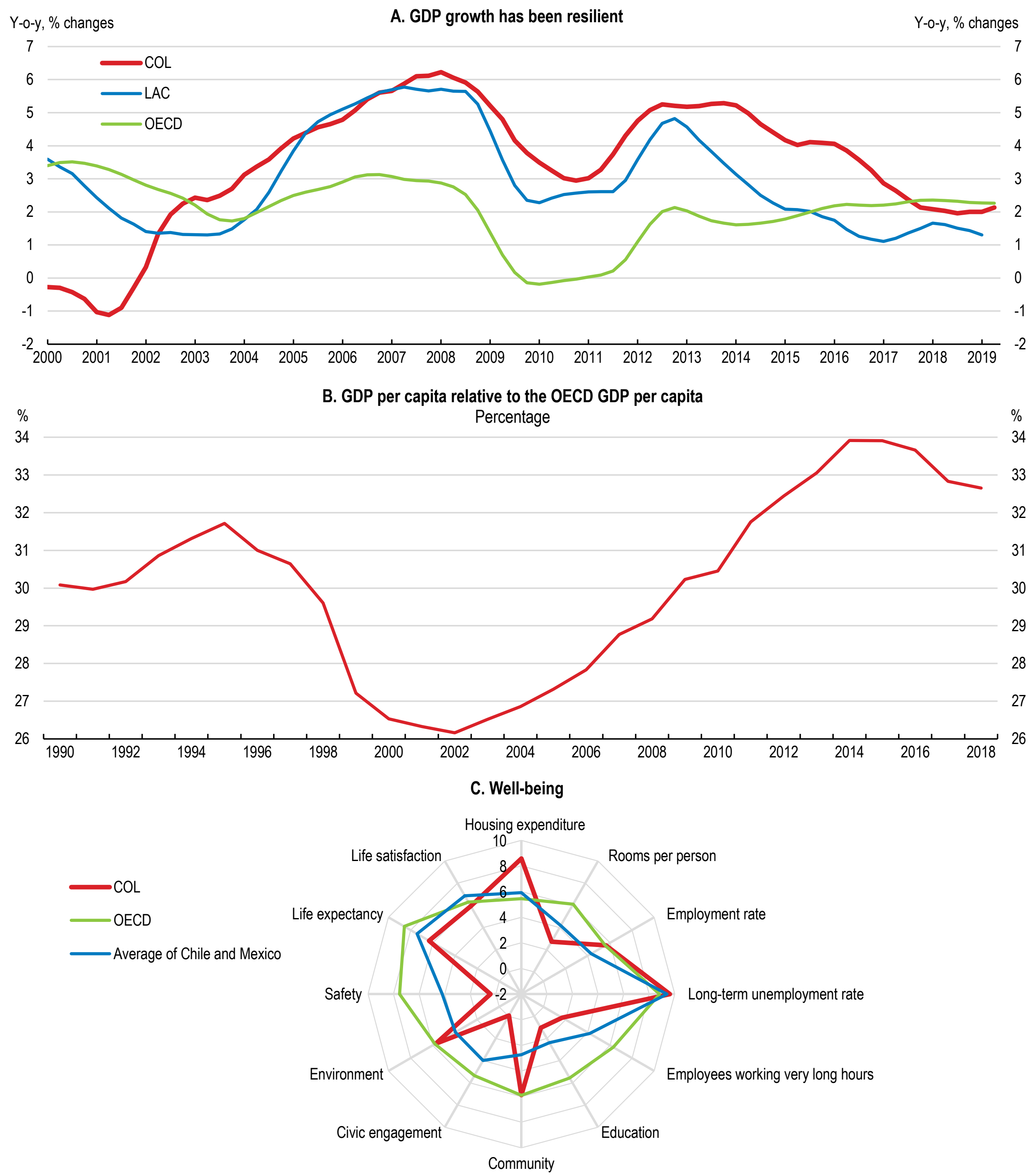
However, challenges ahead to maintain performance and further convergence towards higher living standards are substantial. Colombia has already lost ground relative to some of its peers in Latin America in per capita growth. (Figure 3). The still high level of informality remains a major economic and social challenge, affecting income distribution, quality of jobs and productivity. Despite a recent decline, income inequality is the highest among OECD countries and one of the highest in Latin America. The strong economic performance over the past decade was also not shared by all regions and regional differences in living conditions remain large.

Potential growth has followed a downward trend due to lacklustre productivity. The traditional growth drivers, largely capital-intensive extractive industries and favourable terms of trade, have shown their limits. Exports remain dependent on oil prices, leaving Colombia vulnerable to external and unpredictable shocks. The non-extractive sectors lag behind due to high regulatory burden, infrastructure gaps and low competition and integration to international markets.

Colombia has now a historic opportunity to reignite growth and continue social progress, after 50 years of internal conflict. The sound macroeconomic policy framework, which has benefited from continuity over the years, provides solid foundations. Further advances in living standards and more balanced and inclusive growth will hinge on implementing structural reforms to foster productivity growth and improve the business and job creation frameworks.

The new government identified boosting economic growth as one of its key priorities (Box 1), as also reflected in the latest National Developmen Plan. The OECD estimates that structural reforms in key areas could raise GDP per capita by 11% in 10 years(Figure 1). The largest benefits stem from increasing international trade. At the same time, there is also a need to ensure that all Colombians benefit from the fruits of reforms, with a particular focus on increasing opportunities for those more vulnerable. To overcome political economy obstacles to implementation of reforms, OECD evidence suggests that communicating clearly the benefits of policy decisions boosts confidence and creates more ownership of the reform programme (OECD, 2017[1]). There are also clear benefits to ensure intergovernmental coordination across different policy areas.

Figure 1. Economic growth has been resilient but has slowed



Note: LAC refers to the unweighted average of Argentina, Brazil, Chile, Costa Rica and Mexico. Data show a 3-year moving average of year-on-year percentage changes; For Panel C, each dimension is measured by the available indicators from the OECD How's Life 2017 set.
Source: OECD Analytital database; World Bank, World Development Indicators database; OECD, How's Life? 2017.

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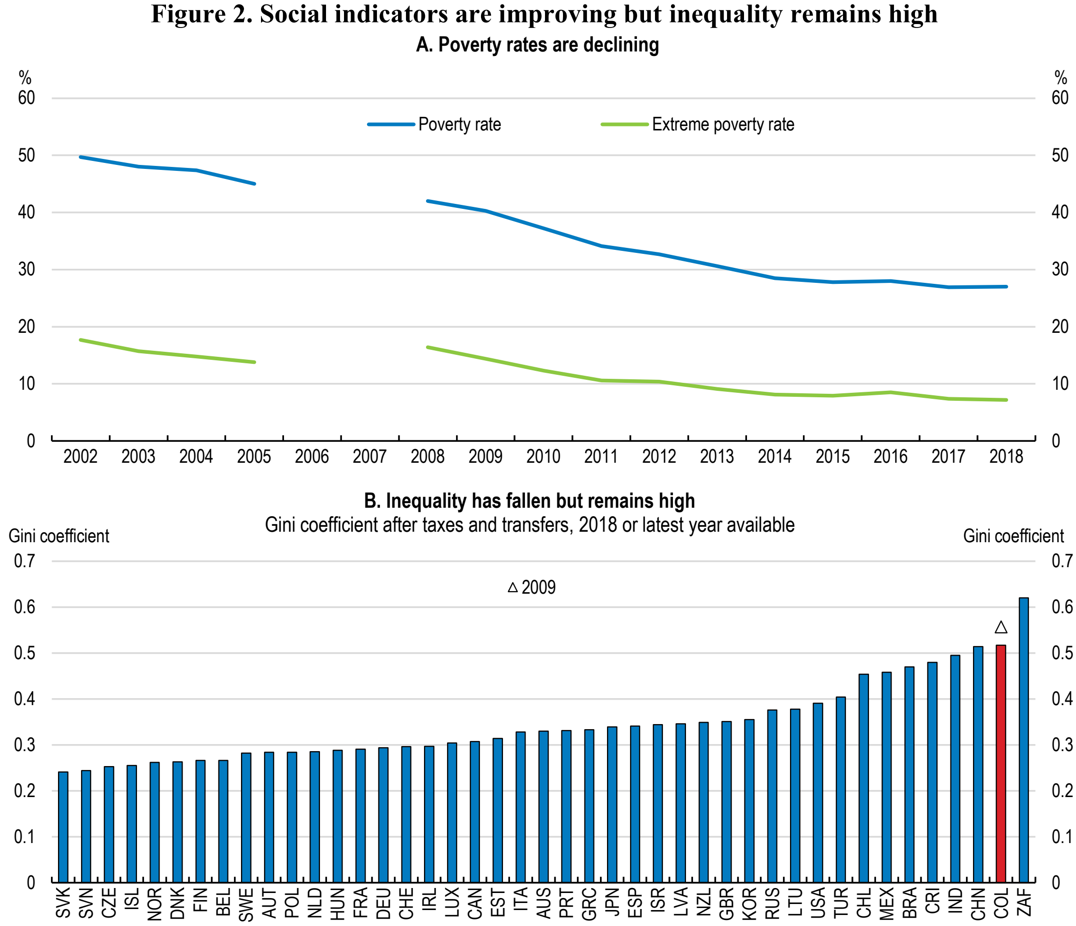
Against this background, the main messages of the Survey are:

- Macroeconomic policies are solid and have sustained growth and smooth adjustments to shocks over the years. Maintaining and strengthening the policy framework is key to sustainable macroeconomic policies and setting the basis for higher productivity and inclusiveness.
- Putting Colombia on a path to stronger and more inclusive growth, and reducing dependence on natural resources, requires boosting productivity by adopting structural reforms in competition, regulations, trade policy, infrastructure, innovation, and skills.
- Reducing informality and boosting job-quality would extend the benefits of growth to all Colombians, underpinning economic and political support for reform.

Finding the appropriate sequencing and prioritisation is essential for a successful reform agenda and avoiding reform fatigue. Continuing to reduce informality should be the first priority, as it is win-win for productivity, equity and public finances. Opening up to trade and taking more advantage of current trade agreements would boost productivity and job-creation and should be the second in line. Boosting fiscal revenues in a sustainable way and making the tax system more growth and equity friendly should also be a priority. Strengthening the fight against corruption would also be essential and would facilitate the reform agenda, as it would boost trust on government.

Figure 2. Social indicators are improving but inequality remains high



Note: No data available for 2006 and 2007.
Source: DANE, OECD.

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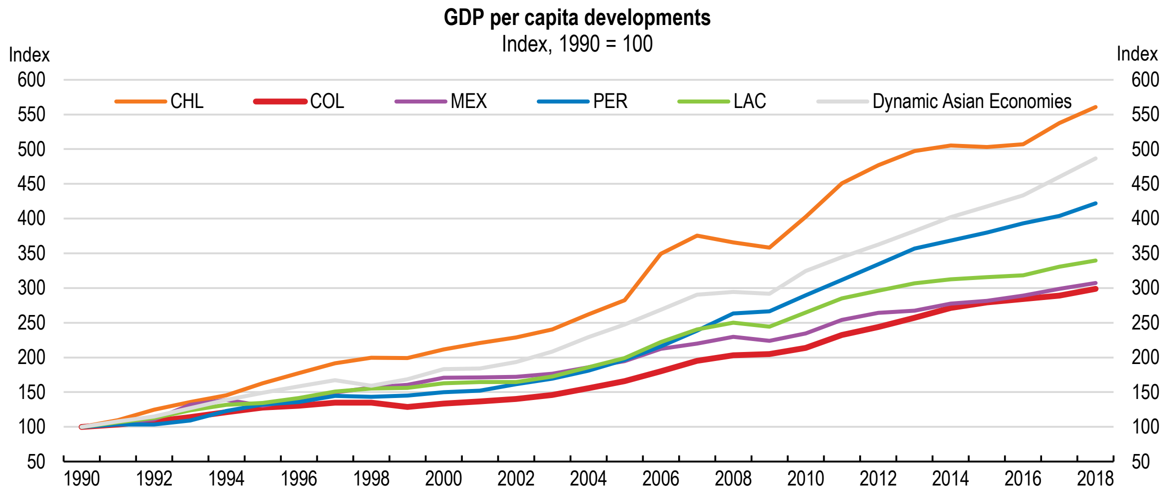
Figure 3. Colombia has lost ground



Note: GDP per capita are in purchasing power parity terms. LAC refers to the unweighted average of Argentina, Brazil, Chile, Costa Rica, Mexico and Peru. Dynamic Asian Economies refers to the unweighted average of China, Malaysia, Philippines, Singapore, Thailand and Viet Nam.

Source: World Bank, World Development Indicators database.

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Box 1. Key features of the programme of Duque's government

The new government took office in August 2018 and is the first gender-balanced government in the history of Colombia. Among its main priorities are:

- **Boosting economic growth** to 4% through structural reforms.
- **Reforming the tax system** to make it more favourable to investment and job-creation.
- **Fighting informality** by giving high priority to this area, as informality has a critical and large detrimental impact on productivity, inequality, tax revenues and access and financing of pensions.
- **Reforming the justice system** by making the system more efficient and trustworthy for all citizens.
- **Reforming the pension system** to ensure that more Colombians access old-age income.
- **Enhancing trade facilitation** by launching round tables aimed at promoting reforms to reduce costs to trade.
- **Boosting innovation and entrepreneurship** via better regulation, technology adoption and digital transformation.
- **Making the best out of Colombia's rich cultural assets** (branded under the term *Economía Naranja* ("orange economy")).
- **Protecting environmental richness** by increasing the share of renewables in the energy mix.

Table 1. Structural reforms would boost growth

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

Structural policy	Policy change		Effects on the level of per capita income (%)			
	Latest data	After reform	2-years	5-years	10-years	Long-term effect
Business regulation						
Reduce the cost of starting a business	85	78	0.1	0.3	0.4	0.4
Intermediate policy channels mainly affecting productivity						
Increase openness (% of GDP)	35	41	0.8	1.3	2.0	4.2
Increase R&D (business expenditure) (% GDP)	0.1	0.2	0.0	0.1	0.2	0.6
Investment specific policies						
Reduce corporate tax (% GDP)	5.1	3.6	0.5	0.6	0.8	1.4
Labour market policies						
Increase activation (spending per unemployed, %. of GDP/capita)	0.04	0.6	0.4	0.7	1.0	2.0
Increase family benefits (% GDP)	1.6	2.1	0.6	1.8	2.9	3.8
Increase legal retirement age	59.5	62	0.5	1.6	2.5	3.2
Institutions						
Increase the control of corruption	-0.3	0.2	0.3	1.0	1.6	2.0
All of the above			3.2	7.4	11.4	17.6
Corresponding to an average annual growth of:			0.3	0.7	1.1	1.6

Note: The reforms imply halving the gap to the OECD average. These estimates were obtained based on numerical indicators of Colombia's policy stance in each policy area, taken from World Bank's World Governance Indicators, Doing Business and World Development indicators; and OECD databases. These quantifications are illustrative, as they are subject to uncertainty, about both their size and the time horizon of their materialisation. Coverage of reforms differs from table 8, depending on the availability of the quantification tools.
Source: OECD calculations based on Balázs Égert and Peter Gal (2017), "The quantification of structural reforms in OECD countries: A new framework", OECD Journal: Economic Studies, Vol. 2016/1 and Balázs Égert (2017), "The quantification of structural reforms: taking stock of the results for OECD and non-OECD countries", OECD Economics Department Working Papers, forthcoming.

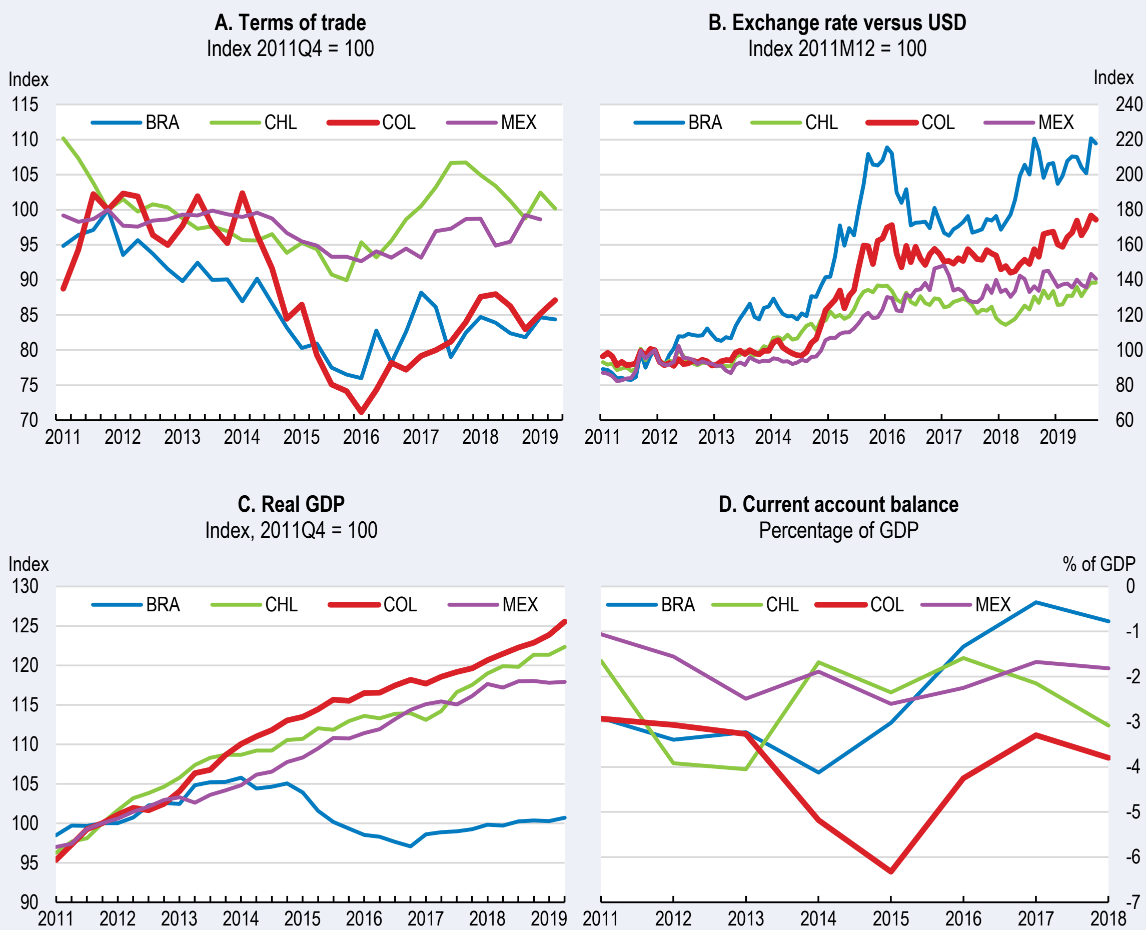
Growth is firming up

The economy is recovering from the large oil price shock of 2015-16, which moderated growth, led to a 70% depreciation of the currency vis-à-vis the US dollar, increased inflation and widened fiscal and current account deficits. The adjustment was, however, relatively smooth (Box 2), thanks to credible macroeconomic policies. The inflation-targeting independent central bank reacted by letting the exchange rate float and interest rates hikes, keeping inflation in single digits (Figure 5). The rules-based fiscal framework, while easing the adjustment to the oil price shock, contained deficits to manageable levels; as did a tax reform that reduced dependence on oil. Vulnerability to shocks was also eased with only moderate exposure to foreign currency funding of the deficit (more details below).

Box 2. A smooth adjustment to a large terms of trade shock

The fall in terms of trade was significantly higher than in other countries in the region (Figure 4, Panel A). The value of exports fell by 47% in 2016, which substantially deteriorated the country's current account and widened the fiscal deficit. Increases in risk premia generated a strong nominal devaluation of the peso (Panel B). Appropriate macroeconomic policy responses smoothed the adjustment to this large shock, with GDP growth outperforming other countries (Panel C) and the current account undergoing a large and smooth adjustment (Panel D).

Figure 4. The trade of terms shock was larger and the adjustment smooth



Note: Current account is all transactions other than those in financial and capital items. The major classifications are goods and services, income and current transfers. The focus of the BOP is on transactions (between an economy and the rest of the world) in goods, services, and income.
Source: OECD Analytical database; Thomson Reuters; IMF, World Economic Outlook April 2019.

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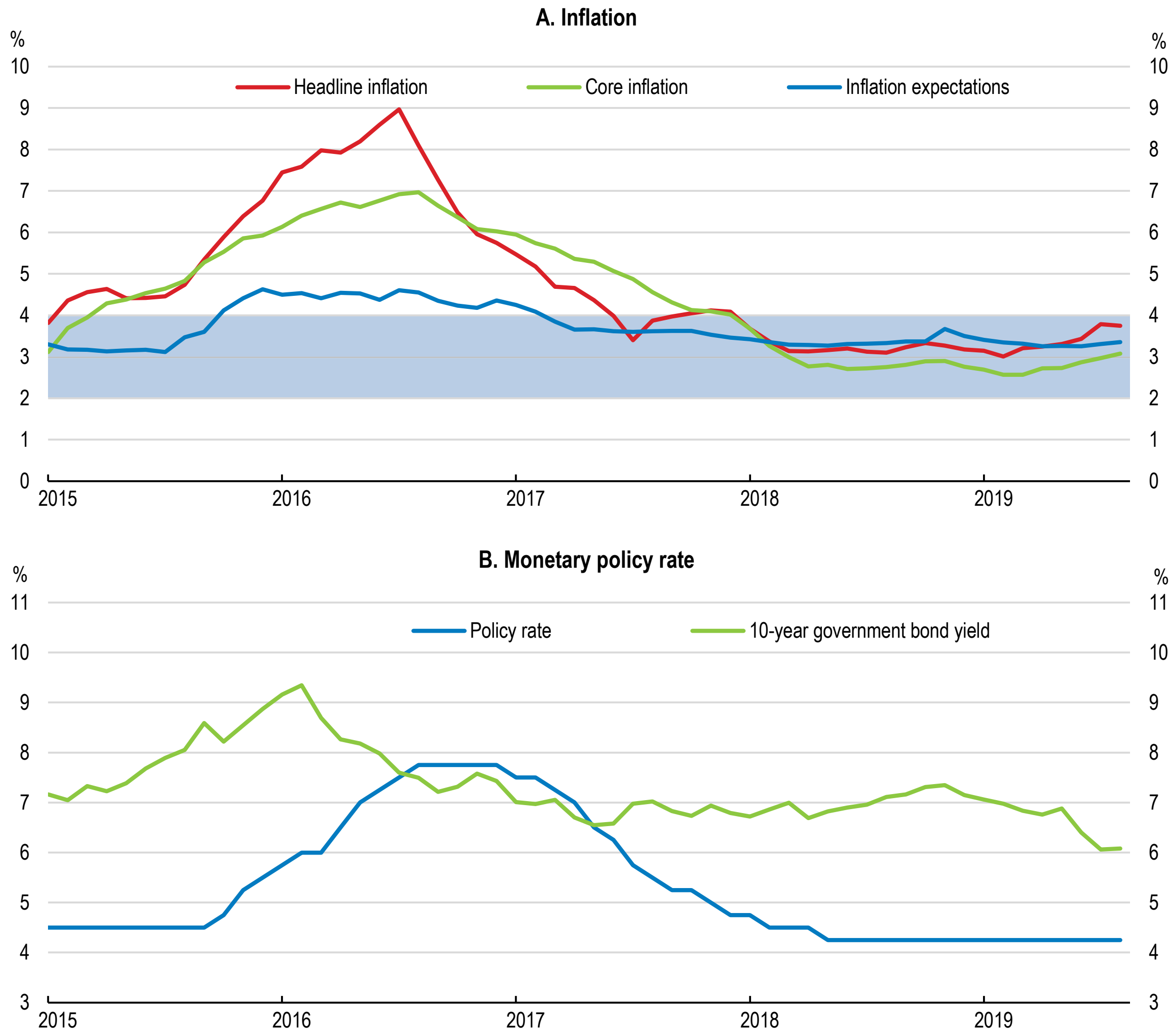
Figure 5. Inflation is near the 3% target



Note: Inflation expectations are defined as the 12-month ahead inflation expectations.
Source: Banco de la República, OECD Analytical database.

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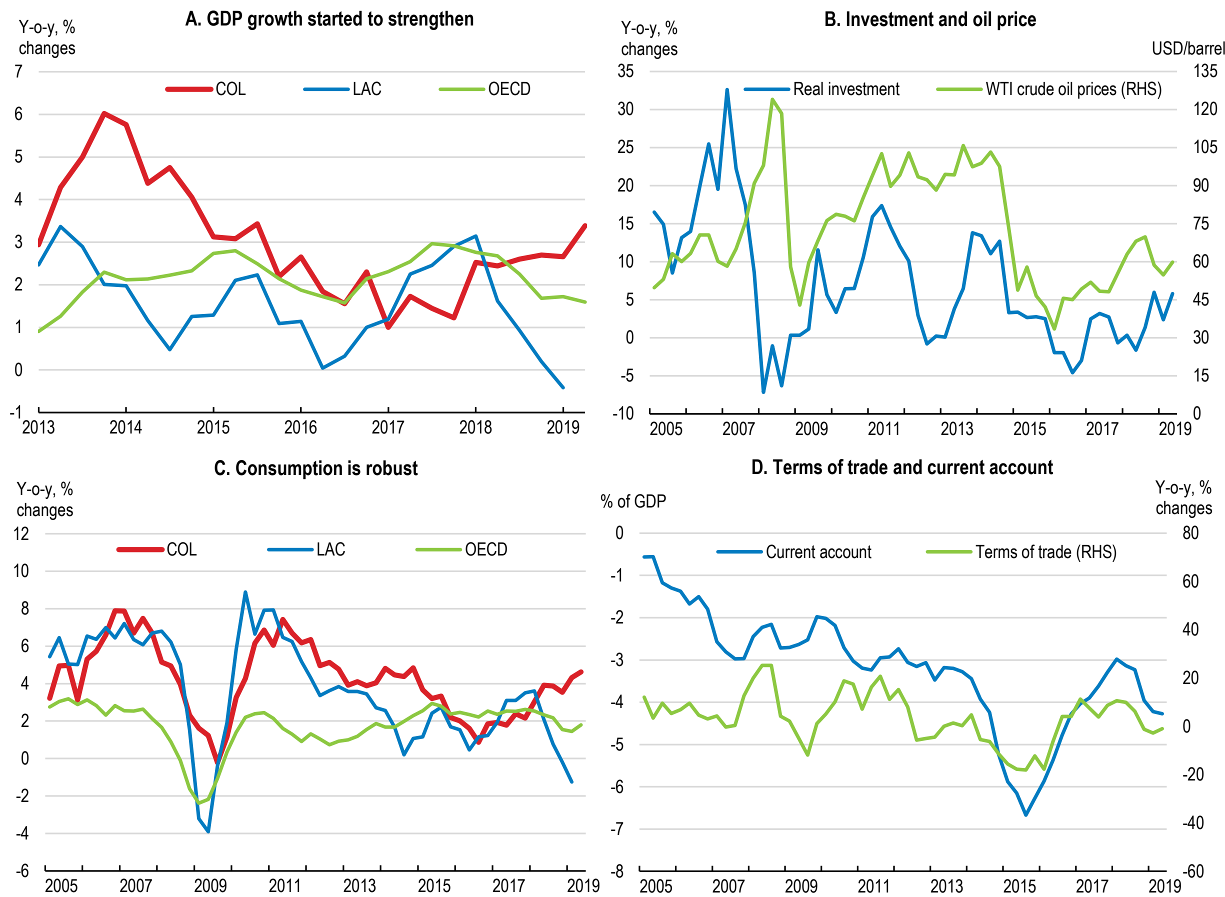
The economy gave signs of revival in the second half of 2017 (Figure 6, Panel A). Real investment bottomed out supported by declining interest rates and higher investment by subnational governments (Panel B). Declining inflation pushed real incomes up and supported consumption (panel C). An improvement in terms of trade supported exports and contributed to a reduction in the current account deficit (panel D), despite a recent deterioration of the current account driven by increased global trade tensions and the peso depreciation.

The labour market has remained subdued, reflecting the impact of the growth deceleration. Unemployment has recently edged to 10% (Figure 7, Panel A), among the highest unemployment rates in Latin America (Figure 7, Panel B). Progress achieved in increasing participation rates has also stalled, particularly in urban areas and among youth. Wages grew above inflation, particularly in manufacturing and retail trade (Banco de la República, 2018[2]). Informality has fallen in recent years, but nearly 60% of all workers still work in the informal sector (see Chapter 2). Increasing migration from Venuzuela imply significant pressures on the labour market (Box 3).

Figure 6. Growth is picking up



Note: Data show year-on-year percentage changes. Base year of the underlying data series is 2015; WTI crude oil prices are monthly averages of average daily prices. Real investment refers to the total volume of gross fixed capital formation; LAC refers to the unweighted average of Argentina, Brazil, Chile, Costa Rica and Mexico.
Source: OECD Analytical database; Thomson Reuters.

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Box 3. Migration from Venezuela imply challenges but also opportunities

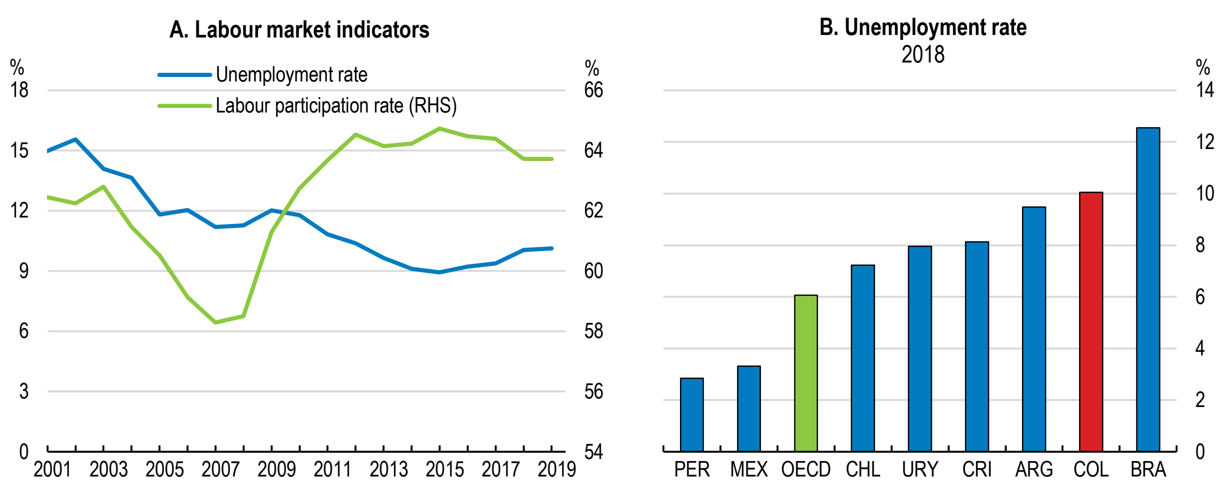
Since 2014 more than one million Venezuelans migrated to Colombia, as a result of the economic, humanitarian and social crisis there. The arrival has intensified, doubling during 2018, and by December the number of Venezuelans migrants was 1 147 743, including both regular and irregular migrants arrived (MFMP, 2019[3]; DNP, 2018[4]).

The government has managed the challenging situation successfully, making efforts to integrate the migrants by providing timely border assistance and ensuring universal emergency and childbirth care. Documentation requirements have been made more flexible so that school-age children can have access to education at the pre-school, basic and secondary levels. Colombia has also relaxed some entry requirements and granted temporary permits to stay in the country. An integral policy strategy for the next years has been launched, including actions in areas such as education, healthcare, water and sanitatiation, labour market integration, childhood care and humanitarian help. Fiscal needs are estimated to be around 0.5% of GDP per annum, under a baseline assumption of two millions migrants entering the country by 2021. This estimate accounts for the higher demand on the provision of basic good and services that the increasing flows of migration will entail over the next three years.

The migration inflows have started to have an impact on the Colombian labour market, with a diverse regional impact. The participation rate of the Venezuelan migrants is 72%, while for non-migrant Colombians it is 64%. Unemployment rates for Venezuelans are particularly high, affecting the national unemployment rate (Fedesarrollo, 2018[5]). The cities most affected and experiencing problems to absorb the large numbers of migrants are Arauca, Riohacha, Cúcuta, as well as Bogotá and Medellín.

Investing in immigrants' integration could deliver benefits in terms of potential growth. Venezuelan migrants tend to be younger than Colombias, allowing for a demographic bonus. In the short-term a positive impact on growth could derive from increased consumption and employment, Policies should aim at fostering the employability of migrants, for example, through skills certification and validation programmes for secondary and higher education. Extending the public employment services and training opportunities would also help. Efforts to support the integration of Venezuelans in the formal sector would maximise their fiscal contribution.

Figure 7. The labour market has remained subdued



Note: Yearly data taken as a 12-month average. Data for 2019 refer to the average of the period July 2018 - June 2019; Total unemployment as a percentage of total labour force. For Panel B, OECD refers to an unweighted average of its member countries.
Source: GEIH of DANE.

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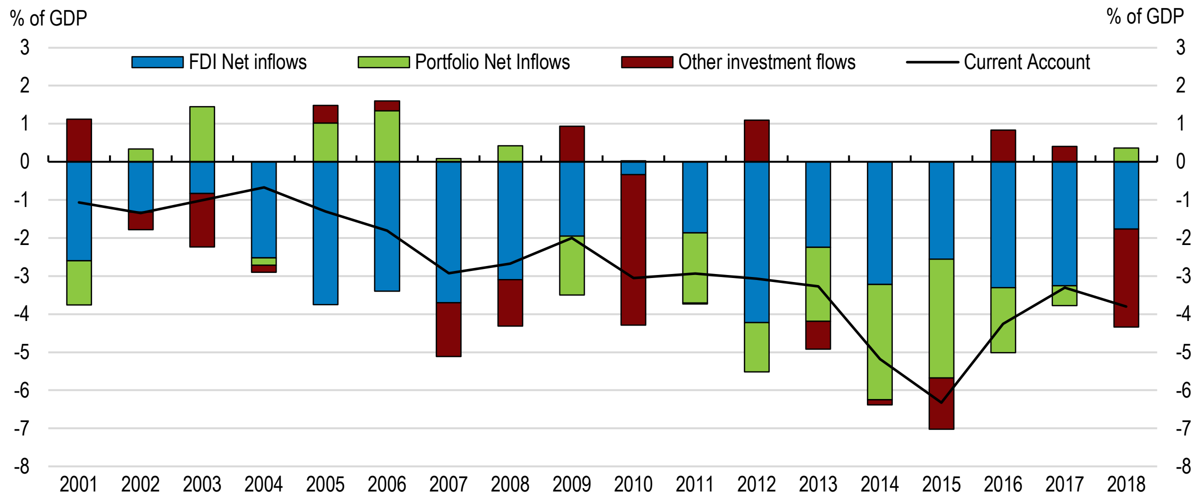
The current account deficit fell from more than 6% of GDP in 2015 to 3% in 2017, illustrating the significant and orderly adjustment experienced. The deficit, which widened in 2018, remains largely financed by foreign direct investment (Figure 8), helping to cushion exchange rate related risks.

Figure 8. The current account deficit has been reduced during 2016-17



Source: IMF Balance Of Payments database.

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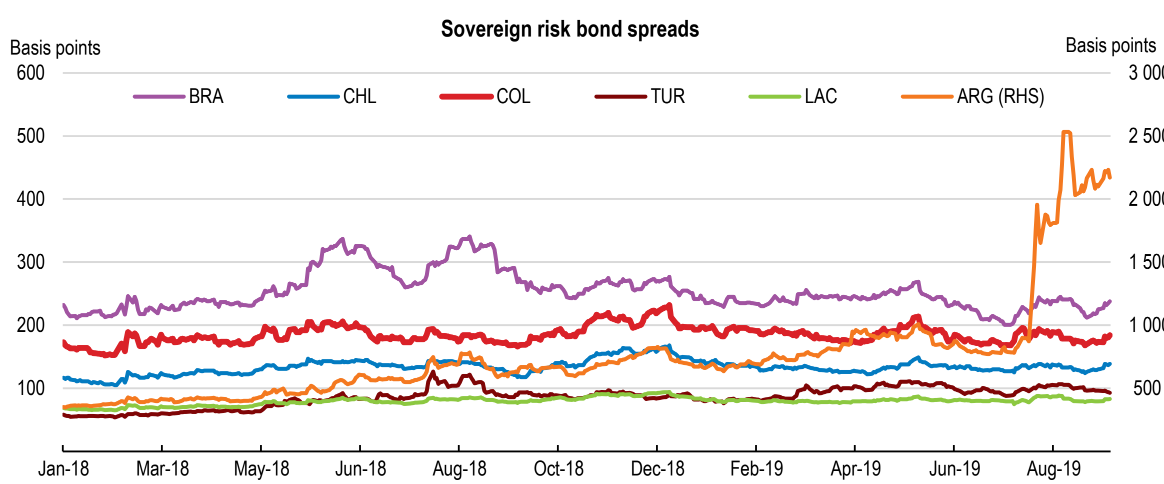
The reduction during 2016-17 in the current account deficit has helped Colombia to remain less affected than other emerging economies by the most recent episodes of financial volatility (Figure 9). The peso has also been relatively more resilient to recent financial market turbulences (Figure 10). External debt has risen over the recent years, reaching around 47% of GDP (Figure 11, Panel A), suggesting that exposure to global financial conditions has increased. 13% of external debt is short-term. Reserves have also increased (Panel B), covering 16% of GDP and 9 months of imports. The coverage ratio, in terms of the current account deficit plus short-term debt at remaining maturity, is about 135%. A flexible credit line with the IMF also helps to deal with extreme events. The Central Bank executed a gradual programme of reserve accumulation, which ended in May 2019, to prepare for a possible reduction of the flexible credit line, which expires in 2020.

Figure 9. Colombia has been resilient to recent episodes of financial uncertainty



Note: JP Morgan EMBI spreads.
Source: Thomson Reuters.

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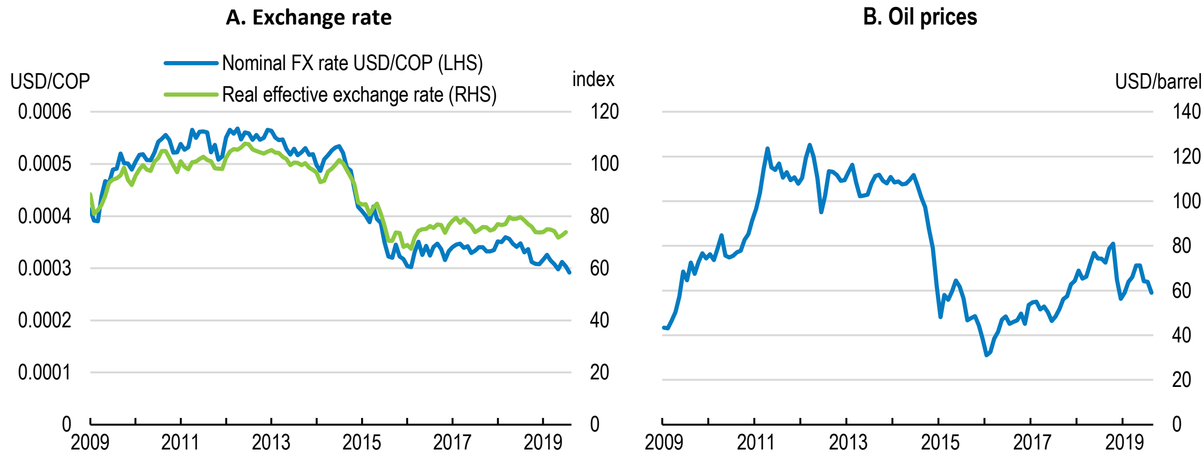
Figure 10. The exchange has remained relatively stable since 2016



Note: Real effective exchange rate is based on Consumer Price Index. WTI crude oil prices are monthly averages of average daily prices.
Source: Banco de la República, IMF International Financial Statistics (IFS); Thomson Reuters.

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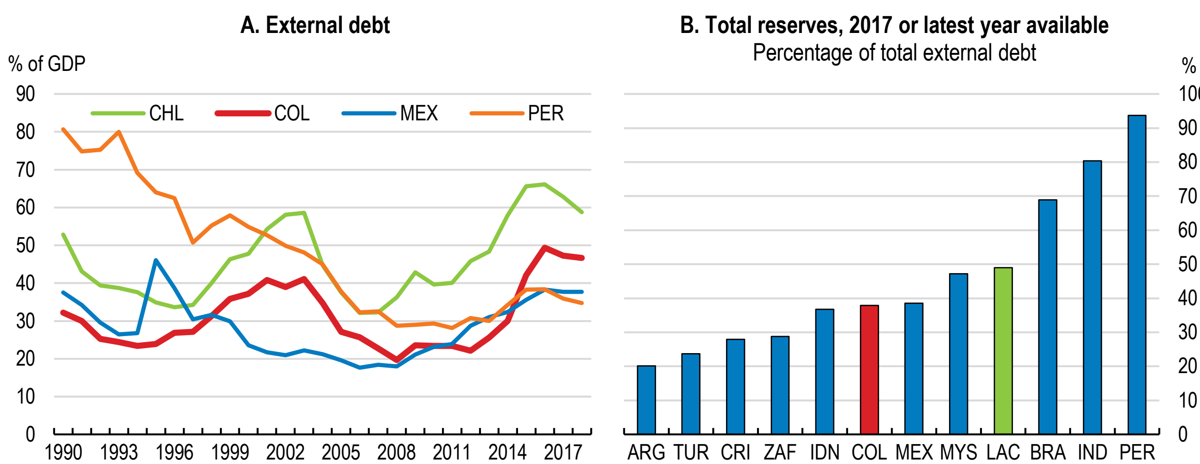
Figure 11. Debt and foreign exchange reserves



Note: External debt to GDP is calculated as the ratio of total external debt in billion US dollars divided by gross domestic product in billion US dollars. LAC refers to the World Bank definition of Latin America & Caribbean (excluding high income).
Source: IMF, World Economic Outlook April 2019; World Bank.

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Growth is projected to strengthen during 2019 and 2020, supported by rising domestic demand (Table 2). Improving confidence and easier financing conditions will support consumption. Investment will become a key driver of growth, aided by the lower corporate taxation, low interest rates, and infrastructure projects. As growth gains traction, the unemployment rate will edge down.

Risks to these projections include volatile oil or coal prices, which would boost or decrease investment. The tourism sector holds potential for upside surprises. Downside risks include additional delays in planned large infrastructure projects. The rise in protectionism could slow down global growth, dampening exports. Increasing migratory flows from Venezuela may imply higher spending needs than foreseen, particularly in health and education, and increases in labour informality. But, if well managed, it can also boost medium-term growth prospects. Currency mismatches are low but financial volatility in emerging economies could also present risks. The authorities consider that Colombia is in a good position to let the exchange rate act as a line of first defence, as inflation is close to the target, providing space to absorb exchange rate depreciation. The economy may also face unpredictable shocks, whose effects are difficult to factor into the projections (Table 3).

Table 2. Projections

	2016	2017	2018	2019	2020
			Percentage changes, volume (2015 prices)		
GDP at market prices	2.1	1.4	2.6	3.4	3.5
Private consumption	1.6	2.1	3.6	4.7	3.9
Government consumption	1.8	3.8	5.6	2.9	3.5
Gross fixed capital formation	-2.9	1.9	1.5	4.6	5.3
Final domestic demand	0.6	2.3	3.5	4.4	4.1
Stockbuilding[1]	0.6	-1.2	0.4	0.3	0.1
Total domestic demand	1.2	1.2	3.9	4.6	4.2
Exports of goods and services	-0.2	2.5	3.9	4.0	4.0
Imports of goods and services	-3.5	1.2	7.9	8.8	5.5
Net exports[1]	0.8	0.1	-1.0	-1.2	-0.6
Memorandum items					
GDP deflator	5.1	5.1	3.7	4.1	3.5
Consumer price index	7.5	4.3	3.2	3.5	3.6
Private consumption deflator	6.6	3.6	2.6	3.5	3.1
Unemployment rate (% of labour force)	9.2	9.4	9.7	10.1	9.2
Current account balance (% of GDP)	-4.3	-3.3	-4.0	-4.2	-4.2
Potential growth	3.4	3.2	3.2	3.1	3.1
Output gap	-2.4	-4.2	-4.8	-4.5	-4.1

Note: Contributions to changes in real GDP.
Source: OECD Economic Outlook 105 database updated with most recent available information.

Table 3. Possible shocks to the Colombian economy

Vulnerability	Possible outcome	Possible policy action
Contagion from emerging markets financial volatility	Large exchange rate depreciation and higher costs of financing the fiscal deficit and servicing debt.	Tighten monetary policy and quicker reduction of the fiscal deficit.
Deepening crisis in Venezuela	Even larger inflows of migrants with higher humanitarian assistance needs.	Continue providing border assistance to immigrants and flexible residence permits. International assistance may be required.
Sudden falls in oil prices	Prices for exports would fall, reducing public revenues and increasing the current account deficit. An associated increased in sovereign risk premium in emerging economies would diminish capital inflows.	Maintain adherence to the fiscal rule and build fiscal buffers overtime. Boost competitiveness in non-oil sectors.
Natural disasters	A significant part of Colombian territory, population and GDP is at risk of natural disasters, such as floods or landslides, which can entail large social, economic and fiscal costs.	Strengthen disaster risk management and foster climate change adaptation strategies.

Financial stability has been preserved

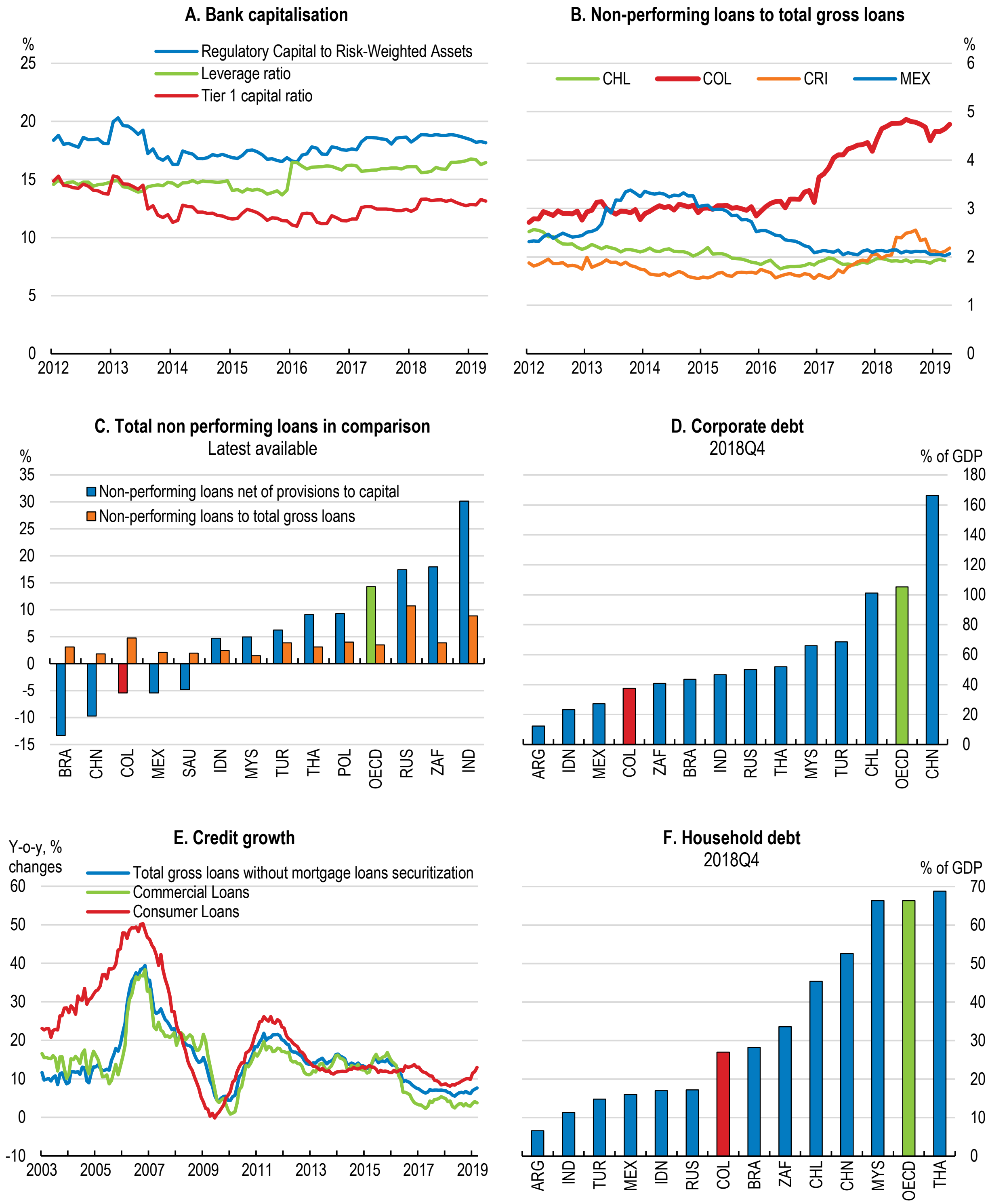
Despite the large shocks, financial indicators of banks remain solid (Figure 12). Credit growth has decelerated since 2016, particularly commercial credit. Consumer credit growth has also decelerated, due to a tightening in credit standards. Non-performing loans have risen (Panel B) but remain low in international perspective (Panel C). The increase was largely driven by two large borrowers in energy and infrastructure sectors. Loan restructuring practices have been recently standardised.

Some risk to the sector arises from the expansion of several Colombian banks to other countries in Latin America. This expansion allows diversifying risks, as exemplified by the positive impact of the fall in oil prices on earnings of Colombian banks present in Central America, whose economies benefited from the fall in oil prices. At the same time, the expansion raises challenges for supervision. The recent strengthening of the supervisory framework, recommended in previous economic surveys, by granting the *Superintendencia Financiera* enhanced regulatory and supervisory powers over financial conglomerates is welcome. Compliance with prudential and risk management standards and access to information of financial conglomerates and financial holdings have also been increased. Foreign exchange and foreign exchange risks regulations by the Central Bank has also moved in this direction.

Existing regulations are robust but are not fully aligned with Basel III, which hampers the credit profiles of banks, affecting its access to international funding. The process to adapt to Basel III standards started in 2012 and is proceeding progressively. While other countries in the region have formally incorporated Basel III standards in their banking regulations, several pieces of regulations are yet to be approved in Colombia and a transition period will start. A recent decree will bring the capital framework closer to Basel III standards. Moving fully to Basel III regulations will further strengthen the resilience of the banking system and facilitate access to credit by banks, and ultimately by firms and households.

Corporate and household debts have reached near record levels but remain modest by international standards (Figure 12, Panel D and F). Around 15% of corporate debt is denominated in foreign currency, while households' exposure to exchange rate risks is negligible. Unhedged corporate liabilities of non-exporting firms amount to 5% of GDP in 2018. Public debt denominated in foreign currency remains at 16%. Foreigners participation in local public bond market has increased and stabilised around 25% of the stock value. This reduces exchange risks for the government and increases liquidity but it also makes Colombia more sensitive to changes in international financial markets sentiment (Banco de la República, 2017[6]).

Figure 12. Financial indicators remain solid



Note: In Panel C, OECD refers to an unweighted average of all its member countries. In Panel D and Panel F, OECD refers to an unweighted average of 30 OECD member countries with available data.
Source: IMF Financial Soundness Indicators database, BIS.

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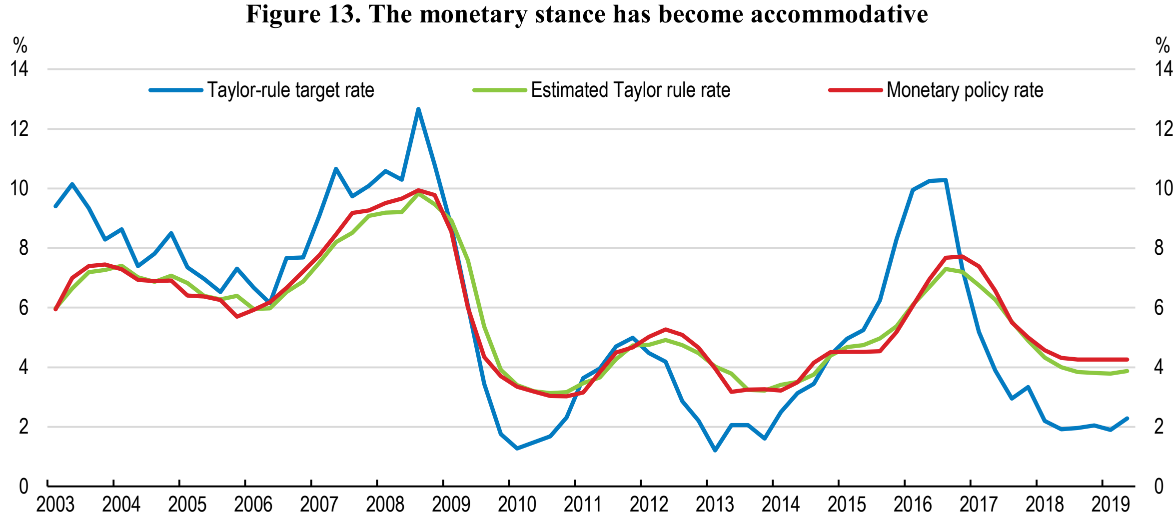
Macroeconomic policies are solid but the fiscal framework could be reinforced

The large oil price shock in 2015-16 put Colombian macroeconomic policy framework to the test. The smooth adjustment to the shock attests that the framework is strong and that policy action was timely. Looking ahead, with uncertainty rising about the global economy, monetary policy and fiscal policy should remain cautious.

Monetary policy

The Central Bank conducts monetary policy on an inflation targeting framework and flexible exchange rate. Skilful management of the monetary framework has contained inflation in a difficult environment. The oil shock and the associated exchange rate depreciation, together with the effect of El Niño, which increased significantly food prices, pushed inflation to 9% in July 2016. Monetary policy tightening avoided de-anchoring of expectations and inflation returned to the 3% target. With inflation decelerating sharply over 2017, the central bank gradually and appropriately eased its policy rate, supporting growth during 2017's deceleration. At the beginning of 2018, the Central Bank eased futher its policy rate to support growth. Inflation is expected to remain close to 3%, allowing the Central Bank to maintain its current monetary stance, which is consistent with a Taylor rule (Figure 13). Going forward monetary policy should remain moderately accommodative, provided inflation and its expectations remain near the 3% target, and start to normalize as the output gap closes down.

Figure 13. The monetary stance has become accommodative



Note: The Taylor rule target rate is computed as: nominal interest rate = real natural interest rate + inflation rate + 0.5 * (inflation gap) + 0.5 * (output gap); the inflation target is set at 3%; the natural real interest rate is taken to be 1%. The estimated Taylor rule rate is based on a simple quarterly regression of nominal interest rate on lagged nominal interest rate, current inflation and output gap estimated over 2002Q1-2019Q2.
Source: OECD calculations and Banco de la República.

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The Central Bank is undertaking changes in the communication of monetary decisions to fine tune its messages and align them to international best standards. Decisions on interest rates will be made in 8 of the 12 meetings held per year. This is aimed at aligning decisions with major data releases and allowing deeper discussion and analysis of macroeconomic and inflation conditions. The Central Bank could also consider introducing elements of forward guidance in its communication. Forward guidance is increasingly used by Central

Banks, including some in the region such as Chile. Forward guidance can help smooth transmission of monetary policy (Pescatori, 2018[7]; Praet, 2013[8]; Campbell, Evans and A. Justiniano, 2012[9]).

Fiscal policy

Fiscal policy has been governed by a fiscal rule since 2012 that targets the central government's budget balance, adjusted for cyclical factors and oil and mining prices. Potential GDP estimates and long-term reference oil prices are set by an external committee. A solid framework to ensure subnational fiscal sustainability is also in place, after problems of over-borrowing and excessive expenditure growth during the 1990s. Presently the fiscal situation of subnational governments is solid, presenting a budget balance of 0.6% of GDP in 2018.

The oil-price shock implied a sharp fall in oil-related revenues, from about 2.6% of GDP in 2014 to nearly 0% in 2016 (Table 4). As a consequence, the central government headline deficit increased from 2.4% to 4% in the same period. The increase in the deficit, together with the depreciation of the peso, triggered an increase in debt from 40% of GDP in 2014 to 51% of GDP in 2018. The deficit was reduced in 2017, thanks to a significant increase in non-oil revenues, partly related to a tax reform, and to one-off revenues related to fines to the telecom sector. The fall in the deficit in 2018 was mainly driven by increased oil-revenues and reduced public investment by the central government (MFMP, 2019[3]).

Table 4. The government deficit has decreased

Percentage of GDP

	Central government								
	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total revenues	**16.7**	**16.1**	**14.9**	**15.6**	**15.3**	**16.6**	**16.5**	**16.5**	**16.4**
Oil revenues	2.6	1.1	0.1	0.3	1.0	1.1	1.2	1.3	1.3
Non-oil tax revenues	13.1	13.9	13.6	13.6	13.2	13.9	13.6	13.7	14.0
Personal taxes	1.1	1.2	1.2						
Corporate taxes	5.3	5.1	4.9						
Value added taxes	5.1	5.2	4.9	5.5	5.7	6.0	6.2	6.3	6.5
Other revenues	0.9	1.1	1.2	1.8	1.4	1.5	1.7	1.6	1.2
Total expenditures	**19.1**	**19.2**	**18.9**	**19.3**	**18.4**	**19.0**	**18.7**	**18.4**	**18.1**
Investment	3.0	3.1	2.0	1.9	1.4	1.6			
Public consumption	13.9	13.5	14.0	14.5	14.2	14.3			
Investment + Public Consumption	16.8	16.6	16.0	16.4	15.6	15.9	15.7	15.5	15.4
Interest	2.2	2.6	2.9	2.9	2.8	3.0	3.0	2.8	2.7
Migration shock						**0.5**	**0.4**	**0.3**	**0.2**
Fiscal balance	**-2.4**	**-3.0**	**-4.0**	**-3.6**	**-3.1**	**-2.4**	**-2.2**	**-1.8**	**-1.6**
Structural balance (fiscal rule)	**-2.3**	**-2.2**	**-2.2**	**-1.9**	**-1.9**	**-1.5**	**-1.5**	**-1.3**	**-1.0**
Fiscal impulse		**-0.1**	**0.0**	**-0.3**	**0.0**	**-0.4**	**-0.1**	**-0.4**	**-0.3**
	General government								
Total revenues	**27.5**	**25.4**	**24.3**	**24.5**	**26.5**	**27.9**	**27.8**	**26.9**	**26.5**
Total expenditures	**29.2**	**28.6**	**27.4**	**26.9**	**28.8**	**29.9**	**29.1**	**28.0**	**27.6**
Fiscal balance	**-1.7**	**-3.2**	**-3.0**	**-2.3**	**-2.2**	**-2.0**	**-1.3**	**-1.1**	**-1.0**

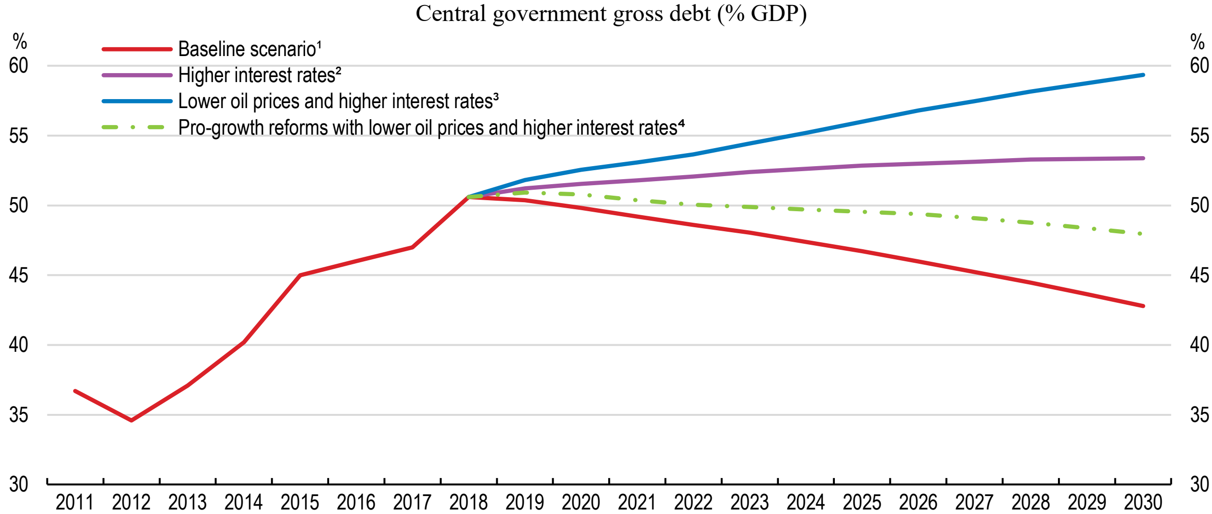
Note: Figures for 2019-2022 are projected. In 2017 public consumption includes advances of spending corresponding to 2018 amounting to 0.3% of GDP. From 2019 onwards, other revenues includes the plan of privatisations and Central Bank utilities. The fiscal impulse is calculated as the change in the structural balance. Data on personal taxes, corporate taxes and value added taxes come from the OECD. All other data come from Colombia's Finance Ministry.
Source: Colombia's Finance Ministry; (MFMP, 2019[3]).

Due to the unexpected additional spending needs stemming from the acceleration in the inflow of migrants from Venezuela, the council of independent experts (Comité Consultivo de la Regla Fiscal) suggested that the fiscal deficit could be reduced at a slower pace than previously planned (MFMP, 2019[3]). The new deficit reduction path implies an additional fiscal space of 0.5% of GDP in 2019, decreasing by 0.1 ppts of GDP by year until 2024. This will allow the authorithies to accommodate the migration shock and the associated additional spending needs into Colombia's strong macroeconomic framework (OECD, 2019[10]).

Fiscal policy will be moderately contractionary over the next years to reduce the deficit in line with the fiscal rule, which calls for the structural central government deficit to decline to 1% by 2022. This gradual reduction of the deficit strikes an appropriate balance between spending needs, the gradual recovery and the need to ensure debt sustainability. These plans would help to stabilise public debt/GDP around its current level of 50% of GDP and put it on declining path overtime (Figure 14). However, the debt trajectory is highly sensitive to changes in interest rates, economic growth or oil prices. The need to stabilise the public debt is justified by strong dependence on volatile revenues and exposure as emerging economy to global financial shocks. Recent increases in the debt imply also that Colombia has now fewer buffers for unexpected events. The literature tends to limit prudent debt levels to 30-50% of GDP in emerging economies (Fall et al., 2015[11]) or maximum debt limit of 55-60% according to IMF (2019[12]) . In an ambitious reform scenario, as the one outlined in Table 1, debt would stabilise even if interest rates are higher and oil prices lower.

Figure 14. Public debt has increased

Central government gross debt (% GDP)



1. Baseline long-term assumptions: Real long-term growth of 2.9%, long-term interest rate on government bonds of 5.8%, GDP deflator growth of 3%, primary fiscal balance of 0.4% of GDP in 2020 and 0.8% in 2030, oil price (Brent) of 68 USD in the long-term.
2. Same assumptions as in 1, and real long-term interest rates are higher by 2 percentage points over 2019-2040.
3. Same assumptions as in 2, but lower oil prices at 52 USD per barrel in the long-term.
4. Same assumptions as in 3 and higher annual GDP growth of by 1.1 percentage points every year until 2028 and 1.6 percentage points afterwards (see Table 1).
Source: OECD calculations based on the Medium Term Fiscal Plan 2019 and OECD Economic Outlook 105 database and updated.

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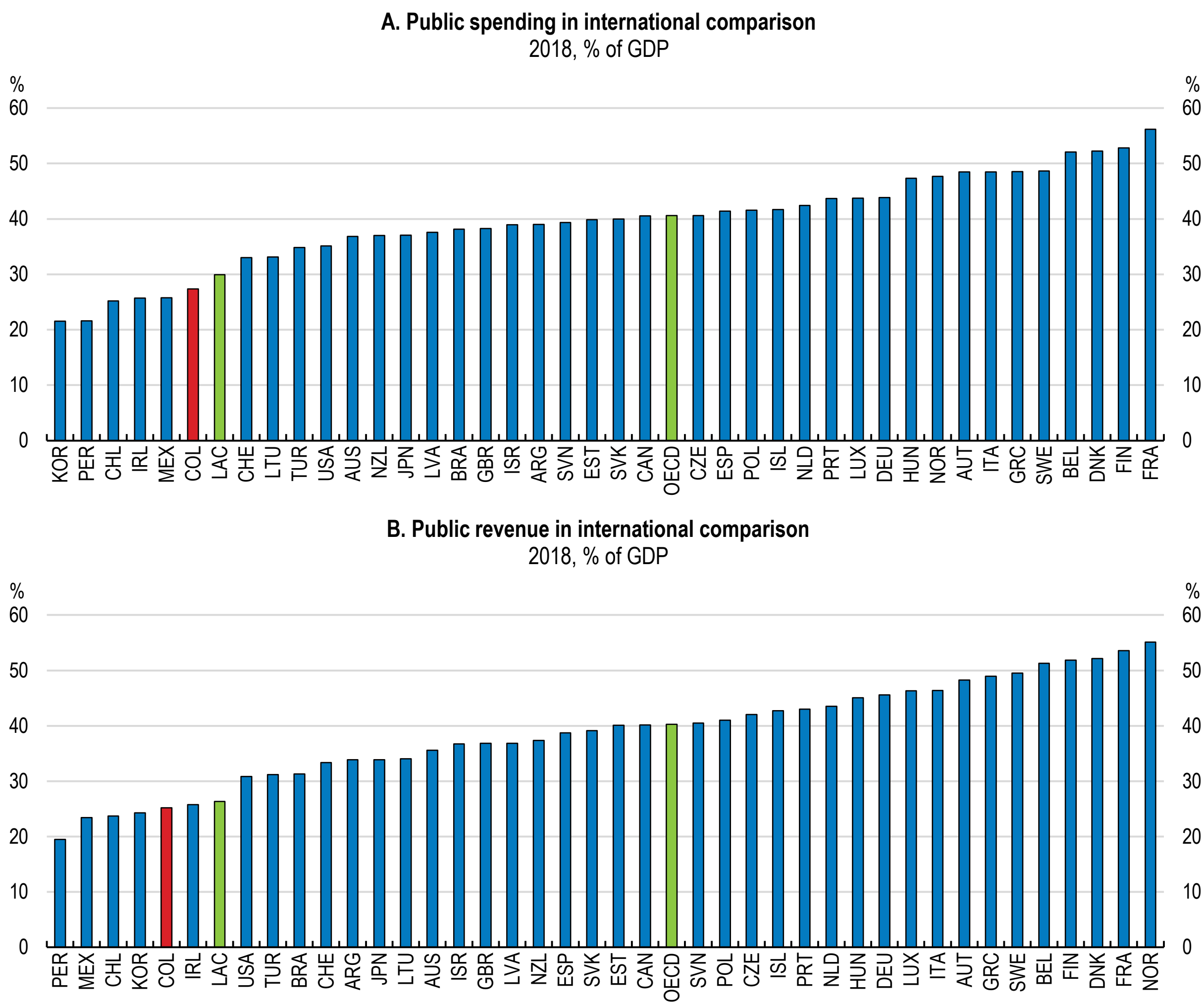
The medium-term fiscal plan foresees that debt reduction will come both from lowering spending and increasing revenue (MFMP, 2019[3]). Both revenues and spending remain lower than in OECD countries (Figure 15). Colombia has important spending needs, such as those related to bottlenecks in infrastructure, social programmes including pensions, or the peace process (Box 4). Social spending in Colombia remains relatively low (OECD, 2017[13]), while social needs are increasing. Central government investment, which has taken a large part of the adjustment, is already at low levels. Higher oil prices may provide temporarily additional revenues, but measures to optimise both public spending and revenue are needed to continue complying with the fiscal rule. From the spending side some measures adopted in the National Development Plan 2018-22 will help reduce spending, such as better tools for targeting subsidies.

Figure 15. Public spending and revenue are lower than in OECD countries



Note: Data refer to general government expenditures and revenues. LAC refers to the unweighted average of Argentina, Brazil, Chile, Mexico and Peru.
Source: IMF, World Economic Outlook database, April 2019.

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Box 4. Implementation of the peace process has advanced

Reports by independent observers (KROC, 2017[14]; KROC, 2018[15]; KROC, 2019[16]) signal that the implementation of the peace agreement shows steady progress. Many of the initial short-term measures have been completed. The process has now entered the more difficult phase of advancing economic development of rural areas, enhancing citizen participation, reincorporating former fighters, substituting crops of illicit use, addressing the concerns of victims, and providing mechanisms for transitional justice (KROC, 2018[15]).

Achieving these goals will require sustaining budgetary and institutional reforms. The implementation of the agreement is estimated to require public spending of around 0.8% of GDP every year up to 2024 and slightly less afterwards. Promoting economic and rural development in other peace agreements has typically taken up to a decade (KROC, 2018[15]). This highlights that it is fundamental to sustain efforts overtime to enhance the capacity of the state to guarantee opportunities for development and citizen participation for all communities, especially in the territories most affected by the conflict.

The Pluriannual Investment Plan for Peace, contained in the National Development Plan 2018-22, amounts to 37.1 trillion pesos (3.8% of GDP). Resources will be focused on victims, the process of reincorporation and substitution of illicit crops, as well as on the population and territories with the highest rates of extreme poverty, illegal economies, institutional weakness and violence, especially in the 170 municipalities of the development programs with a territorial approach.

Completing and updating the cadastre is fundamental to boost rural development and a sustainable peace. Existing cadastral information is incomplete, as cadastral information lacks for one third of the country and half of current information is outdated. The cadastre would also help speed up formalisation and registration of land rights, as more than 40% of land ownership continues to be informal. A functional and complete rural cadastre would be the starting point to promote a better use of land, as it will improve legal certainty and facilitate transactions. This would improve incentives for a better use of land according to its suitability and help to attract private investment. Steady progress in land restoration programs, a cornerstone of the peace agreement aiming at land to be returned to its proper owners, would also be a fundamental step for a more inclusive rural development.

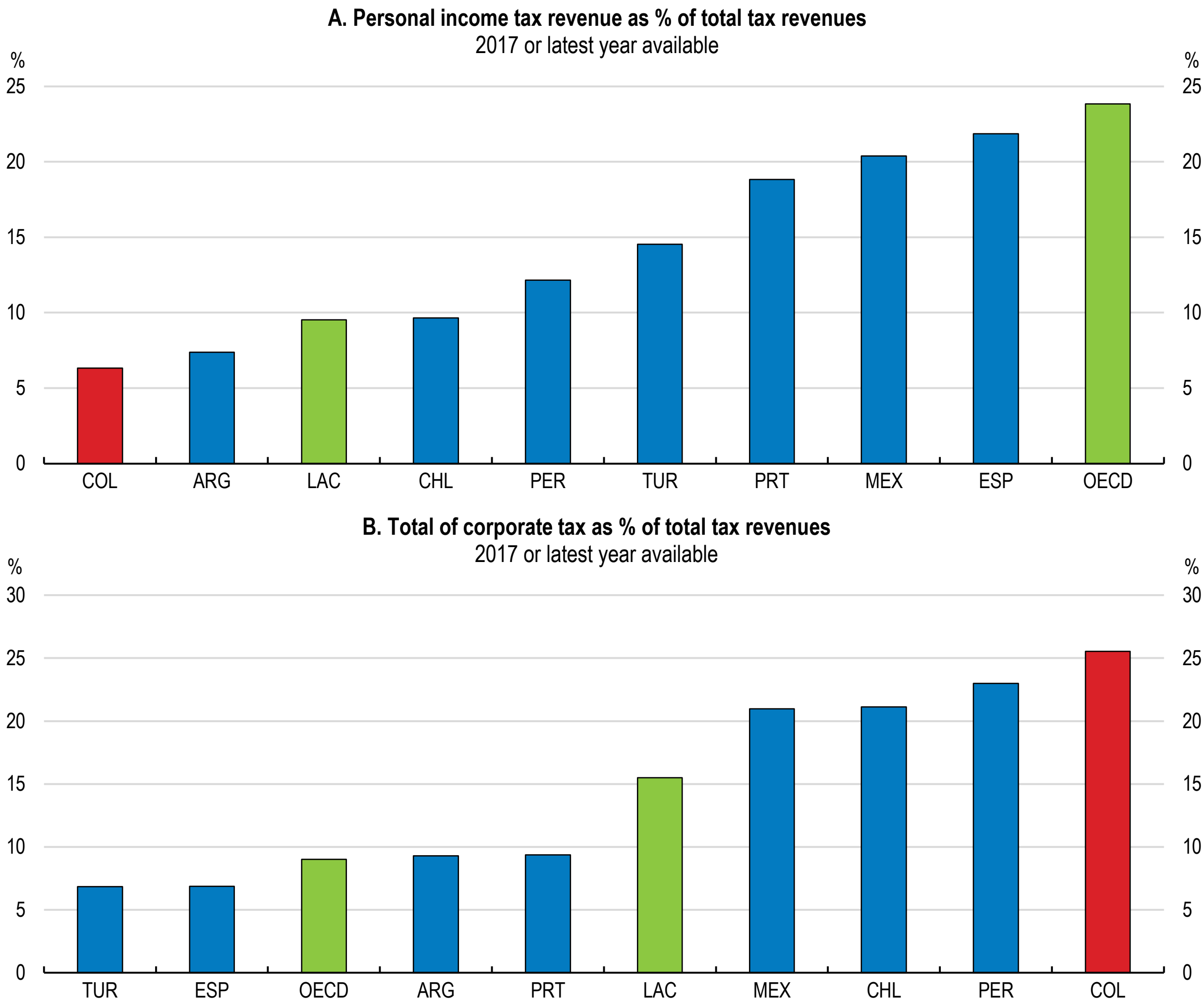
Simplifying the tax system and improving the tax mix

Raising revenue in a more efficient and fair way has been a long-standing challenge, as highlighted in previous Economic Surveys (OECD, 2017[13]; OECD, 2015[17]; OECD, 2013[18]). There were 20 tax reforms in the last 20 years but the tax system remains complex, with multiple special regimes and tax exemptions. The latest reforms were enacted in December 2016 and December 2018, incorporating some OECD recommendations, such as reducing the corporate tax rate, eliminating the business wealth tax or increasing the VAT rate and measures to reduce tax evasion (Box 5, Table 5, (OECD, 2017[13])). Further reform remains needed to rebalance the tax burden (Figure 16), held predominantly by firms, and to simplify the tax system. There is also a need to increase revenue in a sustainable way, which would increase predictability, helping to boost investment.

Table 5. Past recommendations on improving the macroeconomic framework

Past recommendations	Actions taken since the 2017 survey
Approve the law awarding the financial superintendence regulatory powers over holding companies of financial conglomerates	In September 2017, the Law 1870 granted regulatory and supervisory powers over financial conglomerates to the financial superintendence.
Raise more revenue in the medium term	The December 2016 tax reform had the objective to raise more revenue and decrease the dependence on oil revenues. In addition to the increase in the VAT rate and the reduction in the corporate rate, the reform integrated a special corporate tax (CREE) within the corporate income tax. It also phased out the business wealth tax, reformed the treatment of non-profit organisations, and introduced a dividend tax at shareholder level, a carbon tax and a tax on plastic bags. In December 2018 ,the financing law was approved with the main objective of promoting economic growth through incentives for private investment and increasing tax collection. See Box 5 for the main measures.

Figure 16. The tax burden is unbalanced



Note: OECD is the average of all member countries where data is available data for 2016. LAC is the average of all Latin American and the Caribbean countries for which data is available for 2017.
Source: OECD Revenue Statistics database.

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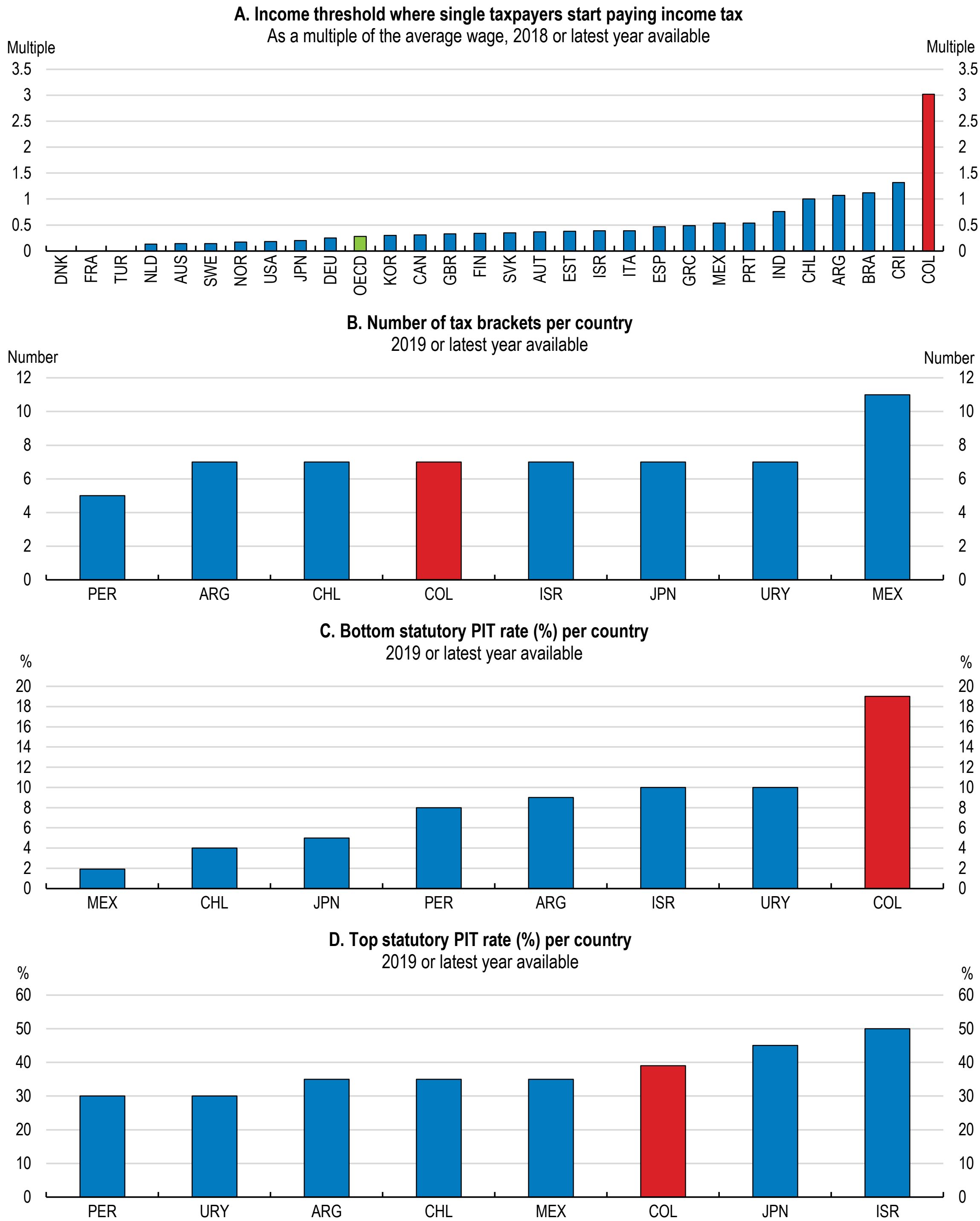
Box 5. Main measures included in the Financing Law

In December 2018, the so-called Financing Law (Ley de Financiamiento) was approved, including changes to several taxes. The main changes are:

- gradual reduction of corporate income tax rates: 32% in 2020 ; 31% in 2021; and 30% in 2022;
- introduction of tax credits for VAT on capital goods and gradual elimination of the tax for the industry and commerce tax (ICA) (50% during 2019-2021 and 100% in 2022);
- gradual reduction and eventual elimination of the presumptive income tax system (reduced to 1.5% on 2019 and 2020, from 2021 the rate will be 0%);
- new simplified tax scheme (Simple) for small firms;
- creation of three personal income tax rates for high-income earners (35%, 37% and 39%) and unification of labour, pension and capital income;
- introduction of a wealth tax for rich and increases in dividend taxes;
- introduction of additional exemptions and special regimes: orange economy, agricultural sector, "megainvestments";
- introduction of an additional CIT surcharge for large financial entities;
- measures to strengthen the tax office (DIAN) to combat evasion.

The personal income tax yields a low share of tax revenue, both in comparison with other countries in the region and with OECD countries. Very few individuals pay personal taxes, or even submit tax returns. This is due to a high income threshold below which no personal income tax has to be paid (Figure 17). As a result, in 2018 more than 90% of the active population were exempted and did not submit a tax declaration. The latest reforms made an effort to limit exemptions but there are still exemptions benefiting high-income households, such as those related to pensions. Pension contributions are deductible from the income tax base and pension benefits are also tax exempt. This illustrates that there is room to broaden the tax base in an inclusive way by lowering the minimum income threshold and eliminating exemptions that benefit more affluent tax payers.

Figure 17. There is room to broaden the personal tax base in a progressive way



Note: PIT stands for personal income tax. For Panel A, in Denmark, France and Turkey, PIT is levied on the first earned currency unit. For India, the average worker income covers only the manufacturing sector, including both men and women. In Panels B:D, data for Colombia are from 2019.

Source: OECD calculations based on the Taxing Wages models; OECD, Taxing Wages in Latin America and the Caribbean 2016; OECD, Taxing Wages 2019; For Panels B:D, data for Colombia come from Dirección de Impuestos y Aduanas Nacionales (DIAN).

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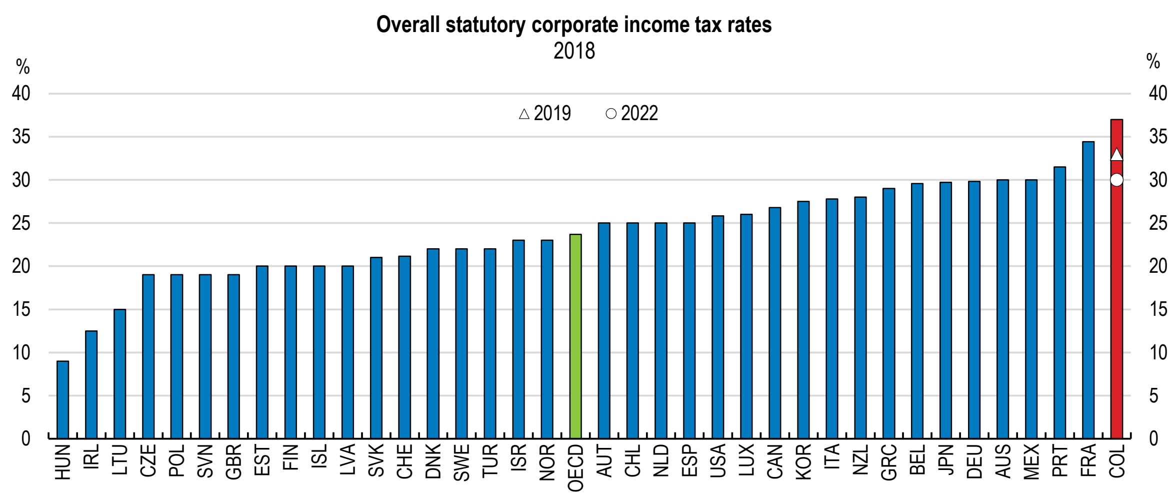
The last tax reforms in Colombia reduced the corporate tax burden. The 2016 tax reform reduced the corporate income tax rate to 37% in 2018 and 33% in 2019. The 2018 tax reform reduces the corporate income tax rate further to 30% in 2022, which is still high in international perspective (Figure 18). The 2018 tax reform also reduced effective corporate tax burden by eliminating the presumptive income tax and introducing a tax credit on the VAT levied on investment. Lowering further the tax burden on enterprises would help raise productivity and create formal jobs by strengthening investment incentives (Arnold et al., 2011[19]). The current fiscal space for lowering the statutory corporate rate further is limited, but some space could be created if the tax base is broadened by eliminating deductions and loopholes. Only those deductions contributing to increasing productivity, such as the R&D tax credit, should be preserved. Other deductions, such as those related to Free Trade Zones, should be thoroughly evaluated and those not found to contribute in a cost-effective manner to higher investment be phased down.

Figure 18. The corporate tax rate remains high



Source: OECD Tax database.

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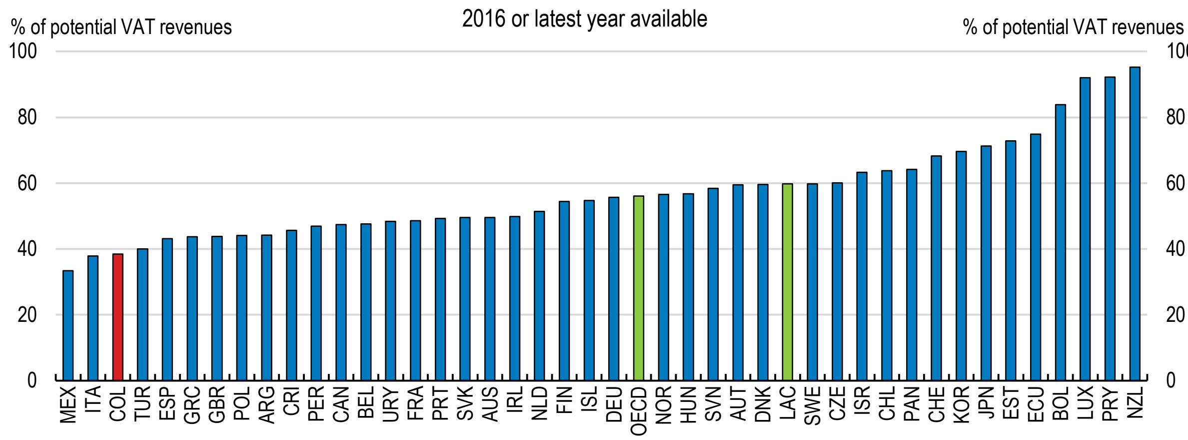
VAT revenues could be raised (Figure 19) with stronger compliance and less use of reduced rates. The VAT rate was increased to 19% in the 2016 reform, with reduced rates or exemptions covering spending on health, education, food, medicines or transportation. Computers, tablets and mobile phones are also exempt until certain limits. In the 2018 tax reform, soft drinks and beer were exluded from the exemptions. Better-off households enjoy a large share of the support that the reduced rates and exemptions provide (OECD, 2013[18]; OECD, 2018[20]). Applying the standard rate to all consumption and compensating low-income households through cash transfers holds the promise of increasing more revenue in a more inclusive way. Colombia has made good progress in rolling out conditional cash transfer schemes, showing that replacing reduced rates with cash transfers to low-income households is a feasible option.

A reform to broaden the personal and VAT tax bases is subject to significant political economy barriers. It would be important to focus communication efforts on emphasizing the intention to promote formalization of firms and jobs. At the same time, willingness to pay is positively associated to the quality of public services and the rule of law (Daude, Gutierrez and Melguizo, 2013[21]). The quality of public services is perceived as very low (Figure 20). Boosting government effectiveness, for example by improving public policies in education, social policies, justice or infrastructure, would also help to boost tax collection.

Figure 19. VAT revenues should be higher



Note: The VAT revenue ratio (VRR) is defined as the ratio between the actual value-added tax (VAT) revenue collected and the revenue that would theoretically be raised if VAT was applied at the standard rate to all final consumption. The OECD and LAC (excluding Colombia) aggregates are unweighted averages of data shown and data for Canada cover federal VAT only.
Source: OECD Consumption Tax Trends 2018, OECD Revenue Statistics in Latin America and the Caribbean 2019.

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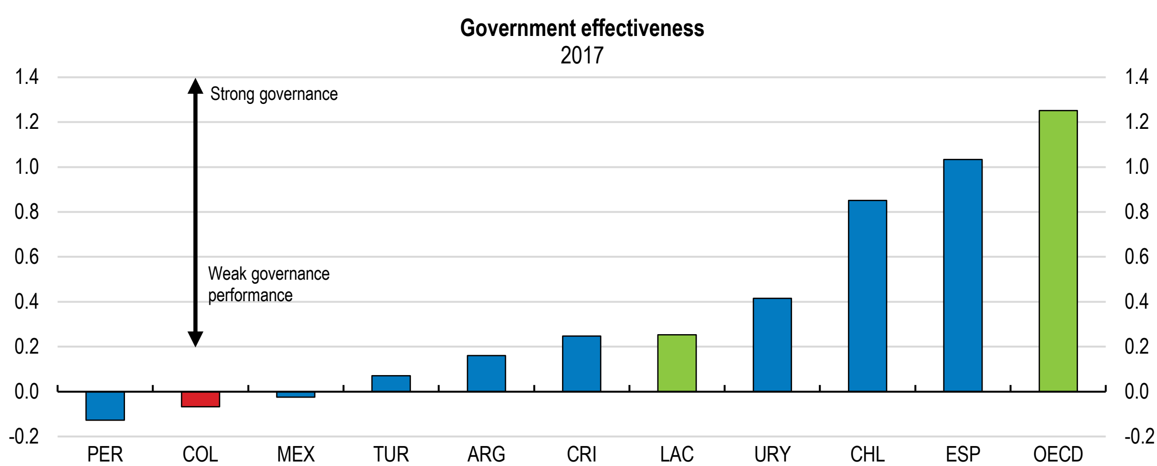
Figure 20. Government is perceived to have limited effectiveness



Note: Government effectiveness reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance). OECD refers to the average of all its member countries for which 2017 data is available. LAC refers to the unweighted average of Argentina, Chile, Costa Rica, Mexico, Peru and Uruguay.
Source: World Bank, Worldwide Governance Indicators database.

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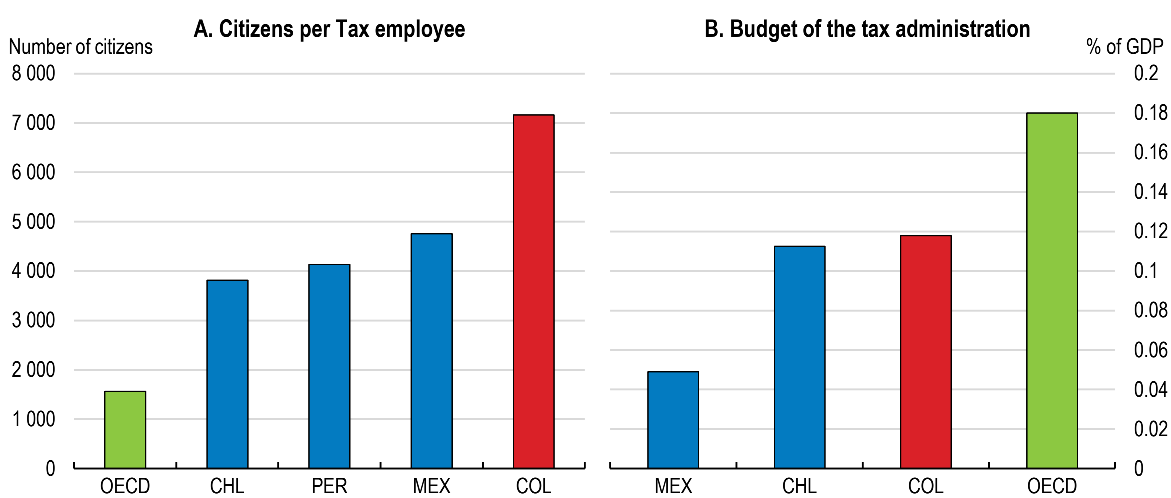
Perceptions about government effectiveness would in turn improve with further progress in reducing tax evasion, which remains pervasive. Tax evasion on VAT and corporate income tax combined could be around 4% of GDP (OECD, 2015[17]). Strengthening further the tax administration, DIAN, whose capacities are constrained by low investment in IT systems (OECD, 2015[17]), is crucial (Figure 21). A broader use of IT would simplify tax administration and enforcement and lower costs for tax payers. The implementation of electronic invoicing, becoming mandatory at the beginning of 2019 and expected to be fully implemented by 2020, is a welcome step in that direction, as illustrated by Chile, where electronic invoicing was introduced in 2003, increasing revenues.

Another way to fight tax evasion would be to limit the use of cash, which accounts for 90% of all transactions, significantly higher than in other emerging economies, such as Brazil or Turkey (Pérez, Pacheco and Salazar, 2016[22]). Facilitating the transition from cash payments into electronic payments would also help to reduce informality and foster financial development (Rogoff, 2016[23]). Ongoing efforts to modernise the retail payment system and simplify saving accounts procedures would foster digital payments and facilitate the creation of a digital ecosystem. Additional policy options include banning cash for transactions above a certain threshold, as done by many OECD countries and some other countries in the region. In 2012 Mexico introduced a ban on large cash transactions, including real estate transactions, and Peru has recently introduced similar schemes.

Figure 21. Tax administration could be strengthened



Note: In both panels, data refer to 2015.
Source: OECD (2017a), Tax Administration 2017: Comparative information on OECD and other advanced and emerging economies.

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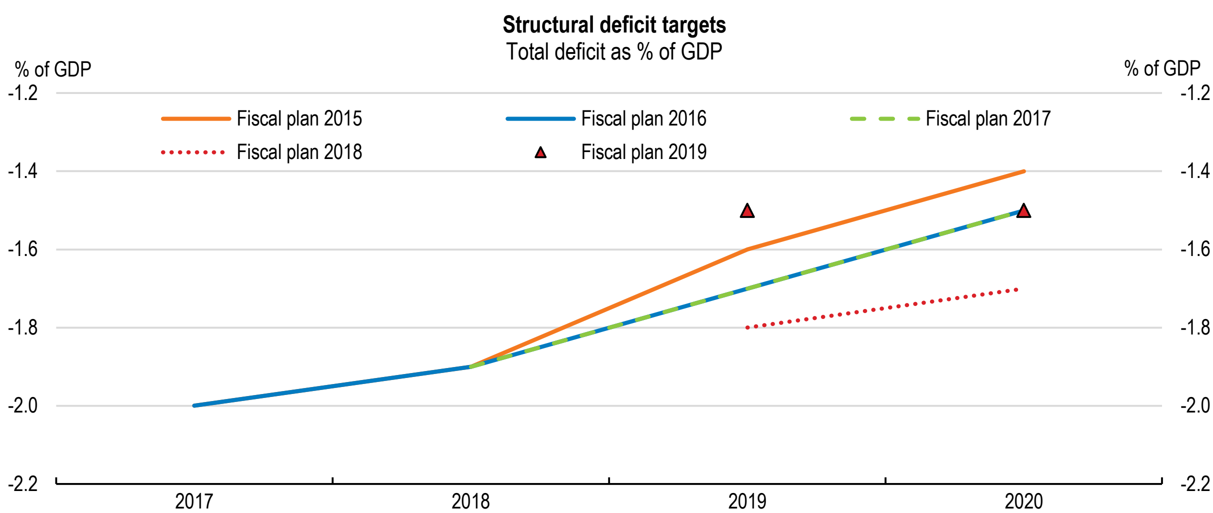
Colombia should also consider phasing out the financial transaction tax, which favours informality and tax evasion, and hampers financial inclusion, despite some exempted transactions and financial products. Given the fiscal situation, the tax could be phased out gradually, as recommended in past OECD Economic Surveys (OECD, 2015[17]). Other taxes, such as environmentally-related taxes or property taxes could be increased instead. Environmentally-related taxes represent 0.6% of GDP, well below the OECD average and leading countries in the region, such as Costa Rica. Colombia recently introduced a carbon tax, and expanding efforts in that direction would offer the double dividend of increasing revenue and taxing environmentally damaging activities. Property taxes on housing represent 0.8% of GDP, well below the OECD average.

Strengthening the fiscal framework

The fiscal rule has provided macroeconomic stability and fiscal discipline. Fiscal targets are established every year, such that the structural budget deficit gradually decreases to 1% by 2022. Structural fiscal targets have been frequently revised, normaly driven by parameters adjustments (Figure 22). Providing additional technical analysis on the source and impact of these revisions would safeguard the credibility of the rule and avoid that frequent revisions end up jeopardising its credibility. The creation of an independent fiscal council, as in many OECD countries and several countries in the region (such as Chile and Brazil), could thus be a useful complement to the fiscal rule. It could undertake additional technical analysis of the inputs that feed into the rule and are used to estimate the structural balance. This would enhance independent oversight and accountability of fiscal policies. Fiscal councils typically produce official or alternative forecasts, analyse the executive's budget proposals, and monitor compliance with fiscal rules and cost legislative proposals. A committee is currently in charge of advising about the fiscal rule. It has some of the characteristics of fiscal councils, but the scope of its analysis is limited, as it has no staff and its members work part-time on an unpaid basis.

Figure 22. Structural deficit targets are frequently revised



Source: Ministerio de Hacienda y Crédito Público.

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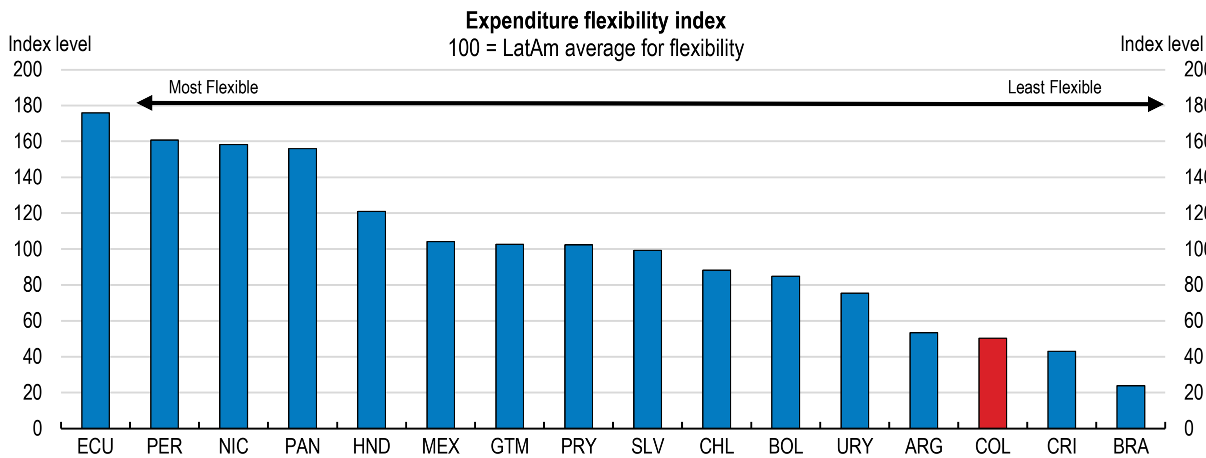
Enhancing public spending efficiency

The need to meet the fiscal rule, together with the need to continue reducing inequality and boosting growth, makes improving the efficiency of public spending a fundamental economic and social challenge. The government's ability to allocate budget spending according to changing needs and priorities is undermined by excessive inflexibility (Figure 23). Spending mandated by law, earmarking, transfers to sub-national entities, pensions and interest spending imply that the share of spending that government can adjust is limited, and almost exclusively related to investment (Bernal, et al., (2017[24])). Existing mandated spending and earmarking of government revenues should be evaluated with a view to reduce budget rigidities.

Figure 23. There is little room for discretionary spending



Note: The expenditure flexibility index tracks central government spending from 2010 to 2016 and classifies outlays as operating expenses (wage and other), transfers, investment or interest payments. Transfers include pensions and payments to subnational governments. In the case of Colombia the latter comprises transfers from the General System of Transfers (Sistema General de Participaciones, SGP). Others include general expenses. For the index, spending on interest, wages and transfers are considered to be mandatory and the share of mandatory outlays to total spending is calculated for each country. The index is scaled using the regional average for mandatory spending as a share of total spending, creating a relative ranking. The sovereigns divide into three categories: those with the most flexible expenditures, the most inflexible, and a neutral middle cohort.
Source: Moody's Investors Service.

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Excessive fragmentation also hampers spending efficiency (Bernal, et al., (2017[24]). Currently there is no single budget process, but an operating budget and an investment budget. Royalties coming from natural resources are also under another budget. OECD countries make use of unified and comprehensive budget mechanisms, which help to avoid fragmentation and facilitate coordination.

The system in charge of allocating royalties from natural resources (Sistema General de Regalias, SGR) was reformed in 2012 to better distribute revenues between regions. Funding allocated to areas not endowed with natural resources increased from 20% to 80% of the total. This increase in revenues had a positive impact on social outcomes (Gallego, Maldonado and Trujillo, 2018[25]). However, the reform has also increased fragmentation and earmarking. Also, incentives to undertake new projects in productive areas has diminished, as those regions face negative externalities from production and lower rents (Bernal, et al., (2017[24]). This can hamper the sustainability of the royalties system. The allocation formula could be reviewed to improve incentives of regions with natural resources while preserving the positive contribution of the system to reduce regional inequalities. A bill in congress, since April 2019, increases incentives for the production of mineral-energy resources by raising the resources to the producing regions, and strengthens investment in all regions of the country by adjusting the project selection.

There is also a need to avoid excessive fragmentation projects financed with royalties, as the current setting provides incentives for low-scale low-impact projects (Contraloría, 2018[26]). Mechanisms, such as the one recently implemented in R&D projects, that foresees that funding will be allocated directly to research centres, which takes care of planning and executing projects, would help to identify and implement projects of larger impact. This offers also the advantage of avoiding problems related with weak governance and capabilities in some subnational governments, a crucial obstacle for making a better use of royalties (Contraloria, 2017[27]).

Making the most out of public spending also requires improving its targeting. Social programmes providing transfers and benefits to households amount to more than 12% of the GDP. Spending allocated to firms is also large, although more difficult to quantify as they involve tax exemptions. Several components of spending are poorly targeted and regressive, as a significant proportion of spending, such as those related to housing, goes to individuals in the highest income brackets (see social section). This suggests that there is high potential to improve the quality of spending by improving targeting, evaluating existing programmes and tax exemptions, retaining those found to have a positive and cost-effective impact on equity or productivity and phasing out the rest.

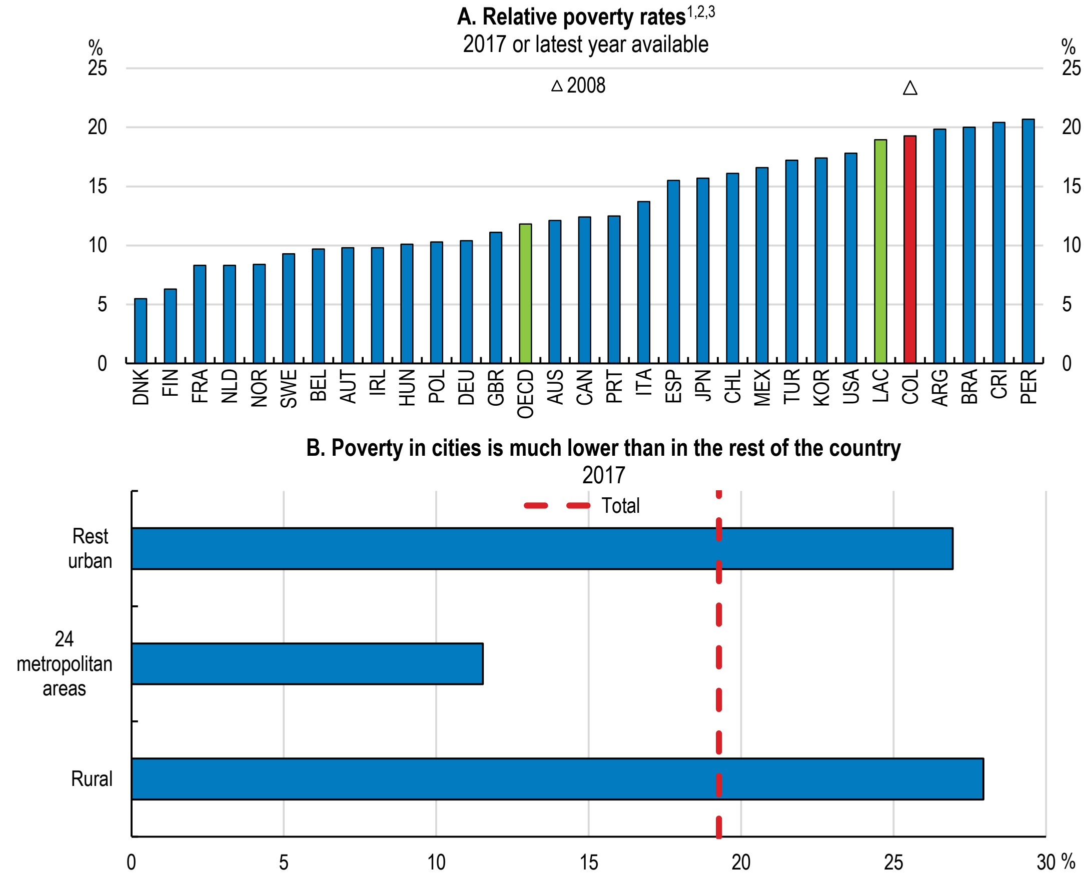
Social indicators have improved, but Colombia remains a very unequal country

Key social indicators have improved in the last decade. Poverty has declined but regional disparities are large (Figure 24). Although in a declining trend, income inequality, measured by different indicators (World Bank, 2018[28]), remains high (Figure 25). It could take eleven generations for children of poor families to reach the average income in their country (OECD, 2018[29]). High inequality has its roots on large regional disparities with a wide gap between urban and rural areas. Colombia displays one of the highest levels of regional inequality in GDP per capita across OECD countries (OECD, 2014[30]). Inequalities particularly affect ethnic minorities and displaced people by the conflict, which are disproportionally concentrated in rural areas. Inequality is also a gender issue as female employment is low and wage gaps have been increasing. The increasing flow of immigration from Venezuela affects mainly the north-western regions of the country, adding to regional disparities. Access to high-quality education and health is also uneven among regions and socioeconomic groups. The pension system exacerbates inequities leaving many elderly in poverty given the low coverage among the most vulnerable. There is significant room to improve the targeting of public spending.

Making growth more inclusive will rely on improving opportunities for all Colombians in education and work, improving their chances to find sustainable income generation opportunities. Improving the targeting of social spending would help to reduce inequality. A pension reform would help to reduce old-age poverty. The peace agreement is an important opportunity to foster inclusive growth and close regional disparities, as it has a strong focus on rural development. Economic integration of the ex-combatants, providing them with income-generating opportunities, will be key. Local and regional administrative capacity should be strengthened for a more effective coordination with the national government to deliver public services of comparable standards and quality across all regions. This would be particularly important in those areas more affected by the armed conflict and migration.

Boosting inclusive growth will also hinge on improving social dialogue and reducing violence against trade unionists. Important steps have been taken to increase security, and violence against trade unionists has dropped considerably (Chapter 2). While the Peace Agreement signed in 2016 will most likely further enhance the security conditions in the country, a proactive strategy by the government to eliminate violence is needed.

Figure 24. Poverty has declined, but territorial disparities remain large



1. Relative poverty rates after taxes and transfers (threshold of 50% of the median income). The statistical definition is different from the one followed by DANE.
2. OECD refers to the unweighted average of its member countries.
3. LAC refers to the unweighted average of Argentina, Brazil, Chile, Costa Rica, Mexico and Peru.
Source: OECD calculations based on GEIH Household Survey 2017, OECD Income Distribution and Poverty database and SEDLAC.

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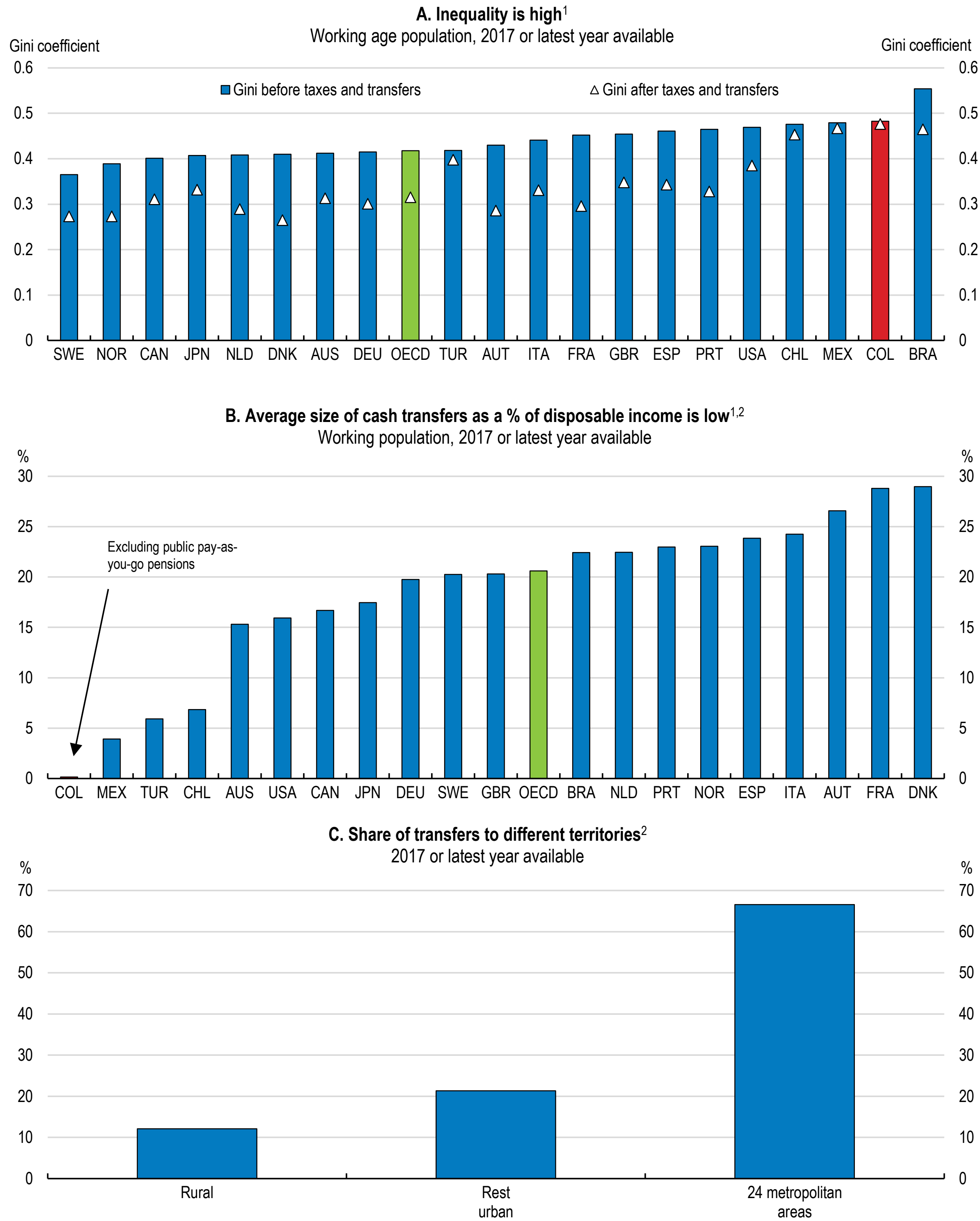
Social spending does little to reduce inequality

The government has made important efforts to expand social programmes, such as *Red Unidos, Más Familias en Acción and Jóvenes en Acción*, which helped to reduce poverty, especially extreme poverty. However, these measures change the Gini only slightly after accounting for taxes and transfers (Figure 25).

Mas Familias en Acción, the main conditional cash transfer to fight poverty, has positive impacts on educational attainment, nutrition and other dimensions of life quality (Angulo, 2016[31]). However, the level of cash transfers is low (Figure 25, Panel B). Family benefits, including financial support for families and children such as child-related cash transfers or benefits in kind for families with children, accounted for only 1.6% of GDP in 2014, below the OECD average of 2.2% (OECD Family Database).

Figure 25. Higher cash transfers focused on most needy regions would reduce inequality



1. OECD refers to the unweighted average of all its member countries.
2. Cash transfers excluding pensions from the pension system for Colombia (in the pay-as-you-go system and special regimes, and Colombia Mayor) and refer to *Mas Familias en Acción, Jovenes en Acción, Bienestar Familiar* from ICBF, subsidies for displaced.
Source: OECD calculations based on GEIH Household Survey (2017) and OECD Income Distribution and Poverty database.

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Higher equity could be achieved by reallocating more spending towards cash transfer programmes, with a focus on vulnerable population, such as rural areas, ethnic minorities (Chapter 2), and those affected by the armed conflict. Spending on universal assistance, such as family or education-related transfers would also help (Causa and Hermansen, 2017[32]). Calculations by the OECD undertaken for this survey show a great potential of channelling more social spending to those more in need to rise equity and reduce poverty (Box 6). Cash transfers would be more effective if supplemented by a training component that improves participants' chances to find more autonomous and sustainable income generation opportunities. Hence, targeting additional training opportunities to recipients of Más Familias en Acción may also be an effective way to give better job opportunities to those most in need, and help avoid possible pervasive effects on informality (Farné and Nieto Ramos, 2018[33]).

Box 6. Potential impact of social policy reforms on poverty and inequality

Simulations, based on microdata from Colombian household survey (GEIH) for 2017, allow gauging the impact of increasing coverage and income-support for two of the most vulnerable populations: old-age and poor families in rural areas (Table 6). For both types of support, increasing coverage and the level of benefits are needed to achieve significant results on inequality and poverty-reduction.

Table 6. Estimated impact on poverty and inequality

	Poverty	Old-age poverty	P90/P10
	% of population		
Old-age income support (*Colombia Mayor*)			
Baseline	19.3	22.7	8.3
Increased coverage	19.1	21.5	8.2
Increased transfer to poverty line	18.7	17.5	7.9
Increased transfer and coverage	18.2	13.5	7.6
	Poverty	Rural poverty	P90/P10
	% households		
Cash transfers to the poor (Mas Familias en Acción)			
Baseline	20.2	29.8	9.5
Increased transfer	19.9	27.9	9.3
Increased coverage in rural areas	19.8	27.0	9.3
Increased transfer and coverage in rural areas	19.1	24.0	9.1

Note: The P90/P10 ratio is the ratio of income of the 10% of people or households with highest income to that of the poorest 10%. For *Colombia Mayor* coverage is doubled reaching 2.5 million old-aged and subsidy is increased to poverty line (calculated by DANE depending on the region). For *Más Familias en Acción*, coverage is increased in 1 million families in rural areas covering 2.5 in total and subsidy is increased only in rural areas by 30 thousand COP$. The extension of coverage was based on ranked estimated probability of obtaining the subsidies depending on income available and individual and household characteristics.
Source: OECD calculations based on GEIH, DANE.

A large share of social programmes and benefits, such as those related to pensions or housing, goes to the relatively rich (Table 7). For example, 32% of the public services subsidies goes to the two highest income quintiles. The potential to reduce inequality and provide better opportunities to all by better targeting social programmes is large. Poverty alleviation programmes, such as *Más Familias en Acción,* are among the best targeted, but 29% of spending still goes to higher income quintiles. This suggest that part of the higher spending needed to increase the impact of some social programmes could come from a reallocation of spending (Table 8). Concentrating public resources into few well-evaluated programmes and integrating programmes with the same objective into one entity would also increase spending efficiency and avoid fragmentation (Bernal, et al. (2017[24]).

Table 7. There is room to improve the targeting of social programmes and benefits

Share by quintile of disposable income, %.Year 2015

	Size of the programme (%GDP)	Lower income 1st quintile	2nd quintile	3rd quintile	4th quintile	Higher income 5th quintile
Education (Inc. job training)	3.0	25.7	23.4	21.4	18.1	11.4
Pensions (Inc. *Colombia Mayor*)	2.3	4.3	7.8	13.7	23.4	50.8
Health	1.8	33.7	23.6	19.7	15.1	8.0
Public services	0.7	21.8	23.2	22.9	20.4	11.9
Poverty alleviation	0.5	33.4	23.0	15.0	17.2	11.5
Early childhood care	0.4	32.0	27.2	22.1	15.4	3.2
Housing	0.2	11.3	22.5	19.6	26.6	10.0
Other	0.2	48.7	35.7	7.5	5.4	2.6
Total	**9.0**	**22.4**	**19.9**	**18.8**	**18.8**	**20.2**

Note: The spending includes administrative costs, direct cash transfers to families and indirect subsidies. The pension subsidy refers to the difference between the profitability of the contributions, based on a fair profitability assumption, and what is actually paid to the pensioner. Public services includes subsidies on the consumption of electricity or natural gas. Poverty alleviation programmes include *Red Unidos, Más Familias en Acción* and *Red de Seguridad Alimentaria*. Housing includes family housing subsidy, displaced housing subsidy, urban housing, Red Unidos housing subsidy and mortgage loan coverages.
Source: Departamento Nacional de Planeación (DNP).

Table 8. Illustrative long-term impact of some OECD recommendations

Measure	Change in fiscal balance (% GDP)
Social spending	
Increase family benefits, such as conditional cash transfers and childcare services, from 1.6% of GDP to 2.1% (the OECD average).	-0.5
Increase spending on Colombia Mayor, the non-contributory pensions, from 0.2% of GDP to 1.0%.	-0.8
Improve targeting of social programmes and benefits by phasing out those received by the highest income quintile of the income distribution	1.8
Rebalancing the tax mix	
Increase property tax, notably recurrent taxes on housing, from 0.8% of GDP to OECD median (1.7%)	0.9
Increase green taxes from 1% of GDP to OECD median (2.2%)	1.1
Lower the bands at which the personal income taxes and the higher income rate are levied to the OECD average (IDB, 2013).	1.4
Reduce the corporate income tax from 5.1% of GDP to halve the gap with the OECD mean (3.6%)	-1.5
Effect of structural reforms in Table 1 on the budget through higher GDP growth	
The estimated impact on GDP per capita (Table 1) would lead to higher GDP by 11.4%, abstracting from population growth. The public-spending-to-GDP ratio of 28% of GDP in 2016 would be lowered to 28/1.114 of GDP and, assuming a long-run tax revenues to GDP elasticity of one (Frickle and Sussmuth, 2014), the estimated effect on the fiscal balance would be 1.3% of GDP.	1.3

Note: Estimations are accounting effects of measures on fiscal balance. In comparison with table 1, these ilustractive impacts cover only selected reforms.
Source: OECD calculations based on IADB (2013), Recaudar no basta: los impuestos como instrumento de desarrollo; Frickle, H. and B. Sussmuth (2014), "Growth and volatility of tax revenues in Latin America", World Development, Vol. 54, pp. 114-138.

Sisben, the instrument used to select participants for social programmes, is currently being revised. It is a survey based instrument covering 76% of the population. Programme eligibility is currently based on a survey carried out in 2011 and the next Sisben will be ready by 2020, and will help to better target social programmes and public services, as foreseen by the National Development Plan 2018-22 (MFMP, 2019[3]). The non-automatic update of the main tool to target social subsidies, and its static nature, hamper the targeting and effectiveness of social subsidies. Targeting could be improved using administrative databases to increase automation and allow faster updates and recertifying of beneficiaries, especially in urban areas where income mobility is higher (Robles, Rubio and Stampini, 2015[34]). A universal tax return system would be key to improve targeting.

Reforming the pension system to increase coverage and equity

The current pension system comprises a small non-contributory pillar (Colombia Mayor) and competing public pay-as-you-go and capitalization contributory pillars (see Box 7). However, coverage is low and inequitable, which has contributed to high old-age poverty compared to OECD and Latin American countries (Figure 26). Only one in three in retirement age receive a contributory pension. Most of existing pensions were granted under the transition regime of the 1993 law, with less demanding requirements than current ones in terms of contributory weeks. Under current requirments, access to contributory pensions is expected to be less than 20% of the old-aged (Bosch et al., 2015[35]). While over 75% of the highest income quintile contributes to the pension system, less than 5% of the lowest quintile is able to do so. In rural areas, only 10% of the elderly are covered. A structural reform of the pension system is key to foster inclusive growth, as highlighted in previous Economic Surveys (OECD, 2015[17]) and Table 9.

The first priority of the pension reform should be to reduce old-age poverty. Coverage in the non-contributory component of the system, *Colombia Mayor*, which provides subsidies to the poorest, has increased in recent years, helping to reduce poverty (DNP, 2016[36]). However, the average benefit under *Colombia Mayor* is about a tenth of the minimum wage, and well below the poverty line and that of most OECD countries. The fiscal cost of increasing coverage and the size of the programme would be moderate compared to the social impact (Bernal, et al., (2017[24]). Simulations undertaken for this survey show that the reform would reduce old-age poverty significantly (Table 6).

There is also a need to reduce inequalities and improve coverage. The public contributory scheme is more generous with high-income earners, as replacement rates are higher, introducing unnecessary competition in the system and making it complex and unfair (Nieto Ramos and Farné, 2017[37]). This is partly driven by implicit pension subsidies in the public regime, as the government fills the gap when contributions fall short of outlays. This accounted to 2.1% of GDP in 2016 and 86% of it went to the richest 20% of the population (Table 7). Phasing out pension subsidies to the richest and aligning replacement rates between contributory regimes would make the system fairer and less complex.

The low coverage of the pension system reflects the widespread informality. Efforts to increase labour formality (see section below) are thus fundamental to expand coverage. The constitutional rule that the minimum pension be at least the minimum wage leads also to the exclusion of a large part of the population from the contributory system given the relatively high level of the minimum wage. Although it requires a difficult change to the Constitution, delinking the minimum pension from the minimum wage would allow increasing coverage. Another option is to give partial pensions to those reaching retirement age with insufficient contributions through BEPS, the programme for workers earning less than a minimum wage (Box 7). Pension coverage would increase if contributions made by those not finally eligible for pensions are mandatorily transferred to BEPS. Other measures to expand coverage and saved amounts in BEPS include making savings mandatory for micro entrepreneurs and seasonal or part-time workers. Finding ways to increase the BEPS subsidy, for example giving increasing subsidies depending on the saved amounts or giving a subsidy upon enrolment would make the programme more attractive. This would improve old-age income support.

The fiscal cost of the pension system is also high in relation to its coverage. In 2017, pension expenditures amounted to 3.9% of GDP, representing nearly 28% of the nation's tax revenues (Figure 26, Panel D). OECD pension systems achieve an average fiscal cost of 8% of GDP with almost universal coverage. The dependency ratio is projected to rise substantially, as the currently young population is ageing (Panel C), putting the long-run sustainability of the system at risk. Sustainability would be helped by establishing a higher minimum retirement age, tied to increases in life expectancy, as current retirement ages of 62/57 for men/women are below other OECD countries. Replacement rates are also generous by international standards. The maximum pension is 12 times the GDP per capita, very high compared to 3.2 in Argentina, 2.2 in Brazil, 1.95 in Greece or 1.3 in Spain. Using the average lifetime wage to calculate the pay base, instead of the last ten years of wages favouring steep earnings profiles, would help to finance extending the coverage in a sustainable and equitable way.

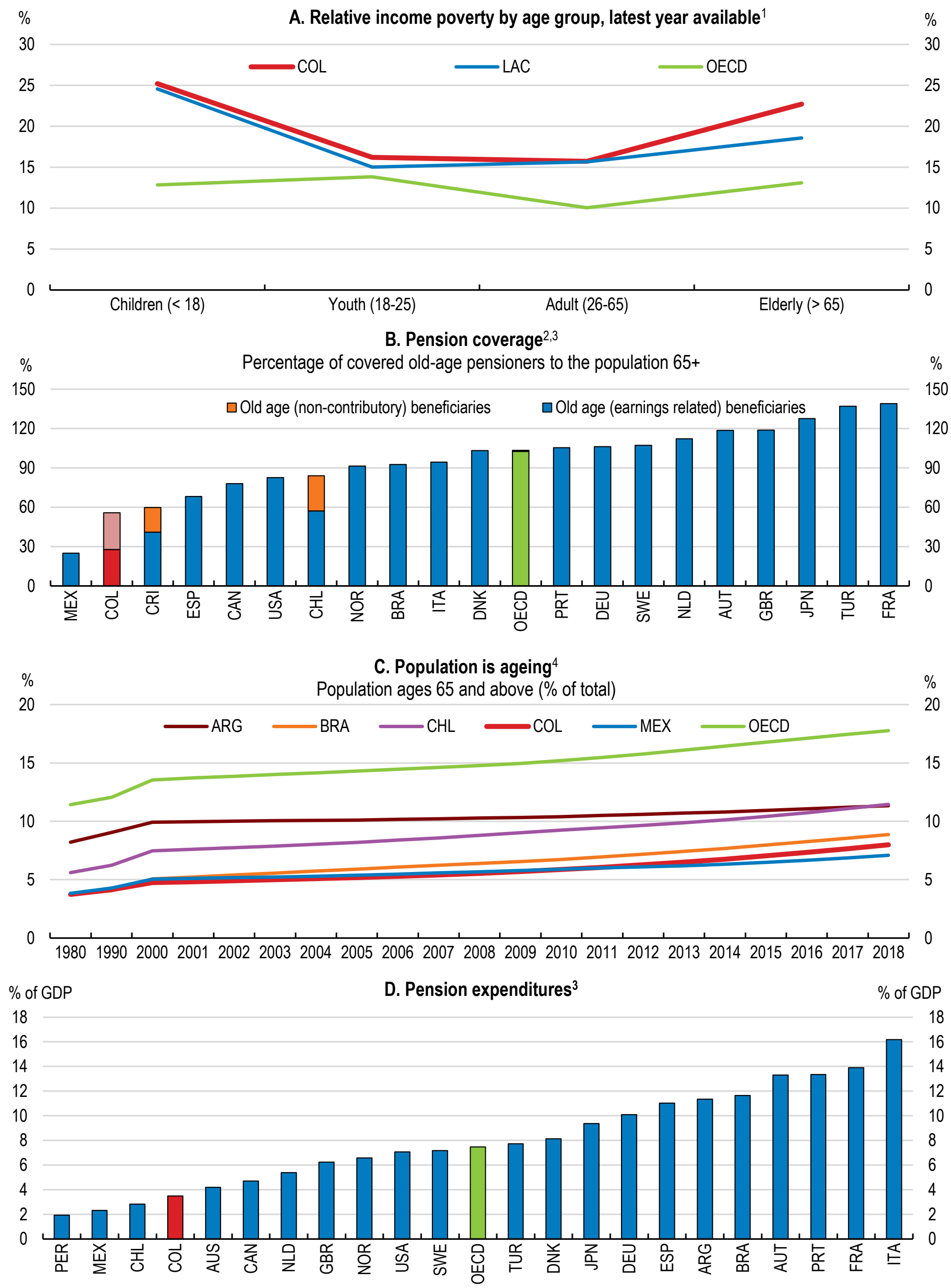
Box 7. The contributory pillar of the pension system in Colombia

The contributory system allows people to choose between two schemes: i) a public Pay-as-you-go defined-benefit plan (Regimen de Prima Media – RPM), managed by a public sector entity (Colpensiones), that in 2017, benefited 58% of retired with pensions; ii) the fully-funded private scheme (RAIS) managed by private pension funds, which covered 6% of the pensioners in 2017. Workers can change regime every five years during their working life. The constitution provides that, the minimum pension cannot be lower than the minimum wage. The retirement age is 62/57 for men/women. Only formal sector workers earning at least the minimum wage can contribute to these two plans. They can only retire with a pension after at least 1300 weeks of formal work in the public regime. In the private regime, workers can get a pension at any age or weeks worked, once the accumulated capital in the individual account is enough to finance a pension of at least 110 % of the minimum wage.

To encourage voluntary savings by low-income Colombians, the so-called Periodic Economic Benefits Scheme (BEPS) was created and is targeted for low-income pensioners, with a state subsidy equal to 20% of contributions. Although the programme's coverage has grown, the number of people who save and the amounts saved are low. Design problems and the fact that the programme relies on voluntary savings by a low-income population, who have little spare income, have limited its impact and development.

The complexity of the system and the many adjustments needed suggest that a comprehensive parametric reform is needed, as analysed in a thematic chapter of the 2015 OECD Economic Assessment and also reflected in several reform proposals, such as the ones by ANIF, Colpensiones, Fedesarrollo and Bernal, et al. (2017[24]).

Figure 26. The pension system is characterized by low coverage, high inequality and has sustainability problems



1. LAC refers to an unweighted average of Brazil, Chile, Costa Rica and Mexico. OECD refers to an unweighted average of its member countries excluding Chile and Mexico.
2. OECD refers to the unweighted average of latest available data of its member countries excluding Australia, Israel and Switzerland.
3. Data refer to 2017 for Colombia. Data are latest available data for the remaining countries.
4. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship.
Source: Colpensiones; Ministerio de Hacienda de Brasil; MECON; OECD Pensions at a Glance: Latin America and the Caribbean (2014); OECD Pensions at a Glance 2017, OECD Stat Pension spending, Panorama de Pensiones de América Latina, World Bank.

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Table 9. Past OECD recommendations for a pension reform

Past recommendations	Actions taken since the 2017 survey
Thoroughly reform the pension system to reduce old-age poverty and inequality.	No actions taken
Expand eligibility of the *beneficios economicos* programme (BEPS)	By 2018, BEPS reaches 1 million beneficiaries and new offices were set across the country.
Increase coverage and benefit levels of the minimum public income-support programme (Colombia Mayor)	The coverage of Colombia Mayor was increased, but the level of the monetary benefits remained unchanged.
Equalise the retirement age between men and women. In the medium term, increase the retirement age and link it to the life expectancy evolution	No actions taken

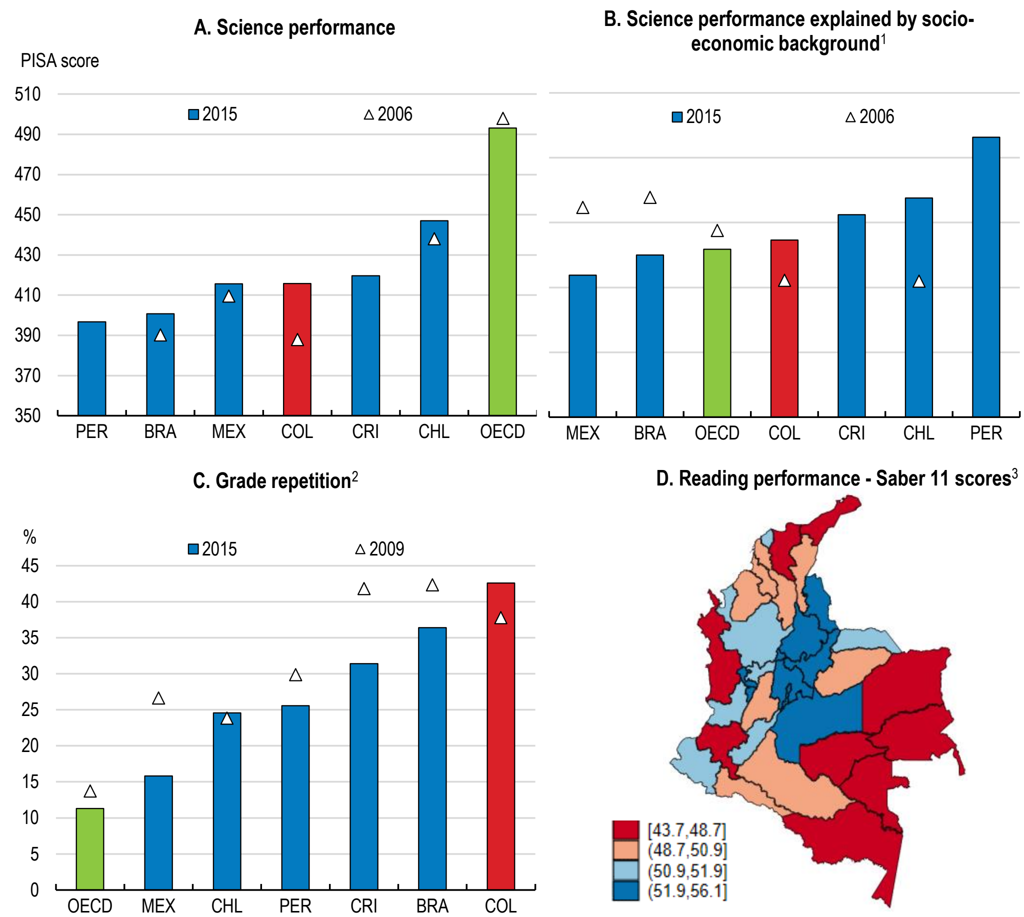
Achieving quality education by giving priority to the most vulnerable population

Boosting the quality of education is a win-win policy for raising both productivity and inclusive growth. Substantial progress has been made in improving coverage and performance (Figure 27). Nonetheless, important challenges remain related to quality and equity. PISA scores in science remain below the OECD average and are highly dependent on socio-economic backgrounds. Although decreasing, school dropout rates and the share of students failing a year remain high (Radinger et al., 2018[38]). Regional disparities in enrolment (OECD, 2018[39]) and school outcomes are large (Panel D). Greater poverty in rural areas explains most of the performance gap with urban areas. But rural students face additional barriers, such as lower aspirations for their future education and lower incentives for students to stay in school given the large informal sector and the related high job turnover and wage penalty. Rural areas face difficulties in attracting and retaining high-quality teachers.

Education has been a key priority in recent years and the government has undertaken important measures to boost attainment (Table 10). Education was a key pillar of the National Development Plan, and is recognised in the peace agreement by developing a special rural education plan. The implementation of full-day schooling, the expansion of early childhood education and care, and the improvement of educational infrastructure all go in the right direction. Colombia has also implemented educational policies and programmes, such as From Zero to Forever (*De Cero de a Siempre*), Let's All Learn (*Todos a Aprender*) or Being Hard Working Pays (*Ser Pilo Paga*), which were successful in increasing attainment and quality.

There is a need to ensure that more resources go to those more in need. Public spending in education at 4% of GDP in 2015, was slightly above the OECD average of 3.6%, and below the average 5% of the region. A significant proportion of spending is financed by central government transfers from the General System of Transfers (Sistema General de Participaciones, SGP) and their distribution is determined by law according to a formula based on a combination of population coverage, social equity, schools human resources, and efficiency criteria. A reform of the government transfer system would help (Radinger et al., 2018[38]) reduce fiscal asymmetries across regions and ensure more resources per student are channelled to the most vulnerable territories. Further financing could also come from reallocating resources from other spending programmes without impact on productivity or equity, such as agriculture or housing subsidies. This would allow increasing quality of education and expanding full-day schooling and the school meals plan. At the same time, there is a need to ensure that better educational outcomes is the main policy target and that reforms in the education area are pursued with that aim. Enhancing institutional capacities, especially at the territorial level where there is high variability in the efficiency of using the SGP funds (Galvis, 2015[40]) and continuously monitoring and evaluating programmes and spending are thus needed.

Figure 27. School results have improved, but equity and regional disparities remain a challenge



1. Percentage of variation in science performance explained by the PISA index of economic, social and cultural.
2. The data for Costa Rica represents the change between 2010 and 2015.
3. Department average scores for Saber 11 which range between 0 and 100.
Source: OECD PISA 2006, 2009 and 2015. Saber 11, 2017-2 ICFES.

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Table 10. Past OECD recommendations on education

Past recommendations	Actions taken since the 2017 survey
Provide more public support to increase enrolment rates of disadvantages children in less developed regions. Expand early childhood education.	During 2017, programs such as "De Cero a Siempre" and "Todos a Aprender" were enhanced, allowing a better quality of education and a greater coverage for rural population. In 2018 the "From Zero to Always" program benefits 1 million children in early childhood development, and has a budget of COP$ 2.6 billion. Particular attention was given to vulnerable population in Mocoa. The program "1000 dias para cambiar el mundo" was launched in 2017. It aims to contribute to the integral development of children during their first 1000 days of life throughout the improvement of nutrition and nourishment. This program mainly targets rural and highly vulnerable population.
Establish a national curriculum for school education and professionalise teachers' carers.	Increased coverage of “Todos a Aprender”, a programme that places tutors to help teachers from the most disadvantage schools and aims at improving quality of education.

The Government needs to prioritize increasing coverage and quality in early education, to improve student performance, reduce gaps in learning achievement and the impact of socioeconomic background. An integrated approach to early childhood development is offered through *De Cero a Siempre* strategy, encompassing education, health, nutrition and protection. But the educational component of early childhood education remains underdeveloped and is key to foster quality and have an impact on skills and employment prospects later in life. Governance issues have led to a fragmented system resulting in inequities in provision and quality and varying goals. Appointing one agency, such as the Ministry of Education, with clear authority and responsibility for delivering national early childhood education policy across the entire sector (care and preschool) would strengthen sector leadership and facilitate co-ordination, improvements in, and expansion of services (OECD, 2016[41]).

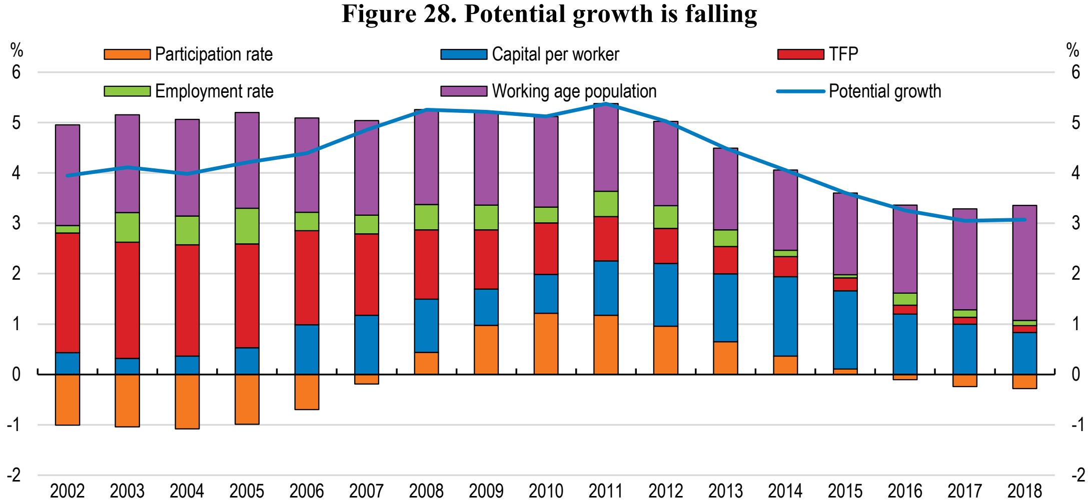
Raising the quality of teachers is key for a high-quality basic education. Colombia has taken considerable steps to professionalise teaching over the last two decades, but implementation has been challenging. An effective evaluation system for existing teachers and the establishment of a framework for professional development would be key to boost the quality of education (OECD, 2016[41]). Teacher selection is essentially based on teachers' rights rather than students' needs, leading to inefficiencies and inequities in the allocation of teachers. Making teaching in rural areas more attractive by shaping the working conditions and professional opportunities in these schools, while providing adequate supply of high-quality initial teacher education in rural areas, is essential. (Radinger et al., 2018[38]).

Curbing dropout rates, increasing employability and job quality of youth will hinge on strengthening upper secondary and higher education programmes while developing a vocational education track in close consultation with employers to match labour market needs (Chapter 2).

Strengthening productivity growth

Over the last ten years, the growth potential of the economy, which measures how fast GDP can grow sustainably, has declined substantially (Figure 28). Growth at the current potential growth rate over the next 30 years would raise income per capita only to the level of Costa Rica today. By contrast, if the economy grew at 5% per annum, per capita incomes would reach approximately the current level of Spain.

Figure 28. Potential growth is falling



Note: Potential growth is expressed as a percentage change. Contributions to growth are shown for the remaining variables.
Source: OECD Economic Outlook 105 database.

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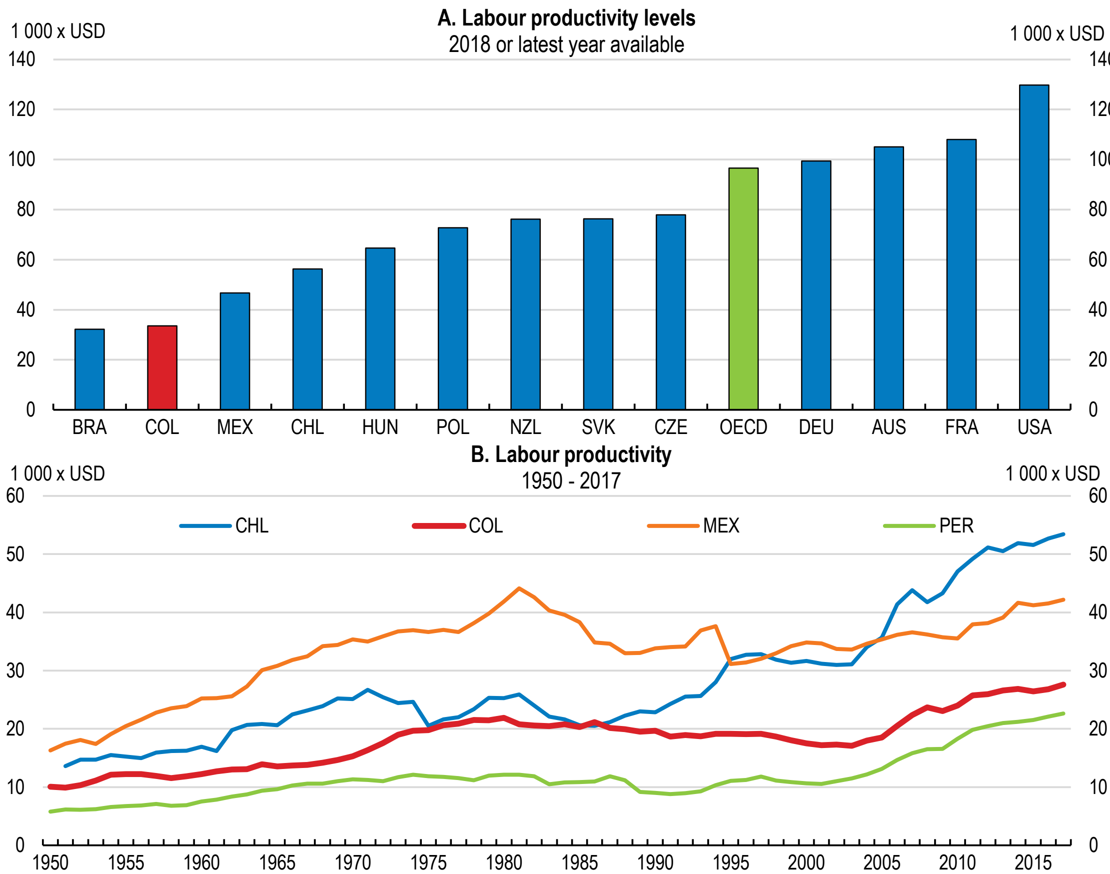
The fall in potential output reflects weak productivity, whose level is below other countries in the region and other emerging countries (Figure 29). Labour productivity has remained sluggish in all sectors of the economy, with the exception of the mining sector (Figure 30). Differences in productivity across regions are also large (Departamento Nacional de Planeación, 2016[42]), and this is well reflected in the successive national development plans, which have a strong regional component.

Figure 29. Labour productivity has stagnated



Note: For both panels, units are measured in thousand USD per person employed (PPPs).
Source: OECD Productivity database; Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2015), "The Next Generation of the Penn World Table" American Economic Review, 105(10), 3150-3182.

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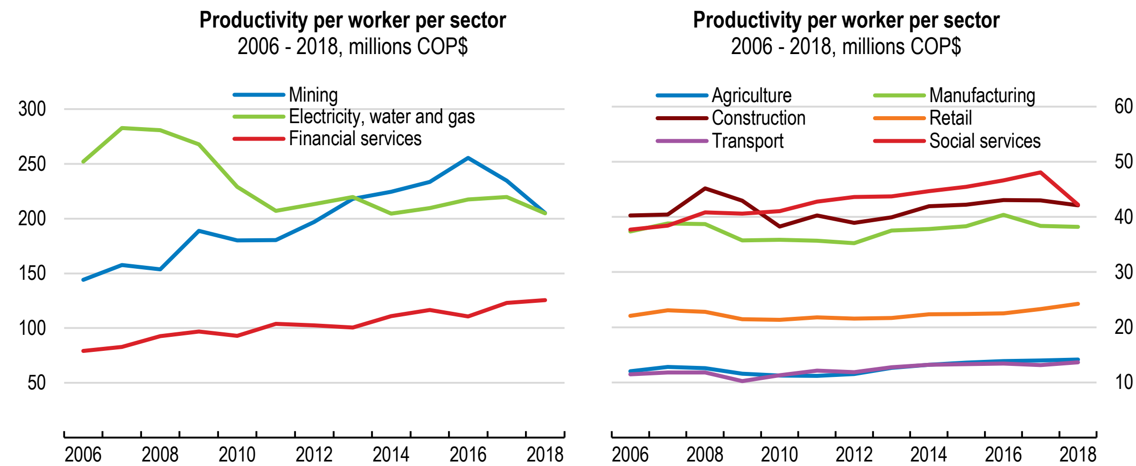
Figure 30. Productivity is sluggish in all sectors



Note: Productivity is defined as the GDP at constant (2015) prices for each sector divided by the number of persons employed in that sector.
Source: DANE.

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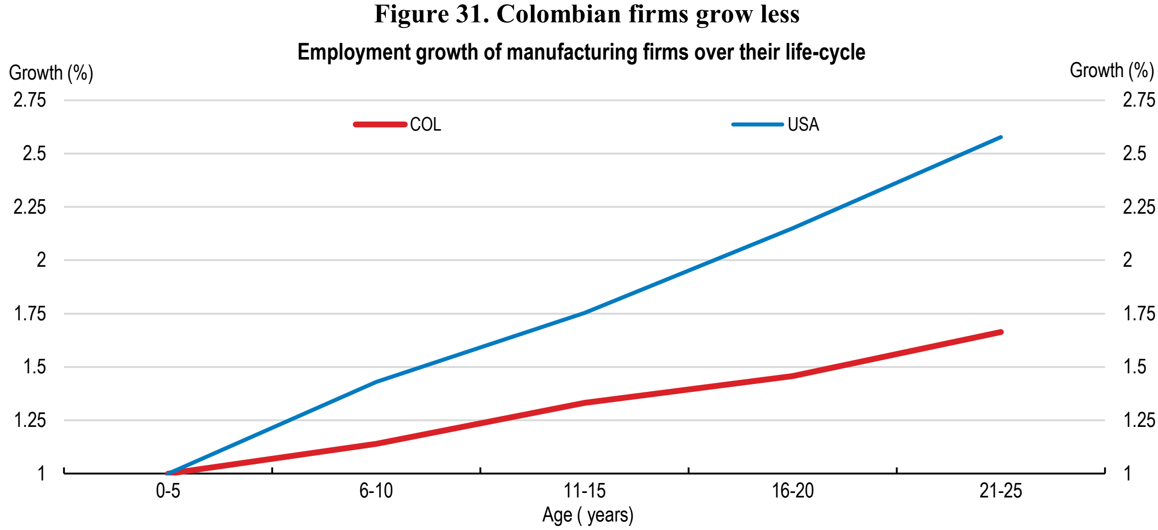
Boosting productivity through more competition

Two factors help to explain low productivity in Colombia at firm level. On the one hand, the average and typical firm is less efficient than the average firm in other economies. On the other hand, a high proportion of resources are used in firms of lower productivity, particularly in micro and informal firms.

The lower productivity of the typical firm could be linked to lower growth over their life cycle (Figure 31). Colombian firms tend to remain smaller, which hinders investment, knowledge spillovers, and specialisation of employees. In Colombia youngest cohorts of firms explain most of the employment and output growth, but these firms grow less than in advanced economies (Eslava, Haltiwanger and Pinzon G., 2018[43]). Low-performing firms are also less likely to be replaced by new and young firms.

Figure 31. Colombian firms grow less



Note: Ratio of current employment to initial employment at different age categories.
Source: (Eslava, Haltiwanger and Pinzon G., 2018[43])

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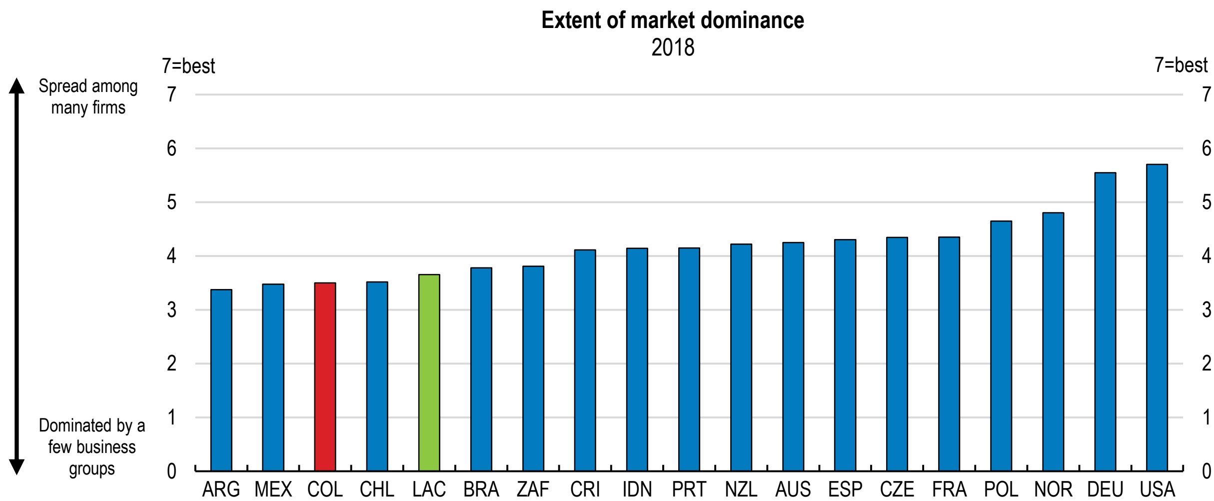
These features are typical of economies where competition is not strong enough to create an environment in which the disciplining effect from new entrants prompts incumbents to become more efficient (Klapper et al., 2006[44]). Competition has been weak in some key sectors of the economy, such as telecommunications, banking, retail, food (OECD, 2015[17]) or transport (OECD, 2017[13]), contributing to low productivity, low wages and higher prices to consumers. A small number of large firms dominate the economy (Figure 32), indicating the need to promote a more competitive business environment, both locally and through international trade.

Figure 32. Markets are largely dominated by a small number of firms



Note: This indicator shows the extent of market dominance, 1-7 (best). In the World Economic Forum, Executive Opinion Survey, it is the answer to the following question: In your country, how do you characterize corporate activity? [1 = dominated by a few business groups; 7 = spread among many firms]. LAC is the unweighted average of Argentina, Brazil, Chile, Costa Rica and Mexico.
Source: World Economic Forum, The Global Competitiveness Index 4.0 2018 dataset (version 13 October 2018).

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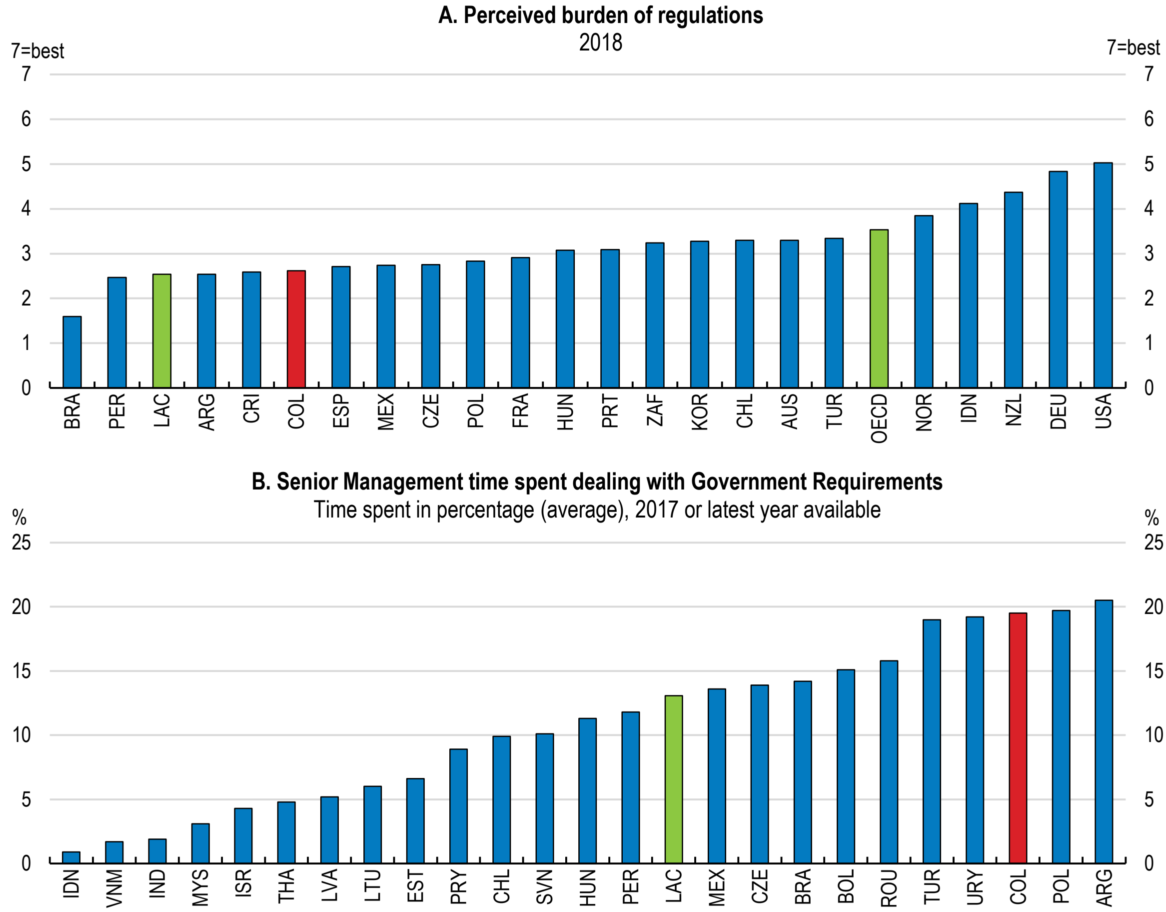
Colombia has taken important steps towards a more competitive business environment. The budget of the competition authority, SIC, has been tripled in the last six years (SIC, 2018[45]). There have been important advances in the prosecution of business cartels, abuses of dominant position and collusion in public tenders (SIC, 2017[46]). Still, the competition authority faces substantial challenges and would benefit from the ability to impose higher and more dissuasive sanctions. Fines are so far expressed in terms of the minimum wage. They should be expressed in terms of sales that market agents have had instead, in line with other OECD countries (OECD, 2016[47]). In addition, those engaging in anticompetitive processes in public procurement processes should be disqualified temporarily, in line with OECD practices (OECD, 2016[47]). For the time being, they are entitled to continue participating in public procurement processes.

Regulatory burden is high (Figure 33). A process with the public administration takes on average 7.4 hours while in Chile it takes 2 hours. While in other countries in the region most procedures can be completed on line, this is only possible in Colombia in 35% of cases (Roseth et al., 2018[48]). While regulations may serve a variety of legitimate objectives, if ill-designed they can impose unnecessary restrictions on competition.

Figure 33. Regulations are burdensome



Note: In Panel A, the indicator shows the perceived burden of regulations, 1-7 (best). In the World Economic Forum, Executive Opinion Survey, it is the answer to the following question: In your country, how burdensome is it for companies to comply with public administration's requirements (e.g., permits, regulations, reporting)? [1 = extremely burdensome; 7 = not burdensome at all]. In both panels, LAC refers to the unweighted average of Argentina, Brazil, Chile, Costa Rica, Mexico and Peru.
Source: World Economic Forum, The Global Competitiveness Index 4.0 2018 dataset (version 13 October 2018); World Bank, World Development Indicators database.

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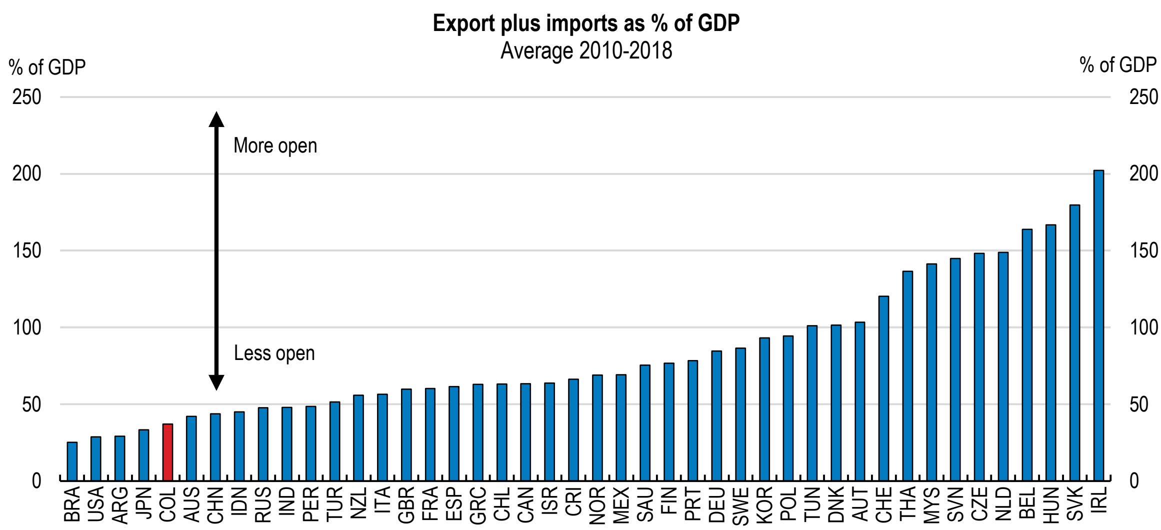
Introducing a legal obligation for the executive to systematically submit all new laws likely to affect competition to a regulatory impact assessment has proven effective in many OECD and Latin American countries, including Mexico (OECD, 2015[49]). In the context of the accession process to the OECD, Colombia has recently started to undertake impact regulatory assessment for selected regulations from the central government. This is a fundamental initial step to improve the quality of regulations. The scope of the impact assessments should be increased progressively, covering as well regulations from other parts of the government.

Large parts of the economy have also been shielded from international competition. Colombia remains significantly less integrated into international trade than other emerging economies (Figure 34), despite efforts to promote trade integration via trade agreements. Increasing Colombia's exposure to trade will boost competition, productivity and growth. Colombia's own experience in the early 80s, when trade tariffs were reduced, attests that this channel can be strong (Eslava et al., 2013[50]). Primary goods account for 70% of the export basket and there is room to diversify exports and to make trade a new source of growth, as analysed in Chapter 1. Notable progress to improve primary roads (Table 11) have been accomplished via 4G, a significant PPP initative. It remains important to continue to evaluate thoroughly the projects and to record life-time contingent liabilities in a timely and transparent way. Remaining significant gaps in transport infrastructure imply high trade costs (Chapter 1) and also fragment the domestic market, with a detrimental effect on competition. Filling these gaps, while preserving natural resources and the environment, would be a fundamental step to boost productivity.

Figure 34. Exposure to trade is low



Note: Data for Peru show the average for the period 2010 - 2017.
Source: OECD Analytical database; IMF International Financial Statistics (IFS).

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Table 11.Past OECD recommendations to sustain strong economic growth

Past recommendations	Actions taken since 2017
Sustain the increase in public investment	Public investment accounted for 2.1% of GDP in 2016s central government budget. Its size decreased to 1.9% in 2017 and to 1.7% in 2018.
Implement the road infrastructure program (4G) and guarantee that private-public-partnerships continue to have proper cost-benefit analysis	By the end of 2018 the financing of 17 projects, out of the 30 planed under 4G, is expected to be closed. This amounts to USD 8.4 billions

The low productivity is also explained by the predominance of small firms (Eslava, Haltiwanger and Pinzon G., 2018[43]). Small firms account for around 90% of all Colombian firms and a significant amount of employment (Table 12). The high share of small firms is a feature shared with Mexico, but largest firms absorb a lower share of employment in Colombia than in Mexico or OECD countries. Firm-level empirical analyses confirm that resource misallocation is significant (Busso, Madrigal and Pagés, 2013[51]). The potential gains in terms of aggregate total factor productivity of moving to a more efficient allocation of capital and labour in the manufacturing sector could reach 50%. These estimates could be larger if resource misallocation induced by informality could be captured. There is little information at firm level about informal firms but households' surveys show that informality is prevalent in small firms in all sectors, reaching 90% of employment (Table 13). Firms relying on informal contracting are less likely to innovate and grow, offer less training to their employees and have problems raising worker's motivation and effort, reducing productivity (Battisti and Vallanti, 2013[52]; Perry et al., 2007[53]).

Table 12. A large share of firms are small

	Companies (% of total)				Employment (% of total)			
Number of employees	Colombia	Mexico	OECD	United States	Colombia	Mexico	OECD	United States
1 to 9	87.2	88.0	80.3	49.9	31.6	30.6	30.2	4.4
10 to 49	10.6	9.7	14.6	32.7	21.5	20.7	20.9	16.2
50 to 249	1.8	1.5	4.1	14.1	19.4	16.6	17.9	33.4
250 and above	0.4	0.7	0.9	3.3	27.4	32.1	31.0	46.0

Note: Manufacturing sector. Data for Mexico refers to establishments and are from 2013. OECD refers to an unweighted average of its member countries excluding Chile.
Source: CAF (2018), OECD (2017) Entrepreneurship at a Glance 2017.

Table 13. Informality is concentrated in small firms

Percentage of informal employment according to firm size and sector

	All economy	Agriculture	Industry	Services
Small	88	94	87	83
Medium	22	48	22	19
Large	5	9	3	5

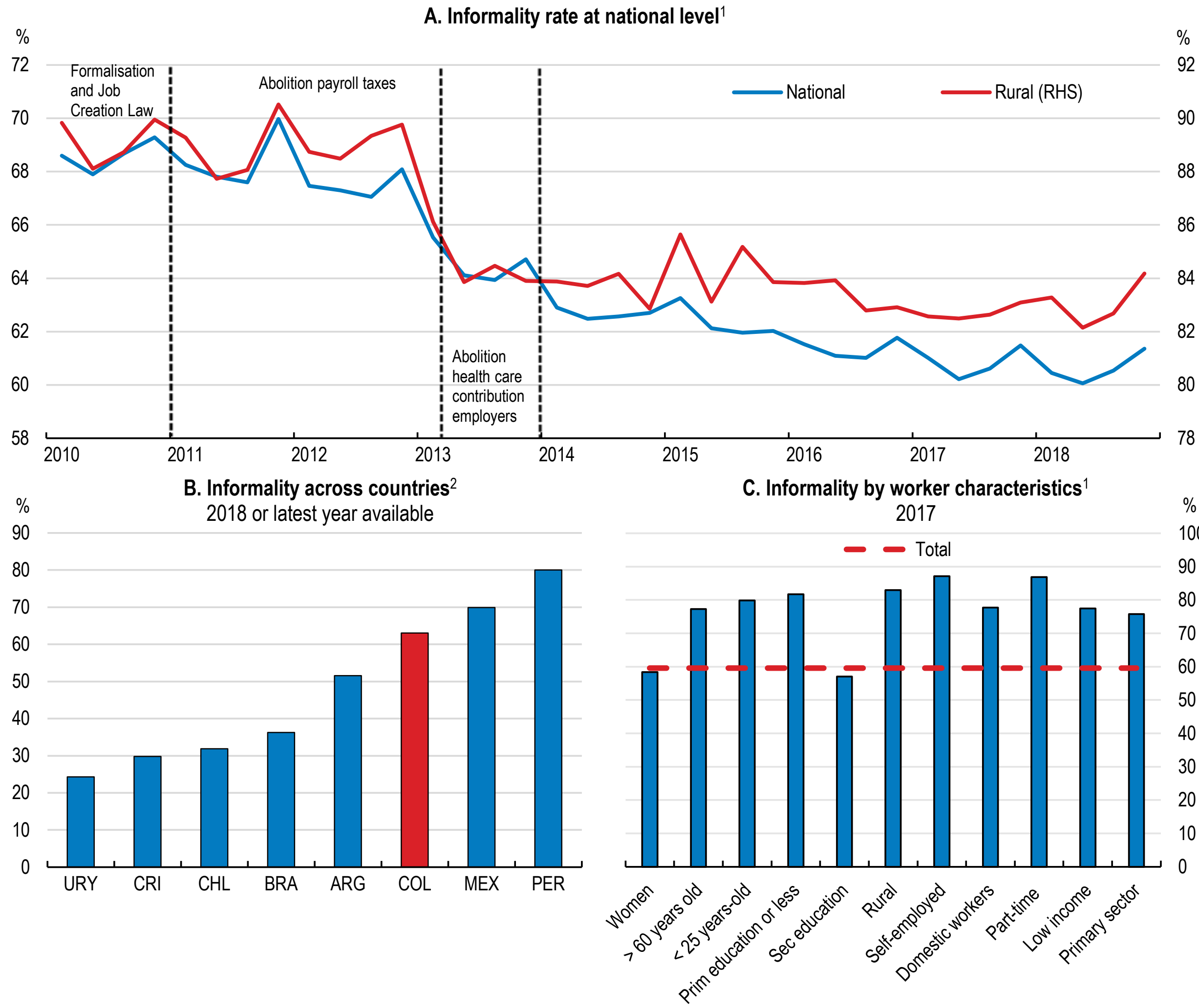
Note: OECD calculations based on 2017's Colombia's households surveys. Informal workers are those not contributing to the pension system.
Source: OECD calculations based on GEIH 2017 of DANE.

Reducing informality: win-win for inclusiveness and productivity

Informality is both a cause and a consequence of low productivity. It has also detrimental effects on social outcomes, as it reduces job quality and access to social services and labour protection and contributes to high income inequality. OECD calculations for this survey show that informal workers suffer an hourly wage penalty of 49%, after controlling for worker and job characteristics. Informality also erodes the tax base reducing the quantity and quality of public services (Binelli, 2016[54]; Tornarolli et al., 2014[55]; Maurizio, 2013[56]) and reduces access to pensions and its financing.

Informality has been decreasing after the 2012 cut in social security contributions but remains high (Figure 35). The share of informal wage earners, defined as those not contributing to pension or health system, is 33% in 2018. Self-employment, mostly informal and often associated to low productivity jobs, is also high at 43% of total employment and accounts for an increasing share of employment since the slowdown of the economy in 2014.

Figure 35. Informality has declined but remains high



1. Informality is defined as the percentage of workers in employment not contributing to the pension or health system. The statistical definition is different from the one followed by DANE.
2. Data comes from IADB SIMs database. Informality is defined as not contributing to the pension system.
Source: OECD calculations based on GEIH of DANE and IADB SIMs database.

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Colombia has made several efforts to reduce informality. The most successful initiative was a 2012 tax reform, which reduced non-wage costs by 13.5%, in particular social security contributions, helping to create more formal jobs and increase wages (Kugler, Kugler and Prada, 2017[57]; Bernal et al., 2017[58]; Fernández and Villar, 2016[59]; Garlati-Bertoldi, 2018[60]). There is no silver bullet to continue reducing informality. A comprehensive strategy is required, with actions needed in several policy areas, such as taxes, business and labour regulations, enforcement or skills. Model-based simulations confirm that the associated improvements in terms of productivity and living standards would be large (Box 8).

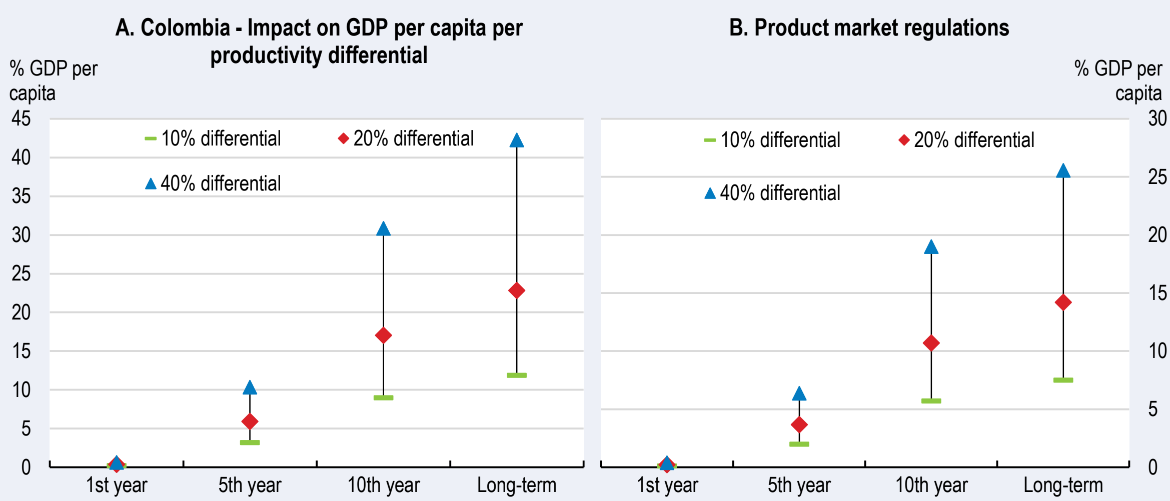
Box 8. Regulations, informality and productivity in Colombia

Illustrative simulations with a small macro-structural model (Chalaux, Kopoin and Mourougane, 2018[61]) can shed light on the interactions among regulations and informality and the impact that structural reforms can have on productivity and GDP per capita.

The simulations suggest that both labour and product market regulations matter. The gains in GDP per capita depend on the assumed productivity differential between the informal and formal sector. Some estimates indicate the productivity differential between formal and informal firms could reach 40% in Colombia. For labour regulations, this would imply a raise in GDP per capita by 10% over 10 years. Even if the productivity gap between formal and informal firms is smaller, the gains in GDP per capita could reach 5% over 10 years (Figure 36, Panel A). Easing product market regulations to the OECD average would raise GDP per capita by another 6-19%, depending on the assumed productivity differential (Figure 36, Panel B).

Figure 36. Structural reforms can reduce informality and trough that channel boost growth

Per cent of GDP per capita relative to no-reform baseline depending on assumed productivity differential between formal and informal sector



Note: The productivity differential is the gap between productivity in the formal and informal sectors. Reform means convergence of the product market indicator to the OECD average evenly over 10 years and convergence to the OECD minimum for labour market regulations, which are proxied by the indicator for workers on regular contracts.
Source: Model simulations based on Yoda (Chalaux, Kopoin and Mourougane, 2018[62])"A formal look at regulations and labour market informality in emerging-market economies", OECD Economics Department Working Paper, OECD.

StatLink http://dx.doi.org/10.1787/888934012750

Despite the 2012 reform, non-wage labour costs remain high, representing almost 50% of the wages, one of the highest in Latin America (Alaimo et al., 2017[63]). For example, employers pay a 4% payroll tax to finance the so-called *Cajas de Compensación Familiar*, which offer a wide range of services from housing and training programmes to sports and entertainment. Alternative sources of financing for these institutions need to be sought or the contribution could be made optional (voluntary). The services could also be reviewed to avoid duplication with other government programs and inequalities in access by workers.

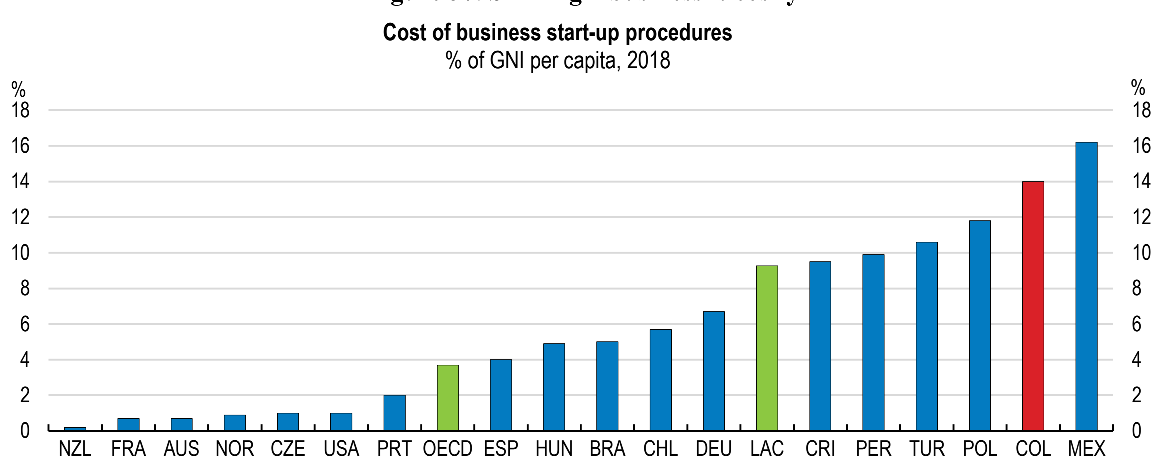
The minimum wage, which is twice the poverty line and at 86% of the median wage, the highest in OECD countries, also contributes to informality and reduces employment prospects of low skilled workers, youth and people located in less developed regions (OECD, 2015[17]; Garda, forthcoming[64]). Limiting increases to inflation for some time would bring formal wages to a more job-friendly level (OECD, 2015[17]). Other options include differentiating the minimum wage by age or by region (OECD, 2017[13]) or establishing an hourly minimum wage, which would avoid the current penalisation of part-time employment.

Table 14. Past OECD recommendations on reducing informality

Past recommendations	Actions taken since 2017
Further reduce taxes and fees on wages	No actions taken
Simplify procedures for company registration and the affiliation of workers to social security	Some regions made easier for companies to get registered
Establish social dialogue to discuss differentiating the minimum wage by age and regions.	No actions taken

Costly and complex business regulations also hamper the formalization of firms and jobs. A particular barrier to formalization is the high cost related to start up procedures (Figure 37). Registration costs are particularly high compared to countries in the region (Salazar, Mesa and Navarrete, 2017[65]; Maloney, 2017[66]), reaching 5.5% of the assets of a company, regardless of the size of the firm. The registration fee is not only paid when the firm starts its activity but also every year, and is updated in line with the minimum wage. Reducing registration costs, particularly for SMEs and start-ups, would be a fundamental step to facilitate formalization. One-stop shop mechanisms would also simplify the registration of companies, the procedures and the affiliations of workers to social security, which requires 8 forms and 12 procedures. After years of planning, a one-stop shop pilot exercise has started in Bogotá in 2018 for registration of companies. Itis planned to be extended to other cities and to include as well the affiliation of workers to social security. Increasing the use of digital tools would also offer the double dividend of reducing regulatory burden and the scope for corruption.

Figure 37. Starting a business is costly



Note: LAC refers to the unweighted average of Brazil, Chile, Costa Rica, Mexico and Peru.
Source: World Bank, Doing Business project.

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Developing better skills and aligning them more to labour market needs would also reduce informality. OECD estimates for this survey show that completing secondary education decreases the probability of being in the informal sector by 15% compared to an individual without any level of education, while completing higher education or university reduces the probability by 80%. Additionally, there are large gaps between demand and supply of skills (Lora, 2015[67]). Promoting quality education for all (see above) and vocational education and training aimed at generating advanced skills and abilities that match labour market needs (see Chapter 2) would also be key to reduce informality and boost productivity.

Improving governance and reducing corruption

Systemic corruption distorts incentives, undermines confidence in institutions and fair competition in markets, erodes public services, and undercuts social trust. It is also bad for business and hampers productivity and inclusive growth (OECD, 2017[1]). The importance of quality of governance in explaining the differences in productivity across countries is well documented (Hall and Jones, 1999[68]; Olson Jr., Sarna and Swamy, 2000[69]; Nazrul Islam, 2008[70]).

Colombia has made significant progress with recent anti-corruption efforts and initiatives to foster integrity and combat corruption in the public sector (OECD, 2017[71]). However, it consistently rates poorly in corruption indices. High corruption has been identified as the main concern for Colombian citizens in latest surveys. The last Transparency International report ranked Colombia 99 out of 180 countries.

The biggest challenge to fighting corruption effectively remains at regional and local levels, where corruption seems to be more entrenched. Regulating the financing of political parties and campaigns would be a crucial step, as current legislation does not limit the resources that can be provided by the candidate. This implies that candidates can finance 100% of their campaign with own resources, undermining the possibility to track the origin and quantity of funds spent.

Contrary to most OECD countries, there is no whistle-blower law. Implementing effective whistle-blower protection legislation would be a crucial step in the fight against corruption, including at regional and local level. Whistle-blower protection mechanisms were recently introduced to fight cartel behaviour and they have proved valuable to detect and dismantle uncompetitive practices (SIC, 2017[46]).

Integrity in the public sector benefited from the establishment of the new central procurement entity, *Colombia Compra Eficiente*, in 2012. Only procurement from central government is centralised. A significant amount of purchases is still undertaken by subnational governments, indicating that there is still room to improve efficiency and reduce scope for corruption in procurement by bringing to *Colombia Compra Eficiente* all procurement activities of local and regional governments.

Green growth indicators are good but deforestation as well as production and use of hydrocarbons pose challenges

Colombia is the second most biodiverse country in the world after Brazil (Chapman, 2018[72]). Biodiversity of natural resources holds significant opportunities and potential to spur economic growth and social inclusion in lagging regions. A sustainable use of these natural assets is crucial for helping people in these regions to fulfil their potential.

Good progress in decreasing deforestation stalled during 2016 and 2017, although 2018 saw some improvements (Figure 38). Part of the increase in that period is an unintended consequence of the peace process. Limited government presence persists in territories previously controlled by the FARC. Illegal mining and coca production has increased in those areas, previously inaccessible, exacerbating threats to biodiversity.

Coca crops in Colombia have increased since 2013 at an average rate of 45% per year, from 48000 hectares to 146000 in 2016. Data for 2017 show that the area planted had increase further by 17% (SIMCI, 2018[73]). Additional policy efforts to counteract illicit crops is therefore warranted, including eradication, prevention, and providing the affected areas with alternative income generation opportunities.

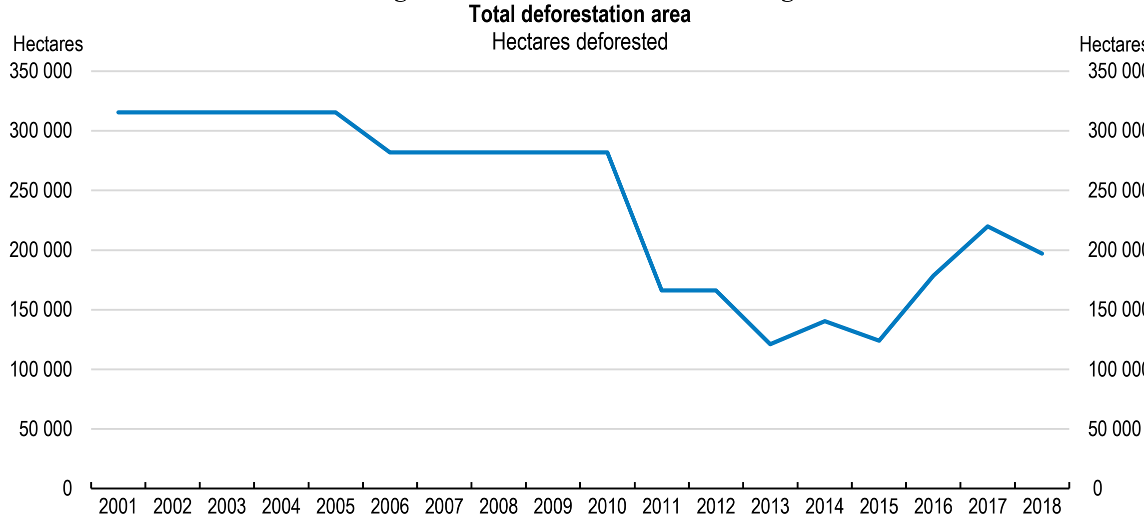
Illegal mining, consisting of carrying out exploration, extraction or collection activities without a valid mining title or authorisation, has also increased from 79 000 hectares in 2014 to 84 000 in 2016. This impacts 60% of Colombia's water resources (DNP, 2016[74]), as illegal mining is responsible for large releases of hazardous chemicals. Increases in illegal gold exploitation have been particularly high, affecting national parks, indigenous reservations and Afro-descendant community lands (UNODC, 2018[75]). Continuing efforts to improve the enforcement of existing regulations against illegal mining is therefore warranted and should be prioritised.

Green growth has been at the core of national development plans and a national deforestation strategy has been established. One way the government can help protect its biodiversity is by officially declaring portions of its territory as protected areas. To date, around 14% of terrestrial area has been declared protected, which is well below areas protected in neighbouring countries such as Brazil or Peru. Protecting areas is not a panacea and proper management and enforcement is also needed. Colombia's regional environmental management authorities, called Regional Autonomous Corporations (CARs), are responsible for managing forests in their jurisdictions. They frequently lack the resources and technical capacity necessary to address challenges in their regions.

Figure 38. Deforestation is increasing

Total deforestation area

Hectares deforested



Source: Instituto de Hidrología, Meteorología y Estudios Ambientales (IDEAM).

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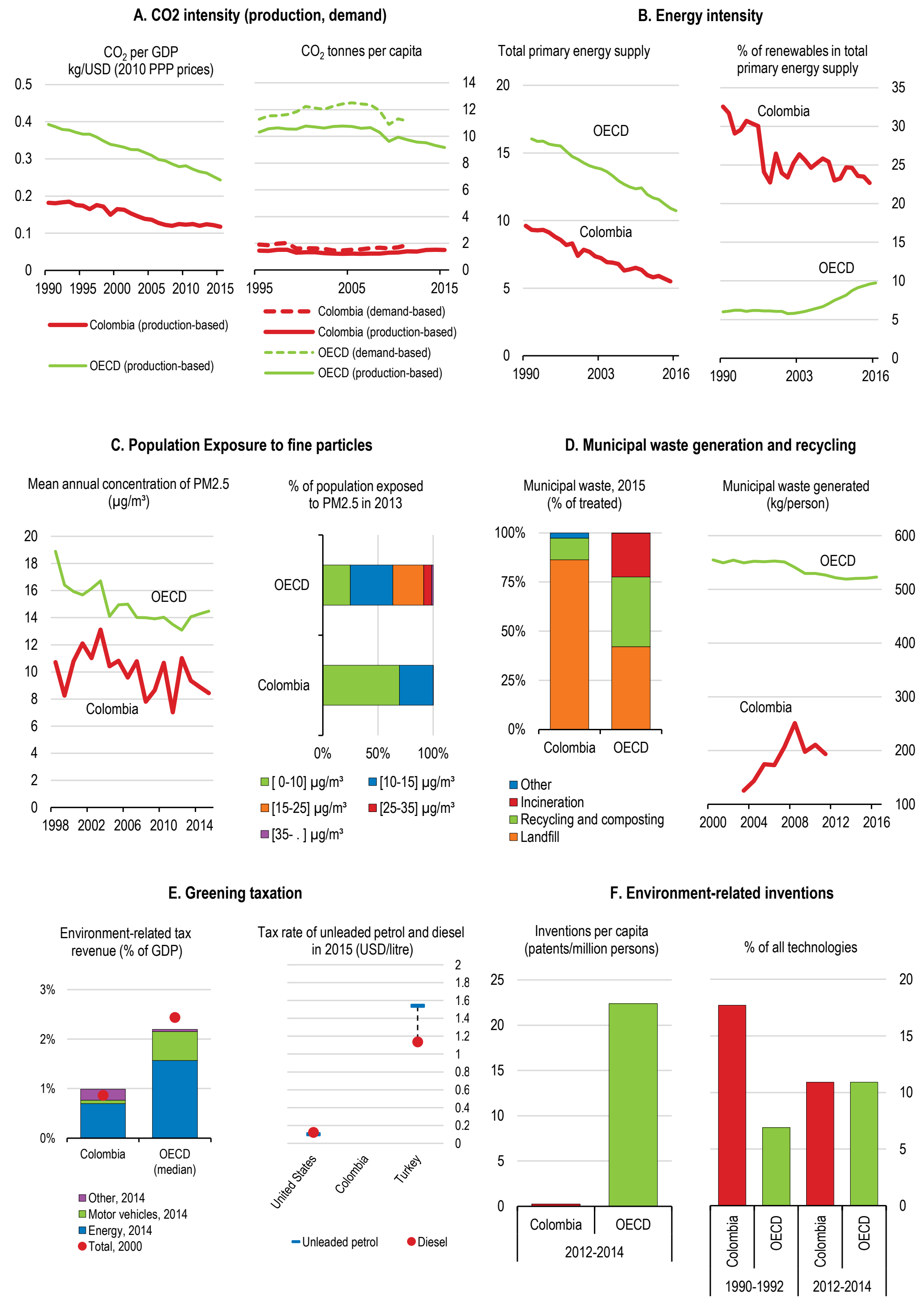
Production-based CO2 emissions from combustion of coal, oil, natural gas and other fuels are much lower than in OECD countries, reflecting the low energy intensity of the economy and a high share of renewable energy supply, mainly hydroelectricity (Figure 39). Nevertheless, emissions from the energy sector are increasing and in the last greenhouse gases inventory they represented 43,6 % of total emissions. Colombia also emits substantial greenhouse gas emissions in agriculture, forestry and land use, and in this inventory accounted for 42,8% of greenhouse gas emissions. However, this calculation did not take into account the recent increase of deforestation. Policies to curb deforestation provide ample opportunities to reduce these emissions and preserve the role of Amazon forests as carbon sinks (Gobierno de Colombia, 2015[76]).

CO_2 emissions per capita have risen in recent years. Rising energy demand has been met with increasing consumption of fossil fuels. The share of renewables has fallen. Colombia has one coal-fired power plant under construction and is planning another 3 (Global Coal Plant Tracker, 2018[77]). Expanding coal-fired electricity generation is inconsistent with reaching the climate objectives of the Paris agreement, which requires coal-fired electricity generation to be phased out. Increasing the share of renewables instead, as recently announced by the government, would help Colombia to meet its commitment to reduce greenhouse gas emissions by at least 20% by 2030. Achieving climate objectives will result in a large decline in demand for coal and oil worldwide. This underscores the need to diversify the Colombian economy away from oil and coal production.

Air quality is overall good, although pockets of poor air quality were reported in the 2014 *OECD Environmental Performance Review of Colombia* (OECD, 2014[78])*,* including in the two principal cities – Bogotá and Medellin. The volume of household and commercial waste remains small. Recycling has increased but is often undertaken by plants not meeting technical requirements. Mining is a source of hazardous waste (OECD, 2014[78]). Revenues from environmental taxes were low in 2015, but they will rise with the carbon tax introduced in 2018.

Colombia is highly vulnerable to climate change and extreme weather events (OECD, 2014[79]). The high mountain ecosystems, called *páramos*, are experiencing increases in maximum temperatures of 1°C per decade. During the 2010-11 La Niña phenomenon, major floods affected three million people, inflicting damage equivalent to about 2% of GDP. Colombia is responding to these challenges by prioritising climate resilience, shifting from disaster response towards a more integrated approach to risk prevention and management, and by integrating climate change and disaster risk management into sectoral policies and planning instruments. Colombia has also subscribed a World Bank catastrophe bond to cover for earthquake risks (World Bank, 2018[80]). There is also a need to simplify and enhance land use planning as a way to increase climate resilience (OECD, 2014[79]).

Figure 39. Green growth indicators: Colombia



Note: For Panel D, waste refers to waste collected by or for municipalities and includes household, bulky and commercial waste, and similar waste handled at the same facilities. Panel E refers to nominal tax rates (excises) for unleaded petrol and diesel, for households. Unit: 2010 USD PPP prices/litre, deflated using the CPI. For Panel F, patents refer to patent applications, using application date, inventors' residence and family size equal to 2 or more (i.e. filed in two or more jurisdictions).
Source: OECD (2018), Green Growth Indicators.

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Annex. Progress in other structural reforms

Past recommendations	Actions taken since the 2017 survey
Sustain strong economic growth	
Finance more infrastructure programmes on a regional basis	Addtional resouces from royalties have been shifted to tertiary roads via the OCAD PAZ programme. This amounted to 500 million dollars.
Provide more grants and loans for R&D to enterprises	The number of enterprises accessing R&D tax credits has increased.
Fund R&D projects that bring industry and academia together	The government implemented Colombia científica programme to finance joint industry and accredited universisties research programmes. 8 programmes have been financed until 2018.
Remove regulations on public ownership and vertical integration in electricity, vertical integration and market structure in rail	No actions taken
Introduce a court or a division of a court dedicated solely to commercial cases and facilitate case management through electronic case management tools.	The Superintedence of Corporations introduced a electroinci case management tool to facilitate comecial disputes and business closures.
Make information on advance rulings on import conditions available more quickly and with higher visibility.	No actions taken
Gender balance	
Raise awareness among young men and women, parents, teachers and employers with campaigns about gender-stereotypical attitudes towards academic performance and the likely consequences of overall educational choices for employment and entrepreneurship opportunities, career progression and earnings	In 2018, the campaign Less Myth's, more equity (*Menos mitos mas igualdad*) was launched with the aim of transforming gender-related believes, prejudices and stereotypes among young population..
Ensure the provision of affordable, good-quality child care and affordable long-term care for elderly relatives or those with disabilities	See below in education
Labour market	
Expand access to and make greater use of active labour-market programmes.	Implementation of Bonds of Impact Social (BIS) and the public-private alliances.
Education and training system	
Enhance public funding to low-income students, either through loans or scholarships. The ICETEX loan conditions could be more flexible for students from very low-income families or rural areas and more strict for those with less financial need.	In 2017,the coverage of the program "Ser pilo paga" was increased as well as resources. The Government also launched "Pilos por Mocoa" and "Todos somos PAZcifico" for the most vulnerable zones
Refocus upper-secondary education teaching and learning on core skills and real-life applications to help students achieve basic skills; improve the relevance of VET options to the labour market by engaging employers in the design of programs, curricula, certification, and quality assurance; and improve the second chance opportunities available to students who have dropped out Establish a body/forum to engage employers and unions in vocational programs. Ensure that good data on the labour market outcomes of vocational programs is available to inform student carer choice and reduce the technicians' gap	In 2017, under SENAS's program "expanding coverage", 25 new public-private alliances were implemented to the Banco de Institutiones Educativas(BIE) in order to expand the availability of programs for tertiary education. For instance SENA-Fundetec and SENA-UDES

Thematic chapters

Chapter 1. Boosting exports and integration into the world economy

Colombia's potential to make exports an engine of growth and job-creation is large, thanks to stable macroeconomic conditions and several trade agreements. However, the potential remains unrealised. Exports have remained low over the last decades and highly concentrated in terms of goods, destinations and regions. The costs to trade are among the highest in the world, driven by infrastructure bottlenecks and weak logistics. Good progress has been made in improving primary roads but significant gaps remain in other areas. Colombia has now a historic opportunity to explore new export opportunities beyond extractive activities, including agriculture or services. Realising Colombia's potential and opportunities will require promoting competitiveness and productivity by reducing the scope of non-trade barriers, continuing to improve infrastructure and boosting competition in services, including logistics. Optimising innovation support programmes and fostering entrepreneurship and access to finance would also be fundamental. Going digital, by promoting further adoption and use of ICT technologies, would also boost firms' competitiveness and the connectivity of regions.

In both developed and emerging economies, trade openness has gone hand in hand with better economic performance and opportunities for workers, consumers and firms (OECD, 2012[1]). Exports in particular can contribute significantly to growth and job creation. Exporting firms tend to be more productive and can serve as conduit for technology transfer, generating technological spillovers with positive backward and forward linkages to the domestic economy. Exports can also be a powerful tool to improve job-quality in emerging economies, as exporting firms pay higher wages and hire more workers than non-exporters (Brambilla, Depetris Chauvin and Porto, 2017[2]).

Colombia has solid foundations to become more integrated into the world economy and some recent success cases illustrate that its large potential can be realised. This chapter discusses what can be done to raise export performance. Raising productivity would be fundamental. Productivity is hampered by weak competition, burdensome regulations, skill gaps and an unbalanced tax structure, as described in the Key Policy Insights section of this survey. This chapter focus on other structural factors affecting export performance, such as infrastructure and logistics gaps, trade policies, competition in non-tradable sectors, innovation or access to finance.

Increasing trade protectionism may dampen exports growth worldwide, but at the same time, new opportunities are emerging for Colombia. This includes increasing trade integration with other member of the Pacific Alliance (Chile, Mexico and Peru) and better prospects for convergence with Mercosur.

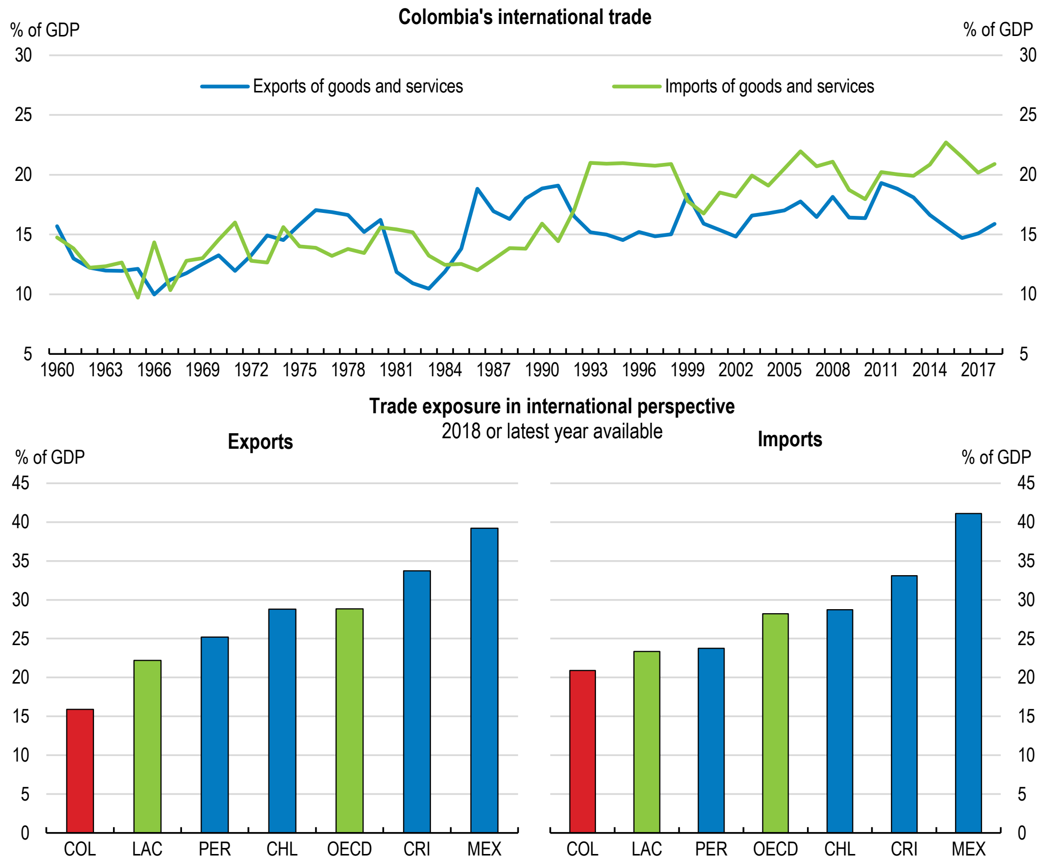
Colombia is not making the most out of international trade

The economy is relatively closed

Exposure to trade has remained relatively low over time (Figure 1.1, Panel A). Exports represent 15% of GDP, slightly below the level 50 years ago. Imports have increased relative to GDP but remain relatively low (Figure 1.1, Panel B). The low and stagnant exposure to trade contrasts with dynamics seen in most advanced and emerging economies, where the role of trade has increased significantly over the last 50 years (OECD, 2012[1]).

Exports were hit hard by the fall in commodity prices, the fall in world demand (Figure 1.2) and the situation in Venezuela, one of Colombia's main trading partners. Short-term data show that exports are growing again, including in non-oil sectors. Nevertheless, export performance indicators have continued to deteriorate (Figure 1.3), indicating that export growth remains low relative to the growth in foreign demand. Foreign demand has gradually strengthened after the collapse in global trade following the 2008 financial crisis. The real exchange rate has depreciated 30% from its peak in 2012, which should have supported competitiveness. The relatively weak performance of exports under these favourable cyclical conditions indicate that export performance is strongly affected by structural factors.

Figure 1.1. Trade exposure is low



Note: Exports and imports of goods and services represent the value of all goods and other market services provided to/from the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments. LAC and OECD are defined according to the definitions of the World Bank.
Source: World Bank, World Development Indicators database.

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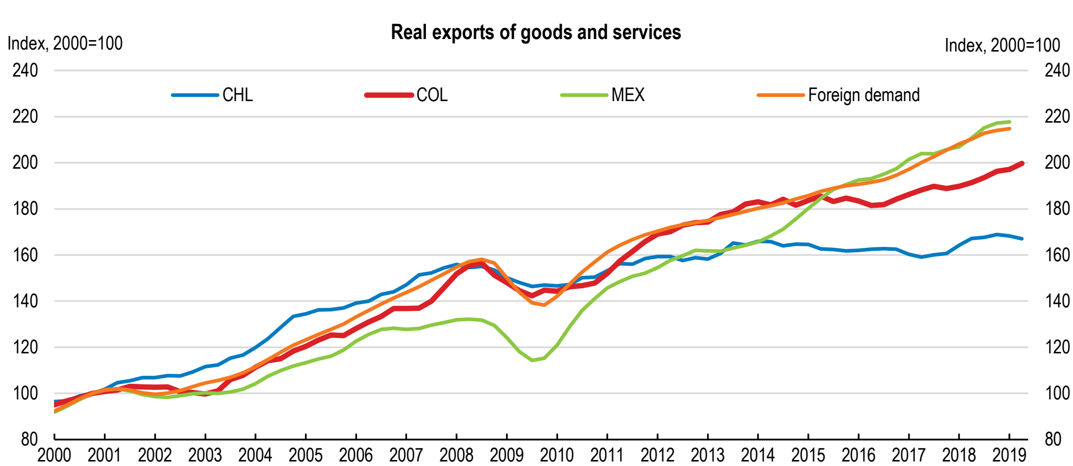
Figure 1.2. Exports have remained weak since 2013



Note: Foreign demand is defined as the export market for goods and services (in volumes) in US dollars, 2010 prices.
Source: OECD Analytical database.

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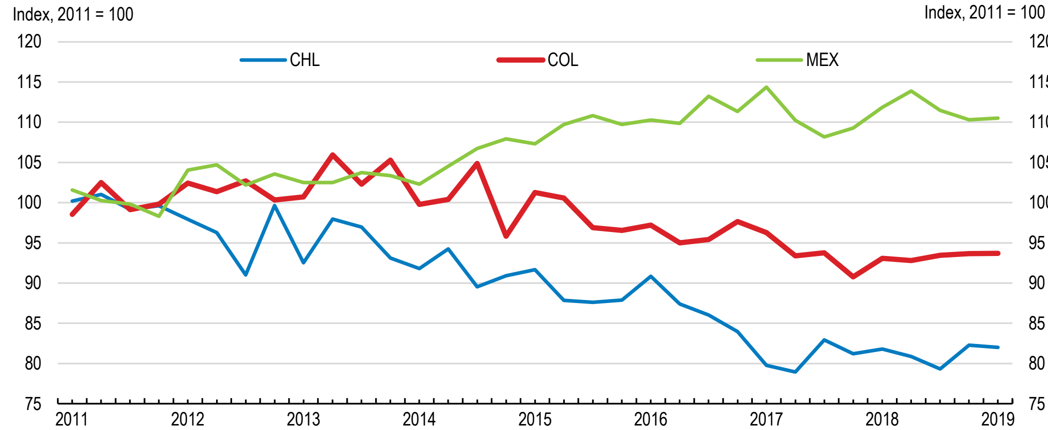
Figure 1.3. Export performance has deteriorated



Note: Export performance is measured as actual growth relative to the growth of the country's export market, which represents the potential export growth for a country assuming that its market shares remain unchanged.
Source: OECD Analytical database.

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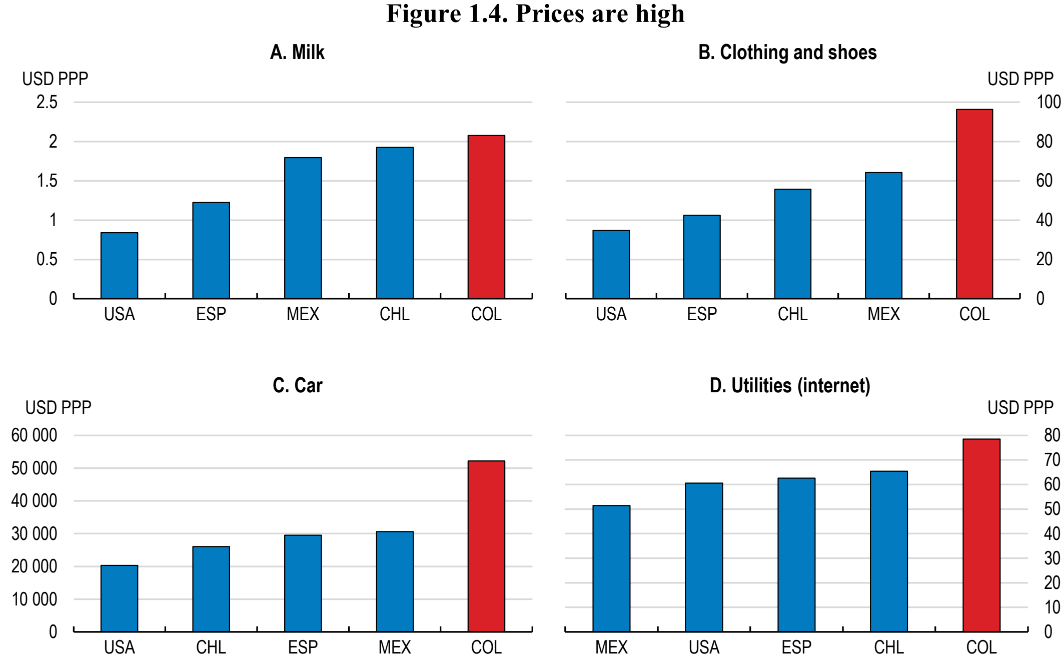
Prices are high

Colombia has not shared in many of the benefits that an increasingly integrated global economy is offering, such as access to a wider variety of quality goods and services at more competitive prices for both firms and consumers.

At present, prices for tradable goods are substantially higher than in other countries, including regional peers (Figure 1.4). Relatively high prices also affect services, including in key sectors such as telecommunications, which provide inputs to other sectors across the economy.

Figure 1.4. Prices are high



Note: Clothing and shoes prices are proxied by the price of a dress in a chain store. Car prices are proxied by the price of a Toyota Corolla or equivalent new car. Mobile prices are those of 1 min. of prepaid mobile tariff local. Prices are converted to PPP dollars by using conversion rates published in the IMF's World Economic Outlook.
Source: OECD computations based on Numbeo and IMF data.

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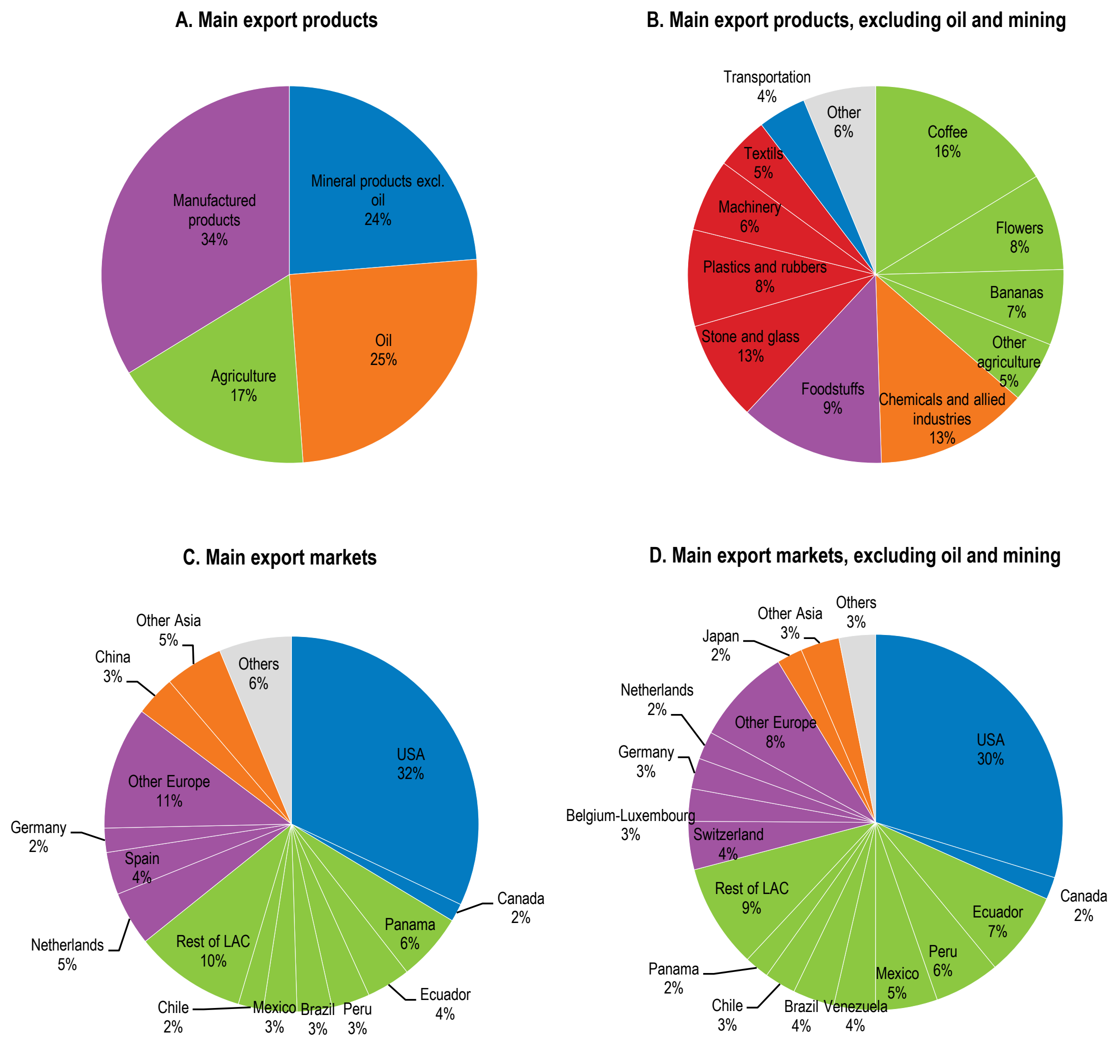
Good exports are concentrated in few products and destinations

Oil and other minerals account for half of the export basket (Figure 1.5), despite being a small producer in the world. The share of primary exports, which includes also raw agriculture exports, is close to 70% (Figure 1.6), which is high in international comparison. The United States is the main export destination, including of non-oil products. Other countries in the region, particularly Panama and Ecuador, are also important markets. Exports to other large economic areas, such as China or the Euro Area, are small in comparison with other countries in the region.

Figure 1.5. Exports are concentrated in products and destinations



Note: All data refer to 2016.
Source: OECD calculations based on BACI database ("Base pour l'Analyse du Commerce International": Database for International Trade Analysis) from the CEPII (Centre d'Etudes Prospectives et d'Informations Internationales).

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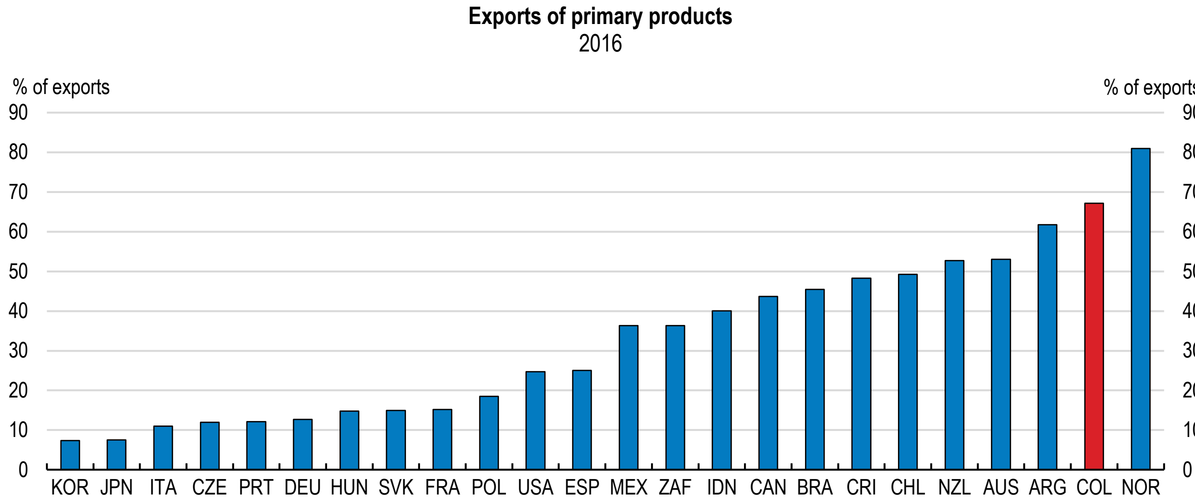
Figure 1.6. The share of primary goods is very high



Note: According to Lall (2000)'s classification. Primary products are oil, mining and raw agriculture products.
Source: OECD computations based on CEPII (2017), BACI Database and World Bank, World Development Indicators database. '

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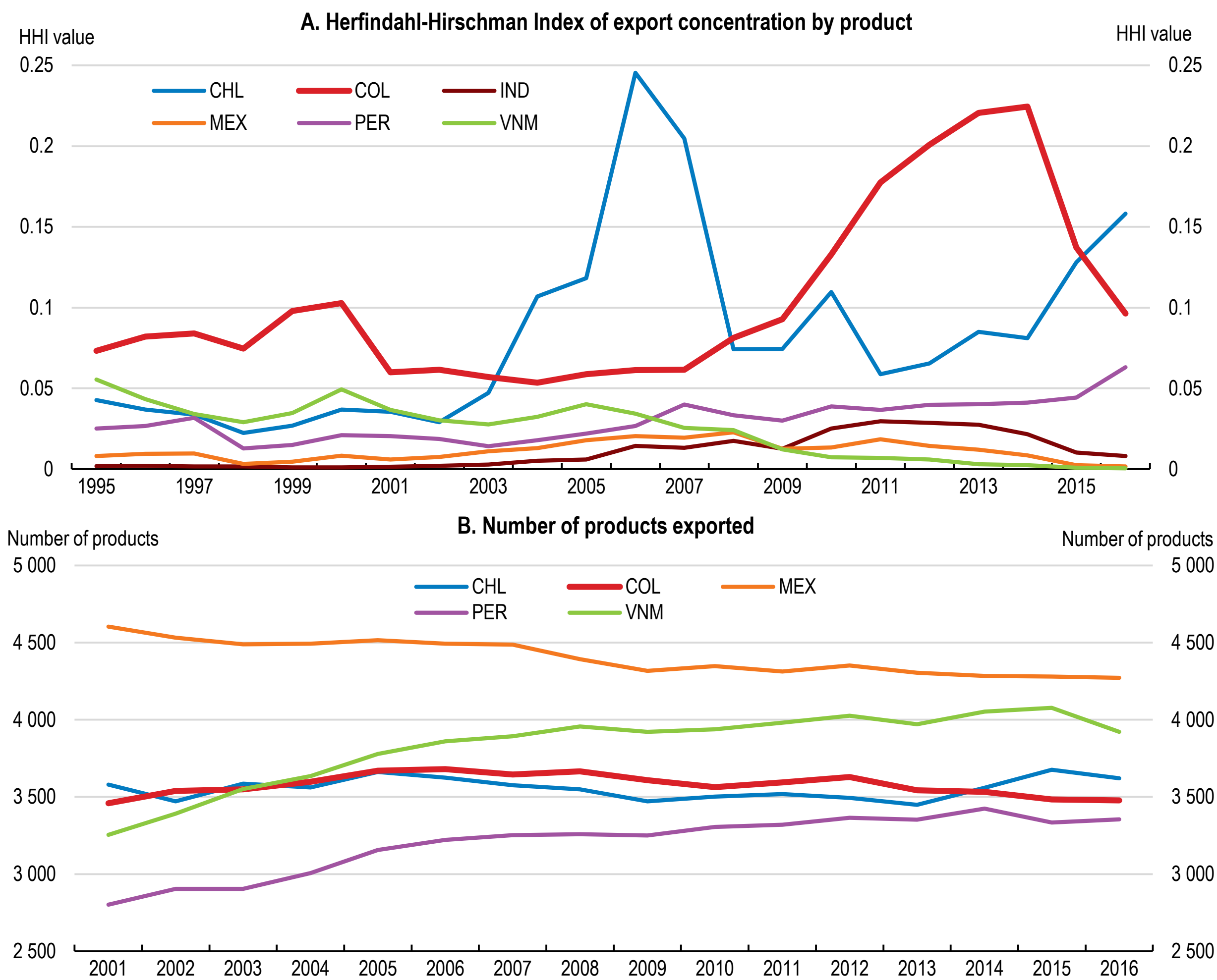
Colombia is the least diversified country among the six largest Latin America countries (Linares, Rodriguez and Gonzalez Pandiella, forthcoming[3]). It is also less diversified than other emerging economies in Asia (Figure 1.7, Panel A). Exports were more concentrated than in peer countries in the 1990s, before the rise of the oil sector. Concentration increased significantly in the 2000s, following the strong growth in oil and mining activities. This was also amplified by a fall in exports to Venezuela, the main traditional destination for Colombian manufacturing exports (Garavito, Montes and Esguerra, 2013[4]). With the end of the commodity boom, export concentration has receded but remains higher than in peer countries, including other countries in the region with large commodity sectors such as Peru. Other emerging countries have managed to increase product diversification of their export baskets over the last fifteen years. On the contrary, the number of products exported by Colombia has remained constant (Figure 1.7, Panel B). There has been good progress in tapping new markets and reducing concentration of destinations (Figure 1.8). Few firms concentrate most exports (BanRep, 2017[5]; Garavito, Montes and Esguerra, 2013[4]). The fall in exports to Venezuela has exacerbated firm concentration, as this has been traditionally the market where small and medium Colombian enterprises initiated their exporting activities (Garavito, Montes and Esguerra, 2013[4]).

Figure 1.7. Exports are concentrated by products



Note: The Herfindahl-Hirschman Index (HHI) measures the dispersion of trade across an exporter's products. Countries with higher preponderance of trade concentrated in a very few products will have a higher value in the index.
Source: OECD computations based on trade statistics from Trade Map.

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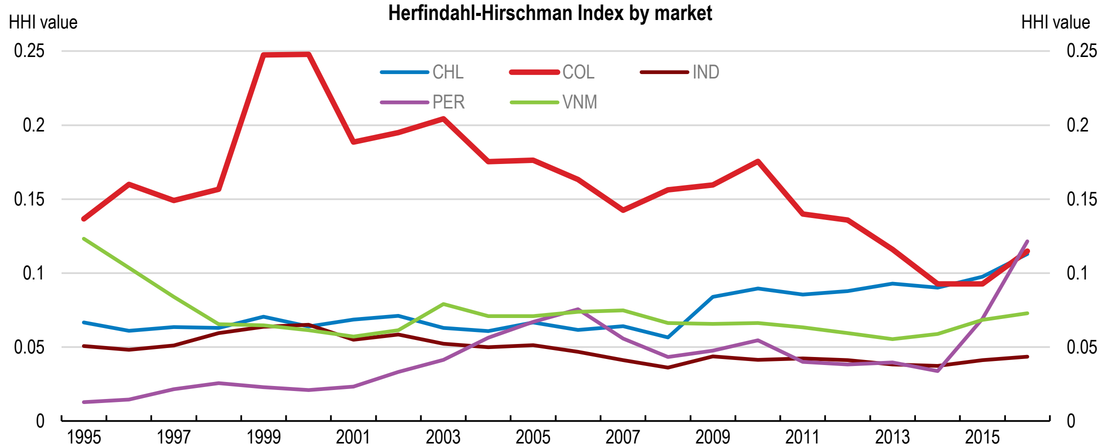
Exports are largely concentrated in products whose demand is decreasing (Figure 1.9, Panel A). Zooming into non-oil exports shows a similar picture, with the share of exports whose demand is decreasing reaching 40% (Figure 1.9, Panel B). The level of sophistication of the export base has not improved either (Linares, Rodriguez and Gonzalez Pandiella, forthcoming[3]), with the main proportion of exports considered as low-technology exports (López, Enciso and Montes, 2015[6]). This contrasts with other countries in the region such as Mexico or Costa Rica that managed to enhance the sophistication of their export basket. Empirical research suggests that achieving a higher level of sophistication in the export basket helps to make growth stronger (IMF, 2018[7]).

Figure 1.8. Exports are also concentrated by destinations

Herfindahl-Hirschman Index by market



Note: The Herfindahl-Hirschman Index (HHI) measures the dispersion of trade across an exporter's partners. Countries with higher preponderance of trade concentrated in a very few markets will have a higher value in the index.
Source: OECD computations based on trade statistics from Trade Map.

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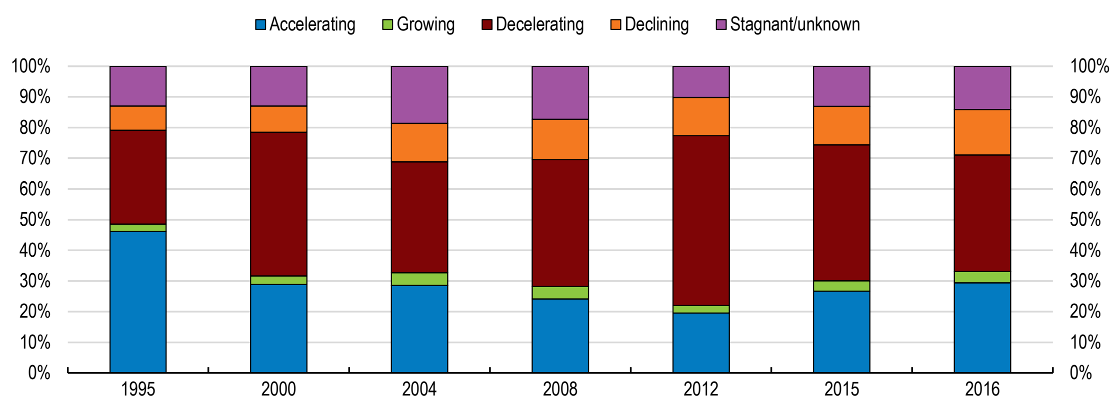
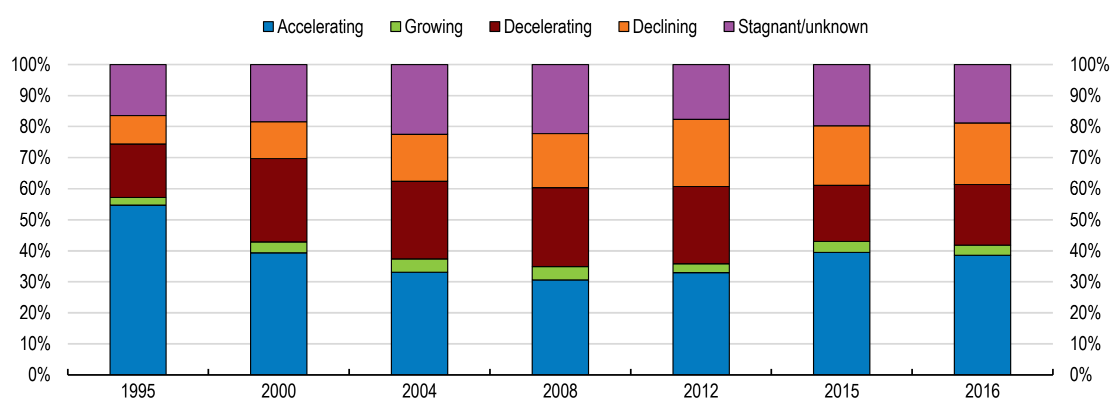
Figure 1.9. Exports are concentrated in products whose demand is decreasing

A. Maturity of export for Colombia (all sectors)



B. Maturity of exports for Colombia (oil sector excluded)



Note: Accelerating products are those whose demand is growing over time at increasing rates. Growing demand products are those whose demand is increasing, but the rate of growth is not. Decelerating products are those whose demand is decreasing at increasing rates. Declining demand products are those whose demand is decreasing, but not at increasing rates.
Source: OECD calculations based on BACI database from the CEPII.

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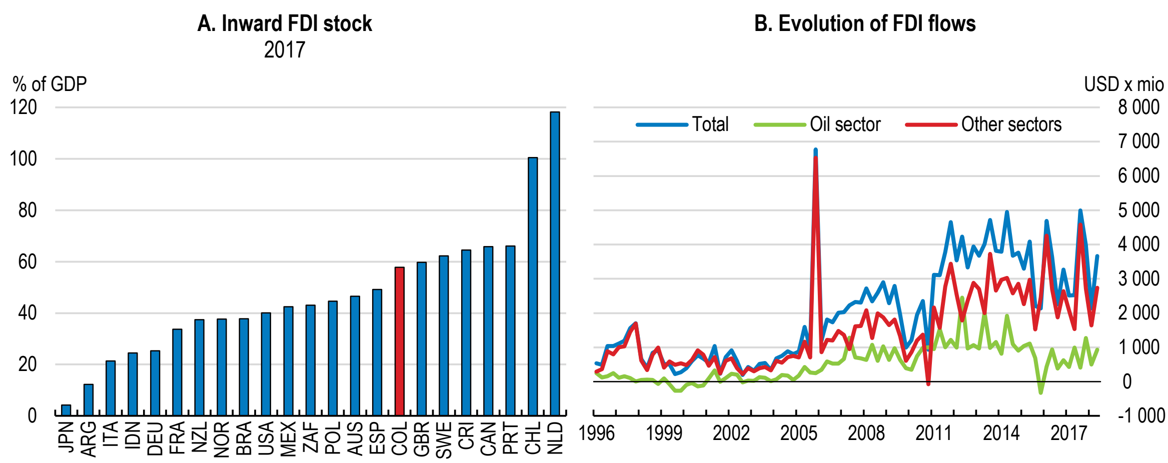
FDI has become more diversified but integration in global value chains remains limited

Foreign direct investment (FDI), which had been largely concentrated in the oil sector, has recently become more diversified (Figure 1.10). However, it has remained focused on natural resources and economic activities related to the domestic market (Garavito, María Iregui and Teresa Ramírez, 2012[8]). Integration in global value chains (GVC), that can help to boost higher value-added exports and diversification, remains limited. The share of foreign value-added embodied in Colombia's export is low (Figure 1.11, Panel A). The foreign value-added of content of exports is also low (Figure 1.11, Panel B). Colombia's only discernible GVC link is with the United States (Figure 1.12), while many Asian and European economies are tightly intertwined through their trade relationships, both among themselves and with advanced economies.

Figure 1.10. FDI has become more diversified



Source: UNCTAD; Banco de la República.

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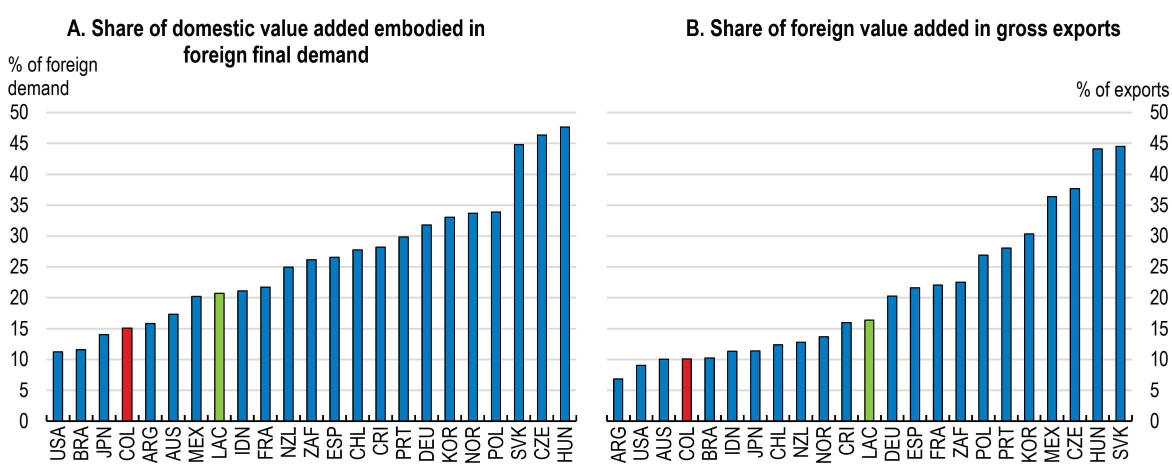
Figure 1.11. Integration in global value chains is limited



Note: LAC refers to the unweighted average of Argentina, Brazil, Chile, Costa Rica and Mexico. The foreign value added content of Colombian exports does not capture the extent to which foreign intermediates enter supply chains for products eventually absorbed by Colombia's domestic demand. Colombian firms import a significant part of their intermediate inputs, notably machinery and equipment.

Source: OECD (2017), OECD/WTO NowCast Tiva Estimates.

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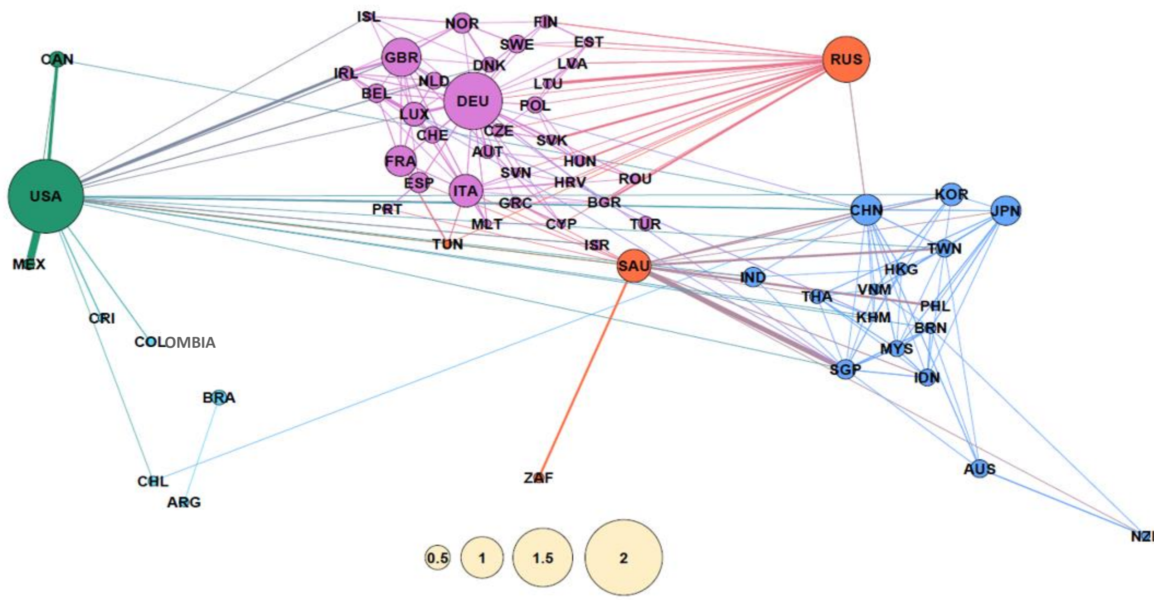
Figure 1.12. Colombia has remained on the side lines of global value chains

A map of global value chains

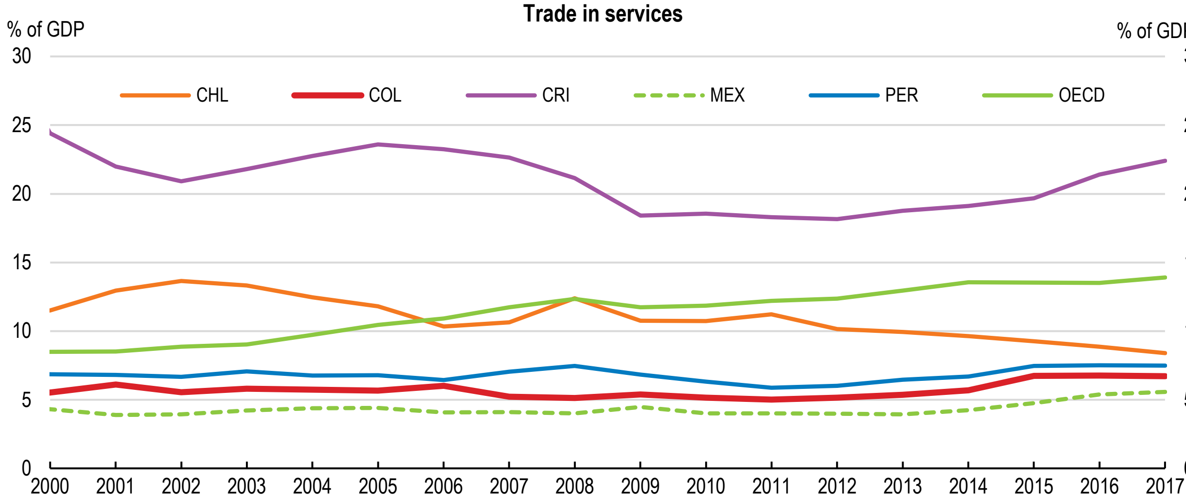


Source: Criscuolo and Timmins (2017).

Trade in services is relatively low

Service trade is the fastest growing segment of the global economy and an important component of many developing countries exports. Trade in services has remained relatively low, even in comparison with regional peers (Figure 1.13).

Figure 1.13. Trade in services is low



Note: Trade in services is the sum of service exports and imports divided by the value of GDP, all in current U.S. dollars.
Source: World Bank, World Development Indicators database.

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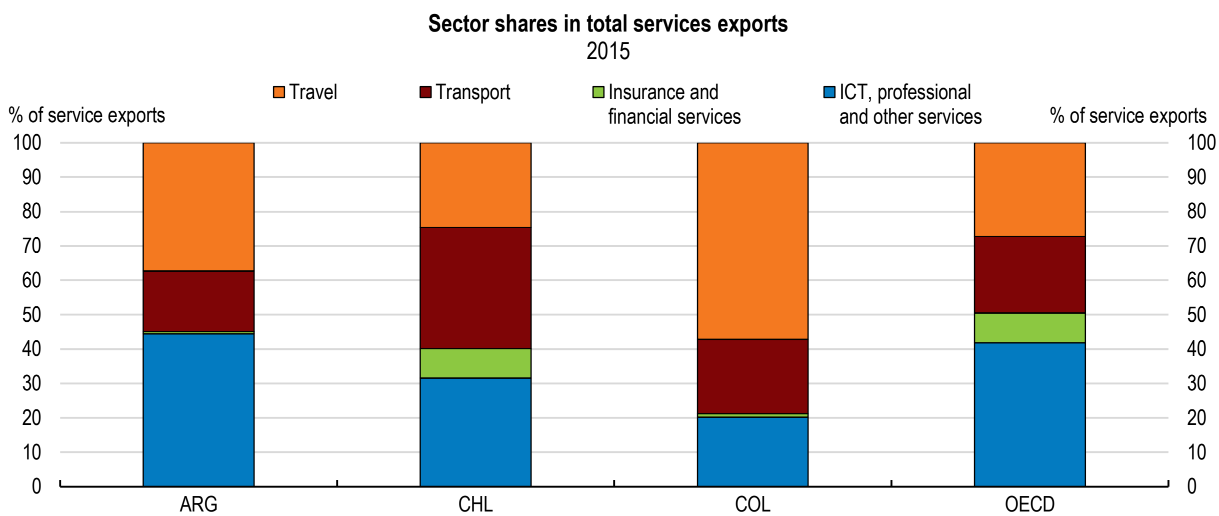
Recent good performance in the tourism sector, benefiting from the new opportunities that the peace process is opening and progress in improving air connectivity and hotel supply, shows that Colombia has also good potential in this area. The number of international visitors has increased substantially, reaching 6.5 millions in 2017, indicating that Colombia is starting to take advantage of the competitive advantage that the country's climate, coastline and cultural assets provide.

There is also room to increase exports of services with higher technological content (Figure 1.14). The strong government emphasis on boosting the adoption of digital technology, encompassed under the strategy so-called *Economía Naranja*, would help to increase services exports in the ICT sector. Improving skills and its relevance to new labour market demands (see Chapter 2), as well as strengthening proficiency in English,would also enhance export performance in these areas.

Figure 1.14. There is room to boost knowledge intensive service exports



Source: World Bank, World Development Indicators database.

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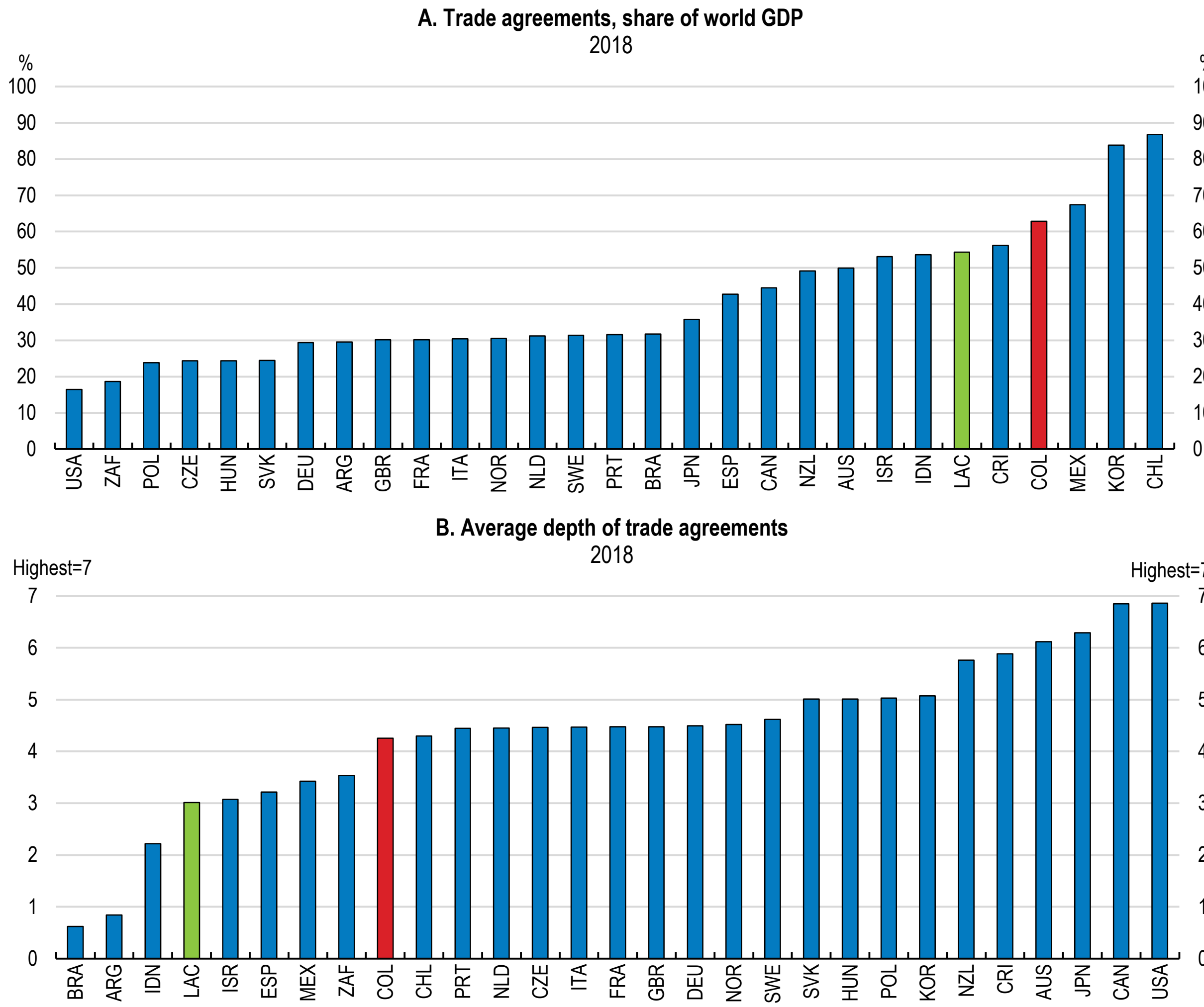
Colombia's untapped potential is large

Colombia's geographic location is privileged, strategically located in the north western tip of South America, near the Equator line. Its extensive coasts on the Atlantic and Pacific oceans provide convenient access to Europe, the United States, the Caribbean and the Pacific Basin. It has 16 trade agreements in force (Figure 1.15), providing preferential access to more than 60 countries and close to 1 500 million consumers in markets such as the United States, the European Union, Brazil, Mexico, Chile, Peru or Korea. Public views concerning trade are positive, as recent opinion surveys indicate that 66% of citizens are in favour of signing free trade agreements "with many countries" (Gallup, 2018[9]). All this, together with continuous macroeconomic stability, provide Colombia with great potential to make trade an engine of growth and jobs. Actions in different policy areas, as outlined in this chapter, can facilitate that the large potential is realised (see Box 1.1).

Figure 1.15. Existing trade agreements are wide



Note: LAC refers to the unweighted average of Argentina, Brazil, Colombia, Costa Rica and Mexico. As measured by Dür et al. (2014), see Box 3. Trade agreements are weighted by partner countries' GDP in PPP US dollars. In Panel B, the computations exclude the domestic country GDP.
Source: Dür et al. (2014).

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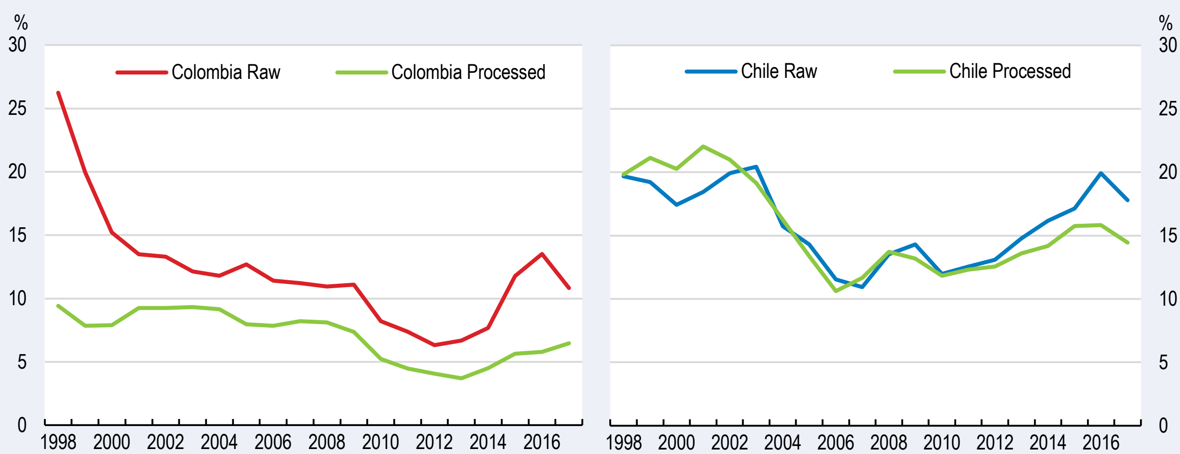
Box 1.1. Realising the potential of the agriculture sector

Colombia's abundant land and freshwater resources and diverse climate allow for the cultivation of a wide variety of crops and forest products. While agriculture is a key sector in terms of employment, productivity is low (OECD, 2015[10]). The internal conflict, which triggered massive displacement of the rural population and engendered illicit crop production, deeply affected the performance of the sector.

After a strong decline, the share of exports of raw agriculture products has started to increase again (Figure 1.16). To build on this recent progress, Colombia will need to adapt to global changes in agriculture trade. The share of processed products in global trade has been increasing, to the detriment of primary agriculture products. In general, the demand for goods of higher knowledge content is expected to increase more in the future, also in the agro sector. The share of processed agriculture exports remains low, in contrast with other countries in the region such as Chile.

Figure 1.16. The share of processed agriculture exports remains low

Share of raw and processed agriculture and food exports over total exports



Source: OECD calculations based on UN Comtrade database.

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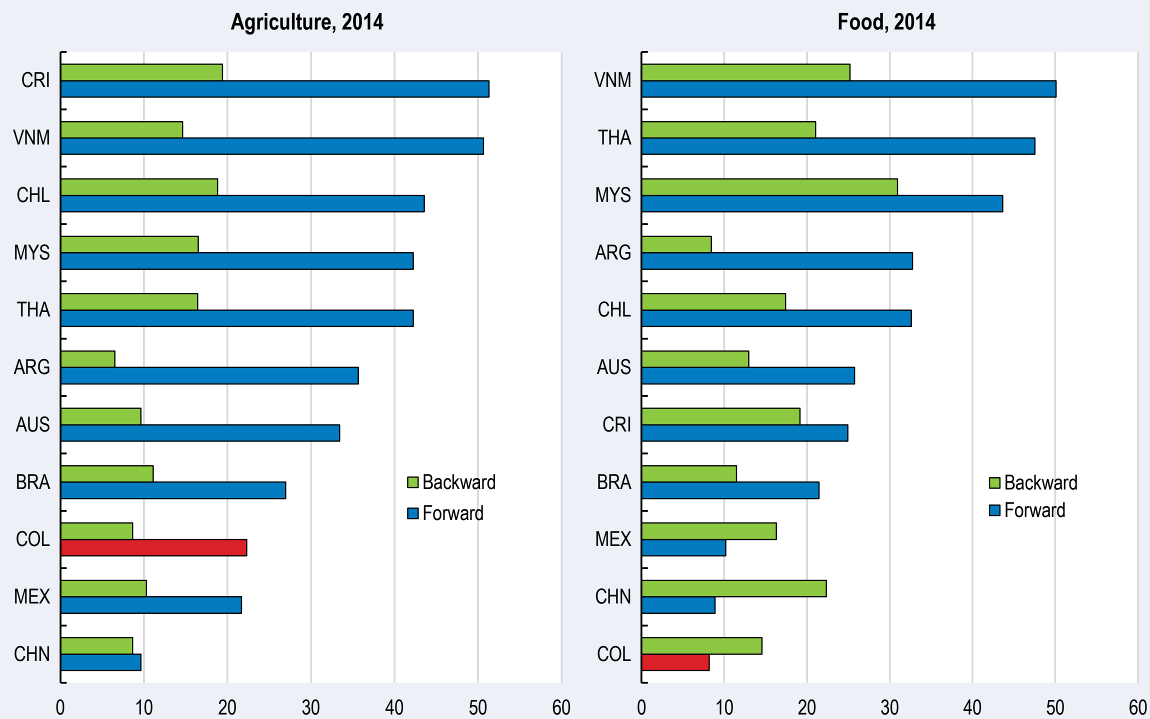
GVCs are also changing the nature of production and specialisation in agriculture and food around the world (Greenville, Kawasaki and Beaujeu, 2017[11]). Colombia is in the bottom in terms of participation in global value chains in agriculture and food (Figure 1.17). Globally, services are an important part of value added in exports in agro-food, even greater than in the manufacturing sector. In Colombia, the services value added share of food exports is relatively low (OECD, 2015[12]), particularly with respect to foreign services. This highlights that the functioning of services markets is critically important also for the agro sector.

Given these trends, Colombia will need to continue improving productivity and competitiveness in primary agriculture products to sustain its improving position in this area. Refocusing agriculture support policies would be a fundamental step. Producers receive relatively high levels of support in the form of market price support, input subsidies and direct transfers, accounting for 90% of public spending in the sector.

Figure 1.17. Colombia's participation in agriculture GVCs is small



Note: Forward participation index: Domestic value added embodied in foreign exports, as % of total gross exports of the source country. Backward participation index: Foreign value.
Source: OECD (2017a), OECD/WTO NowCast Tiva Estimates.

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Refocusing policy efforts away from direct payments to producers into providing public goods and services, such as rural infrastructure or technical assistance, which have been largely neglected (OECD, 2015[13]), would be fundamental to improve productivity and competitiveness in the sector.

Completing and updating the rural cadastre would also be a crucial step to promote a better use of land, as it will improve legal certainty and facilitate transactions. More than 40% of land ownership continues to be informal, and it will be also important to speed up the process of formalisation and registration of land rights.

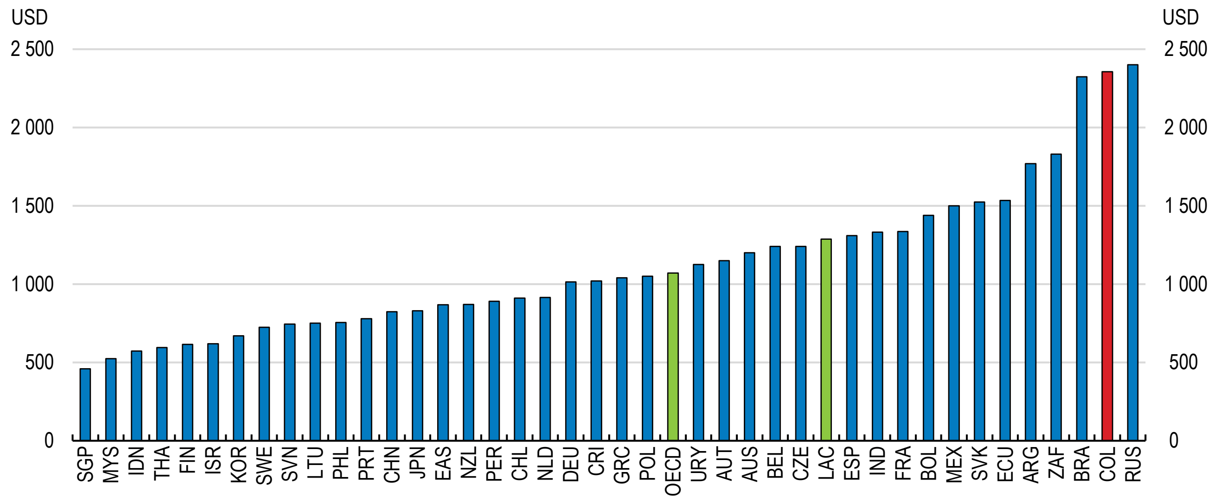
Colombia could also seize increasing opportunities in the processed agriculture segment. This would require adding value to raw products and differentiating them. Differentiation can be achieved through customisation and innovation, where R&D, design, branding or ICT services are fundamental. The sector would also benefit from a better performance in packaging, storage, and transport logistics sectors (Meléndez and Uribe, 2012[14]). Argentina's wine sector is a good example of how differentiating products, based on innovation and by adding value through marketing and branding services, can allow tapping into new markets and boost exports, incomes and jobs (Artopoulos, Friel and Hallak, 2013[15]).

Cost-to-trade is very high

Many of the factors that limit exports and participation in GVCs are shared across Latin America, including long distances from world manufacturing hubs, low intra-regional integration, and low firm productivity. But the high costs and time delays associated with importing and exporting hampers Colombia's performance particularly (Figure 1.18), even in comparison with regional peers. Costs arising from infrastructure gaps, customs procedures, and weak logistics services hinder firms' ability to be competitive in external markets.

Figure 1.18. Trading is costly in Colombia

Fees levied on a 20-foot container in US dollars



Note: LAC and OECD are defined according to the definitions of the World Bank.
Source: World Bank, World Development Indicators database, 2014.

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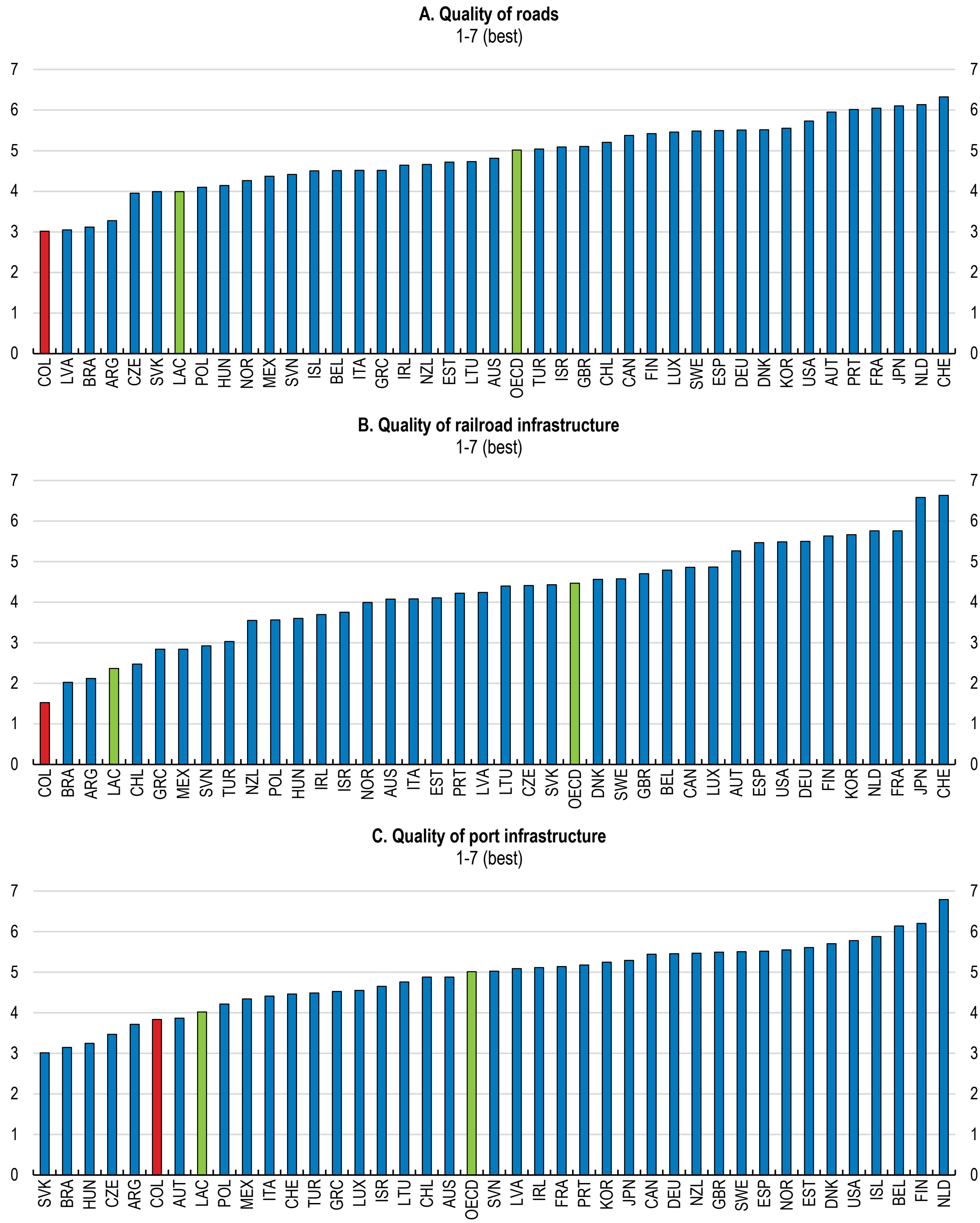
Infrastructure gaps are large

Infrastructure bottlenecks are large and existing in all transport areas (Figure 1.19). This includes ports, the main portal for shipping imports and exports, and roads, the primary way to move goods from warehouses to ports (Chapman, 2018[16]). These infrastructure bottlenecks have contributed to poor connection between regions and cities. Regional economies have developed patterns of self-sufficiency that have not facilitated specialisation or economies of scale, affecting productivity and competitiveness.

Figure 1.19. The quality of infrastructure is relatively low



Note: LAC refers to the unweighted average of Argentina, Brazil, Chile and Mexico.
Source: World Economic Forum, The Global Competitiveness Index dataset (2007-2017).

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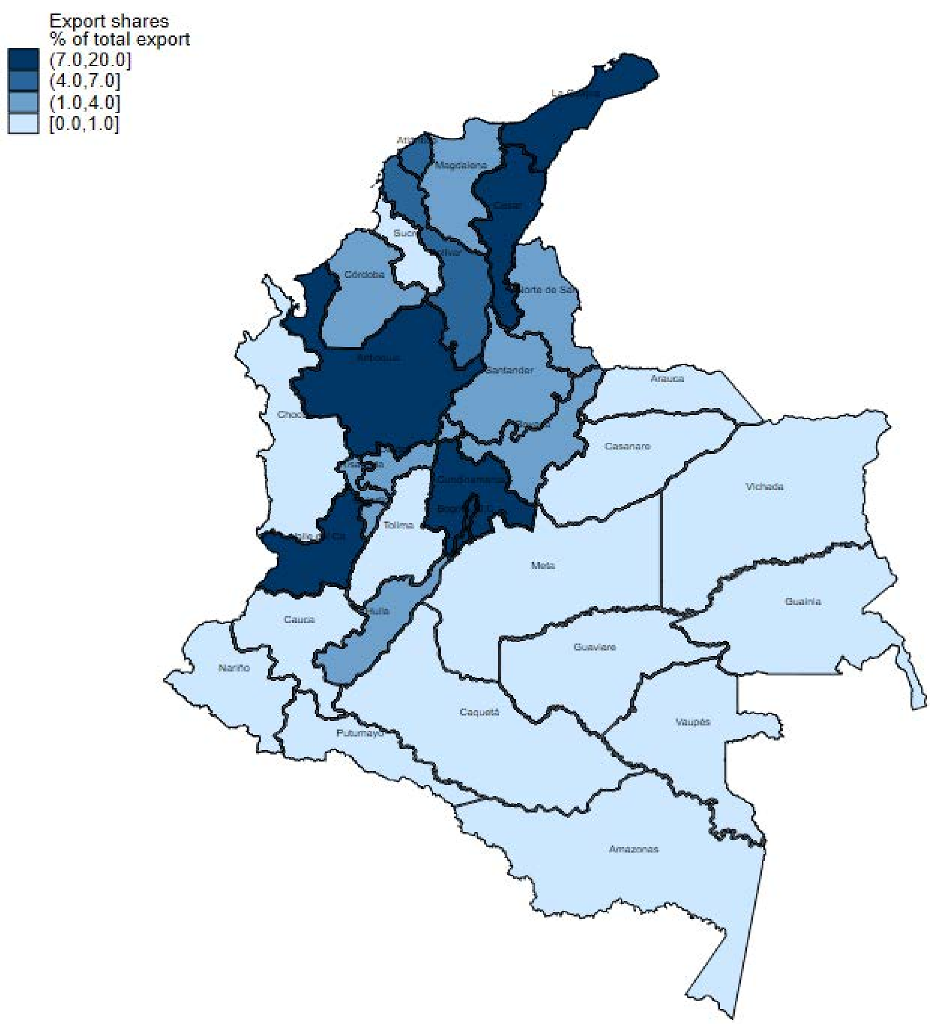
Infrastructure gaps also imply that not all regions are able to seize the opportunities that trade can offer for local development. Several regions suffer from poor connectivity with the main customs offices in the country. As a result exports are largely concentrated in few regions (Figure 1.20). Half of the country's non-oil exports come from four Departments.

Figure 1.20. Exports are concentrated in a few regions



Note: Exports excluding oil and petroleum (related) products. Data refer to the period January – May 2018.
Source: DANE.

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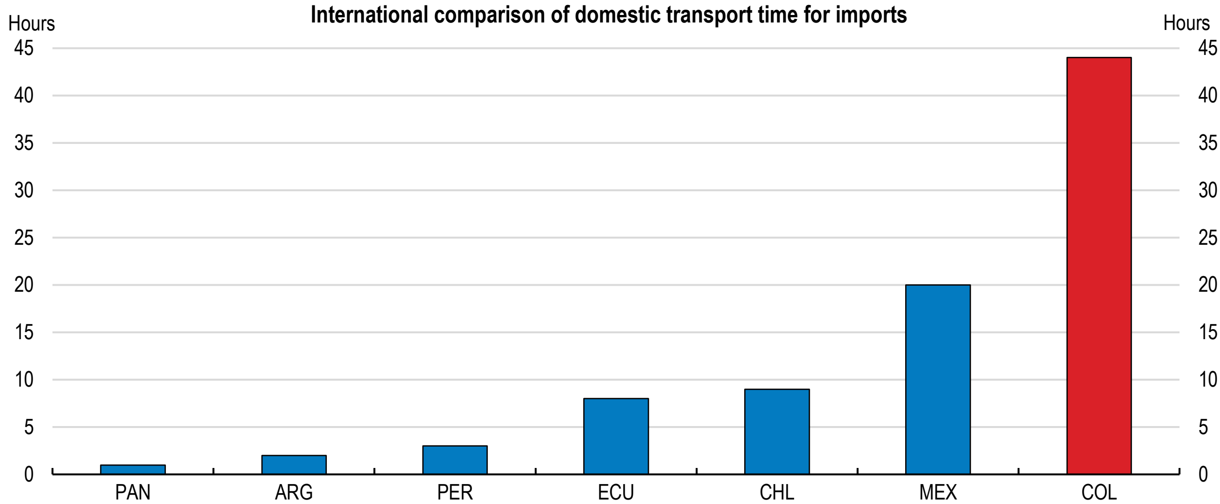
Improving roads

To illustrate the magnitude of Colombia's high domestic transportation costs, it is often mentioned that it costs more to bring a shipment from a Colombian warehouse to a Colombian port than it costs to send the same shipment from the port to Asia. This is confirmed by recent studies finding that domestic transportation costs represent around 5% of the total price of an export, while international transportation represent 4.5% of the price (García et al., 2017[17]). When compared internationally, the 44 hours required to move shipments between a warehouse and port in Colombia doubles the hours necessary in Mexico (Figure 1.21).

Figure 1.21. Domestic transport in Colombia is more than twice as slow as in neighbours



Source: World Bank, Doing Business, 2019.

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Mountainous geography contributes to high transportation costs, but closing large gaps in road infrastructure and addressing inefficient regulations in the freight transport sector can go a long way to reduce transport costs. This would increase exports significantly in all sectors, but particularly in agriculture and manufacturing (De La Cruz et al., 2016[18]).

Colombian authorities have moved decisively to improve road infrastructure recently. An extensive public-private programme (so-called fourth generation, 4G) holds the promise of achieving a fundamental improvement in primary roads in Colombia. It has benefited from a steady improvement in the Colombian Puplic Private Partnerships framework, whose regulations rank now as one of the most robust in the world (International Bank for Reconstruction and Development / and The World Bank, 2018[19]). By the end of 2018 the financing of 17 projects, out of the 30 planed under 4G, is expected to be close. This amounts to USD 8.4 billions. 4G is expected to reduce domestic transportation times considerably. However, it remains important to continue to evaluate thoroughly the PPP projects and to record life-time contingent liabilities in a timely and transparent way.

The 4G programme has suffered from delays due to contractual problems, as the concessionaries of some key projects were affected by Odebrecht corruption cases. This created uncertainties about the balance of risks in some contracts in case the concessionary is affected by corruption allegations. Authorities have reacted promptly and pursued legal changes, but these changes remain subject to judicial uncertainty. The lack of uniformity in environmental licensing has also caused delays and uncertainties in several 4G projects.

Last, financial constraints to finance projects have also emerged, as the pipeline of projects is substantial, most of the investors are local and the size of the financial market remains small. Around 24% of funding is coming from abroad. This highlights that for a successful implementation of 4G projects, there is a need to gradually extend the investor base, incorporating more international investors

The ongoing improvements in primary goods has the potential to reduce domestic transportation costs and times. Yet, such improvements would still be dampened by poor access to cities and hubs for external trade, such as the main customs offices. According to estimates from the Transport Ministry, road traffic congestions to access the main cities, such as Barranquilla, Bogotá or Medellin, imply losses of 2% of GDP per year. This highlights the importance of improving access to cities and trade hubs, based on intermodal transport solutions.

Beyond primary roads, gaps in secondary and tertiary roads are large and critical. Only 10% of tertiary roads are in good shape. Gaps are particularly acute in rural areas, particularly in those affected by the armed conflict. A prompt and successful improvement in roads in these areas is fundamental for its economic and social development and for allowing those regions to benefit from the gains that trade can offer. Some innovative and promising initiatives have been launched, such as *Public Works for Taxes* (*obras por impuestos*) mechanisms, which allow firms to pay part of their taxes in kind, by executing and delivering public works, such as roads (Box 1.2).

Box 1.2. Paying taxes in kind: public works for taxes mechanisms

Public Works for Taxes mechanisms facilitate that the public sector and the private sector work together to reduce infrastructure gaps. Through these mechanisms, private companies advance the payment of their income tax to finance and execute directly public investment projects that either national or subnational governments have prioritized.

Peru was the regional pioneer and launched these schemes in 2008. Colombia is making use of these schemes in areas affected by the armed conflict (so-called Zomac), which cover 53% of the territory. Specialised firms, such as those in engineering or construction sectors, can execute the project themselves. Firms from other sectors can subcontract the execution of the project to specialised firms.

Firms can select among projects prioritised by local governments, regions, ministries or other governmental agencies. They can also propose projects on their own. This can help to accelerate investment in projects that boost participating firms' competitiveness and also of the area where these firms are located. In that case the project is subject to an ex-ante evaluation by the relevant government body to ensure it has public interest.

Works should be in six specific areas: road infrastructure, energy, education, health, water treatment and sewerage. Upon finalization of the projects, the resulting infrastructure is delivered to the government, who determines which entity will be in charge of the management and maintenance. Projects are subject to audit and ex-post evaluation.

These schemes help to bridge acute needs for investment in areas where state capacity to execute projects is limited and the wishes of firms wanting to practice corporate social responsibility, who can get involved in works of high social impact. To make the most of these schemes, it remains crucial to ensure that the selected projects reflect well governments priorities, or in case of projects proposed by firms, that they benefit society at large.

Secondary and tertiary roads are under regional and municipal responsibility. Historically, regional and municipal investment on transport has been very low and of low quality. There have been good progress at national level to coordinate and to promote more investment on infrastructure. The so-called *Transport Master Plan* estimates that closing existing gaps would require additional investment in the order of 1.3% of GDP per annum during the next 20 years. This would require finding additional financial resources. One promising possibility is to raise additional revenues via property taxes, whose revenues are allocated to subnational governments. For that, completing and updating the cadastre is a necessary initial step. Existing cadastral information is incomplete, with about one third of the country not covered and half of existing information outdated. The problem is particularly acute in rural areas. A functional and complete rural cadastre would also be the starting point to promote a better use of land and promote rural development (OECD, 2015[10]).

Updating and completing the cadastre would also provide additional resources particularly to more disadvantaged areas, where the cadastre is more incomplete and more outdated and, at the same time, gaps in roads coverage and quality are largest. Currently municipalities have to compensate the national technical office to compute property values and they are often pressured by local lobbies not to do so (OECD, 2015[20]). The national government could provide cadastral services at lower or free cost and link increases in transfers from the central government to the completion or update of the cadastre.

Improving ports

With the majority of global trade carried by sea, developing strong, well-functioning maritime transport infrastructure is a key element of economic growth. The Colombian ports system is composed of 40 public ports and 18 private ports. The system has increased its capacity in recent years. However, international rankings indicate that port and border handling remains a significant bottleneck for import and export processing times. Colombia's exports required nearly twice as much time for handling (112 hours) as exports from the next slowest peer country (Figure 1.22). Port and border handling explains most of the delay for processing exports (Figure 1.23).

Figure 1.22. Ports are slower than in regional peers

Source: World Bank, Doing Business, 2019

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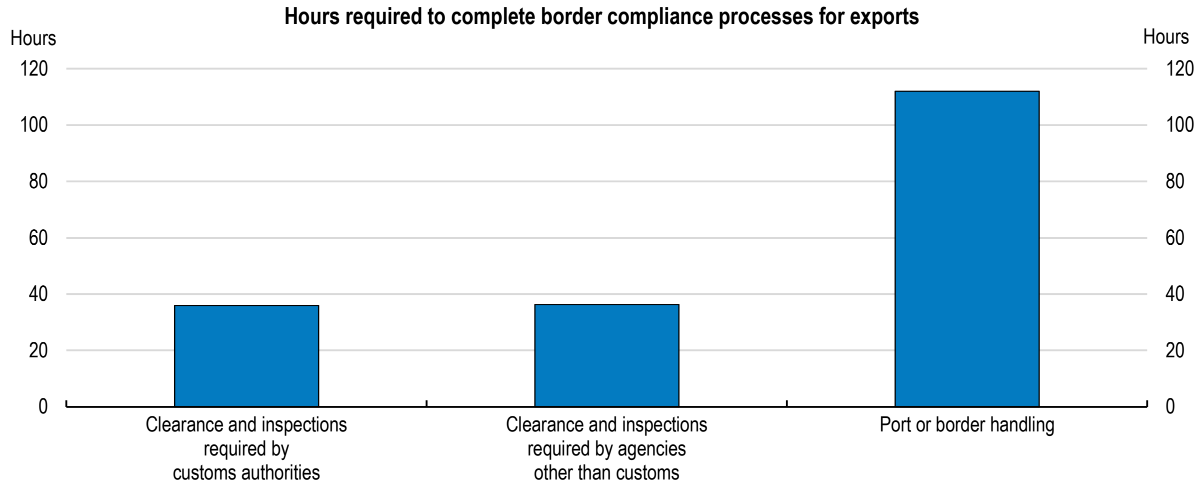
Figure 1.23. Port and border handling is main time delay for processing exports



Source: World Bank, Doing Business, 2019.

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Efficiency analysis comparing ports across Latin America also shows that there is room to improve the efficiency of Colombian ports (Morales et al., 2013[21]). The port of Cartagena is the best performing, while Barranquilla and Santa Marta perform among the least efficient in Latin America.

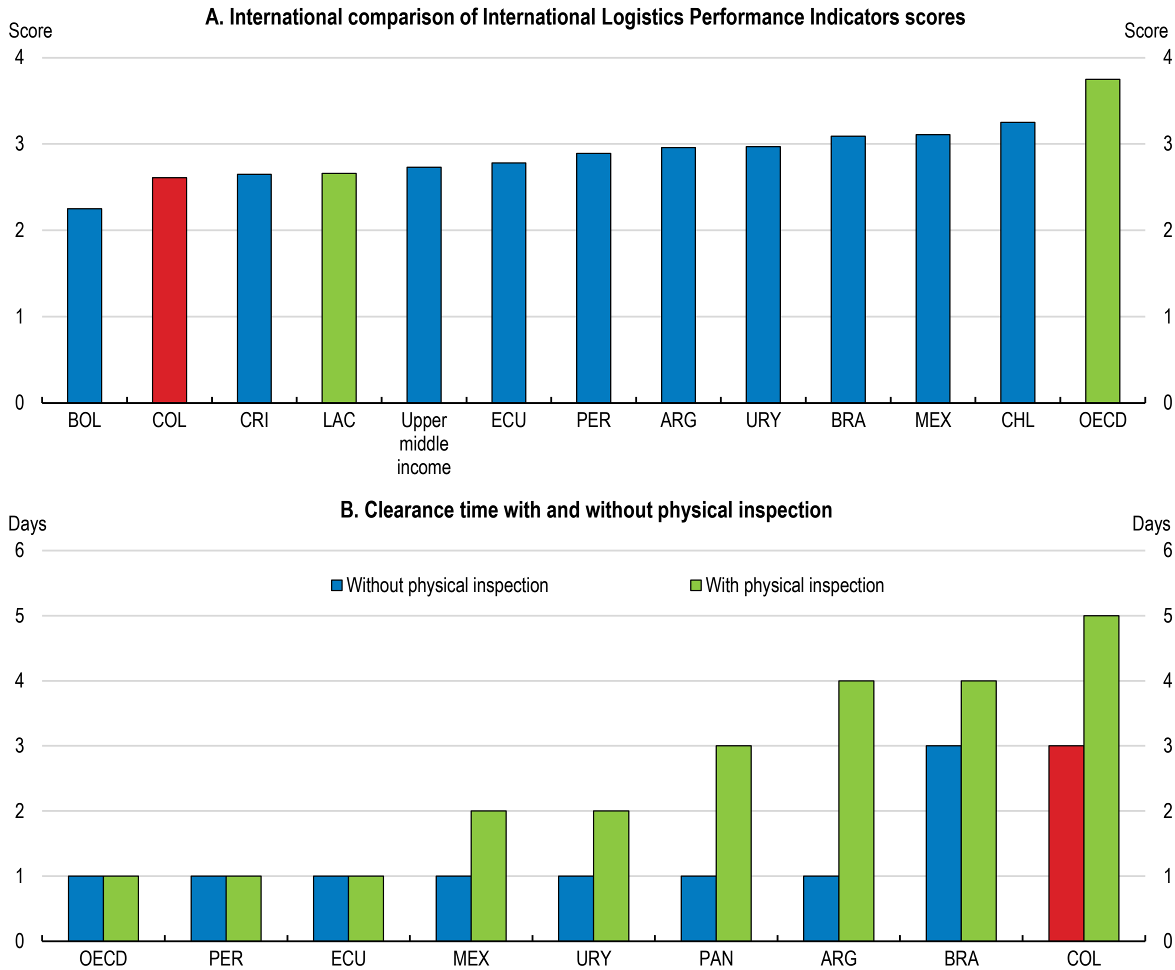
Research shows that in emerging economies increasing private sector participation, reducing corruption in the public sector, improving liner connectivity and the existence of multimodal links help to increase port efficiency (Suárez-Alemán et al., 2016[22]). The latter is particularly important in Colombia as there are gaps in all transport infrastructure sectors. There is also room to increase competition between ports as a way to boost efficiency.

Improving port logistics also offers great potential for greater efficiency and lower costs. There are 140 tolls of which only 41 are digitalised. This implies high costs for users, including administrative costs. There are no one–stop shops for all the permissions and payments required to dock, load and unload cargo in Colombian ports. Moving to paperless and online solutions, where all required documents from various governments agencies are collected, would reduce the administrative burden created by the existence of paper forms and multiple repeated requests for the same information. There is also room to improve port performance by upgrading scanners, as only 10 Colombian ports have digital scanners.

Trade facilitation can help

If goods move in and out of a country faster, trade costs will fall. Logistics play a crucial role in facilitating the movement of goods. Colombia's performance in logistics is also well behind OECD standards and most countries in the region (Figure 1.24, Panel A). Besides infrastructure, this relates to weak clearance processes, uncompetitive shipment prices, low quality logistics services, and poor ability to track and trace consignments. Whether physically inspected or not, Colombian export shipments require more time for clearance than shipments from other countries (Figure 1.24, Panel B). Training, simplified regulations and rules of origin, or technological solutions can help to improve inspection times.

Figure 1.24. Logistics operations in Colombia perceived as lacklustre



Note: LAC, Upper middle income and OECD are defined according to the definitions of the World Bank.
Source: World Bank, Logistics Performance Index, 2016.

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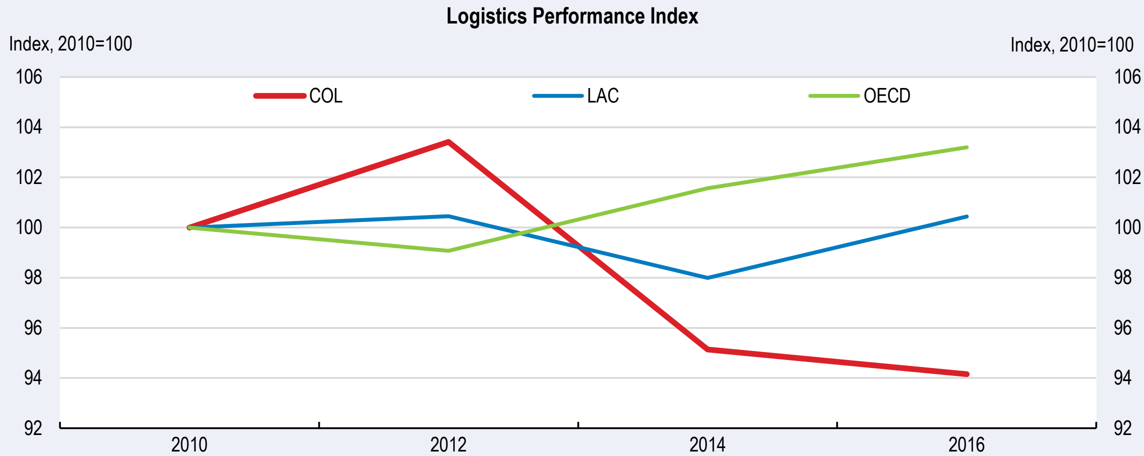
Empirical analysis undertaken for this chapter suggests that improving logistics can give a significant boost to exports (Dek and González Pandiella, forthcoming[23]). Should Colombia have improved its logistic performance in line with improvements made by peer countries, exports could have been significantly higher (Box 1.3).

Box 1.3. Assessing the impact of logistics on exports: a synthetic control method approach

Progress in improving logistics has been significantly lower than in OECD and regional peer countries, with logistics indexes showing a worsening since 2012 (Figure 1.25). The synthetic control method (see (Abadie, Diamond and Hainmueller, 2014[24])) can help to gauge the impact that this weak performance in logistics has on exports (Dek and González Pandiella, forthcoming[23]). The synthetic control method uses a data-driven procedure to construct a synthetic control unit, so-called synthetic Colombia, using a weighted combination of comparison units (other countries) that approximates the characteristics of the exposed unit (Colombia) before an event or intervention. The synthetic Colombia can then be used to simulate the development of Colombia after the event (in this case the lack of progress in improving logistics services). Results indicate that, had Colombia improved its logistic performance in line with improvements made by peer countries, exports would have been significantly higher (Figure 1.26). This highlights that, beyond physical infrastructure, logistics also matters and that policy efforts in this area will pay off in terms of higher exports and growth.

Figure 1.25. Logistics performance has deteriorated



Source: World Bank, Logistics Performance Index (2010, 2012, 2014, 2016).

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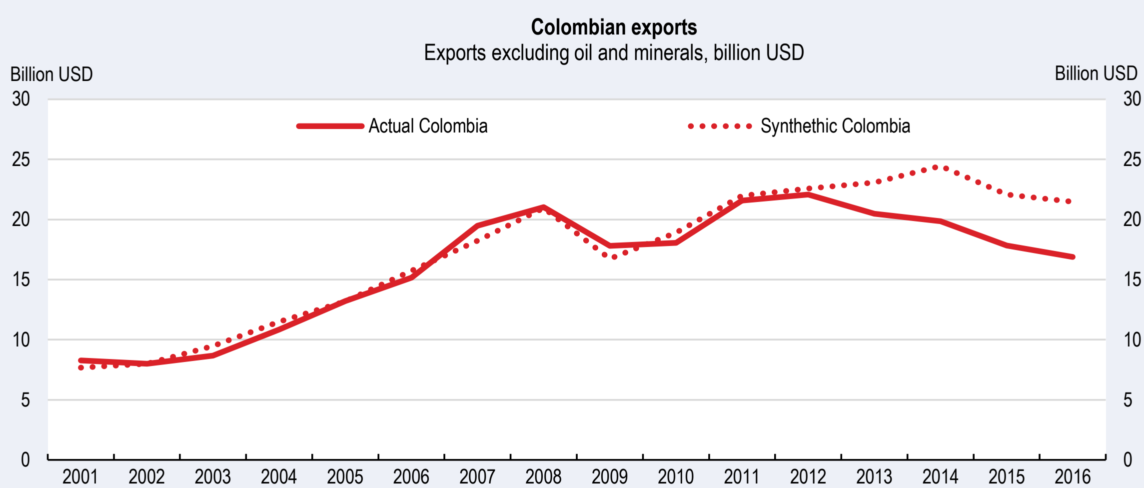
Figure 1.26. Real Colombian exports vs synthetic Colombian exports



Note: The following countries were used to construct the synthetic Colombia: Chile, Ecuador, Finland, Latvia, Mozambique, Nigeria and Turkey.
Source: OECD calculations.

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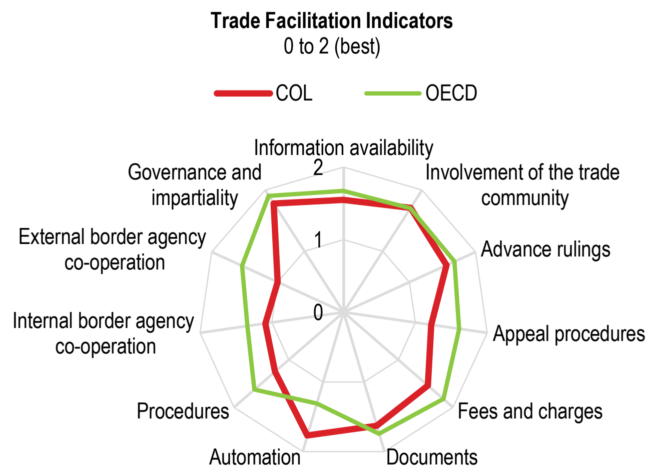
The OECD's Trade Facilitation Indicators can help to identify in which areas policy efforts would be beneficial to reduce logistics costs. Colombia has set up a single window for foreign trade (*Ventanilla Única de Comercio Exterior*, VUCE). It has helped to reduce authorisation times and the number of procedures to comply by exporters and importers. But internal and external border agency cooperation and customs procedures are the areas where Colombia has room to improve (Figure 1.27). These are initiatives which are less demanding in terms of financing than building physical infrastructure but the resulting pay-off could be large. OECD estimates indicate that, by cutting red tape, and harmonising and automating border processes, trade costs could fall up to 18%, with a stronger impact on emerging economies.

Figure 1.27. There is room to improve trade facilitation



Source: OECD Trade Facilitation Indicators, 2017.

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To enhance internal agencies cooperation, Colombia should increase efforts to move to joint inspection processes in which all inspections take place in a single time and place. Cooperation and exchange of information between agencies in charge of processing the movement of goods through its borders, those collecting government revenues, those protecting national security, and those safeguarding public health could be improved. Progressing in the integration of the customs system with the single window for foreign trade by ensuring that the resulting platform is sufficiently resourced to operate efficiently, would be a key step ahead, as it would eliminate duplicities and reduce regulatory burden. Improving risk profiling mechanisms and moving to an integrated risk management system can help to reduce long delays in inspections (OECD, 2014[25]).

Achieving the interoperability of the customs declaration with the other countries of the Pacific Alliance (Chile, Mexico and Peru) would be a major step to improve external border agency cooperation. Fostering the automation of customs processes and promoting and making the advance clearance of goods more user-friendly would also help to improve customs procedures.

Acknowledging the large positive effect that trade facilitation measures can have to spur trade, the government has recently launched a permanent interagency body, the Round Table on Trade Facilitation (*Mesa de facilitación del comercio*), aimed at reducing delays and costs associated to trade. The round table has representatives from the private sector and will have a strong regional emphasis. First initiatives, such as those aimed at decreasing the use of cash transactions in trade operations, are encouraging and the round table holds the promise of being a powerful catalyser of structural reforms in this important area. Tax authorities are also exploring the use of big data and machine learning to improve risk-profiling and reduce inspection times.

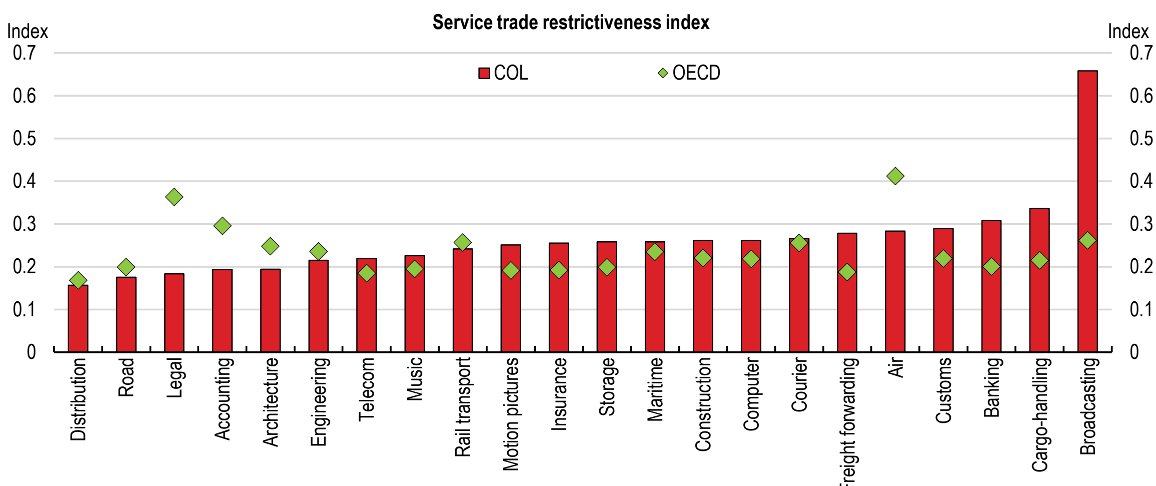
Boosting competition in key services

Restrictive services trade regulations disproportionately discourage exporting activities of SMEs (Rouzet, Benz and Spinelli, 2017[26]). The recent experience in the telecommunication sector, where measures to favour entry and improve competition triggered a significant decrease in prices, illustrate that boosting competition in key services helps to reduce costs for downstream firms and improve its competitiveness.

Reviewing existing trade barriers in key services areas (Figure 1.28), such as cargo-handling, storage or freight forwarding, would improve competition in the logistics sector and reduce costs. For example, foreign companies can only provide multimodal freight services if they have a domiciled agent or representative legally responsible for its activities in Colombia. In the same vein, international cabotage companies can provide cabotage services (i.e. between two points within Colombia) "only when there is no national capacity to provide the service". Colombia prohibits foreign ownership of commercial ships licensed in Colombia and restricts foreign ownership in national airlines or shipping companies to 40%. FDI in the maritime sector is limited to 30%. The owners of a concession providing port services must be legally constituted in Colombia and only Colombian ships may provide port services within Colombian maritime jurisdiction; however, vessels with foreign flags may provide those services if there are no capable Colombian-flag vessels.

In professional services, lessening restrictions on movement of natural persons (e.g. through the recognition of qualifications and reduced residency requirements) could further facilitate trade, in particular in legal and accounting services.

Figure 1.28. Restrictions in some key service sectors are high



Note: Index scale from 0 to 1 (most restrictive regulations).
Source: OECD (2017), Services Trade Restrictiveness Index.

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According to the OECD's Product Market Regulations index, there is significant room to improve regulations in the road transport sector to favour entry and competition, particularly in freight transport. Colombia's trucking industry is highly fragmented with many one-truck firms that are relatively inefficient (OECD, 2017[27]). The performance of the sector is hampered by an old cargo fleet. A scrapping scheme, which is planned to be eliminated in 2019, has made it profitable to maintain old trucks, as importing a new truck requires scrapping an old one. This has created a market for old trucks and raised prices.

Furthermore, there are also plans to eliminate government intervention in price setting in freight transport. Going ahead with these plans and with the elimination of the scrapping scheme would be a fundamental step to improve freight transport, which will have a significant economy-wide positive impact, as all firms make use of those services, in particular exporting firms. There is also scope to improve regulations in railway, particularly concerning entry into the freight transport market, where currently franchised companies are granted exclusive rights, hence limiting competition.

Improving infrastructure planning

Colombia has made good progress in establishing a robust legal framework to improve infrastructure planning and coordination. However fundamental parts of the framework have not been implemented. A law approved in 2013 foresaw the creation of an agency dedicated to the planning of infrastructure (*Unidad de Planeación Integrada del Transporte*), with a particular emphasis on ensuring that a multi-modal view of transport infrastructure is shared across all level of government and in the pre-selection of projects. The latter is particularly needed as the methodology to evaluate projects is currently not standard across government agencies. The emphasis on establishing a multi-modal view is also warranted, as investment in certain areas, such as rail transport, would be more effective if they are undertaken within a multi-modal vision of transport infrastructure.

It would also be beneficial if the agency is tasked with providing subnational governments with technical assistance and advice, to avoid that insufficient planning, non-competitive procurement and corruption continues to hamper local and departmental infrastructure, particularly in rural areas.

The creation of such an agency would be in line with international evidence suggesting that having an entity in charge of coordinated and harmonised planning helps to improve infrastructure in a cost-effective way (Salehi Esfahani and Ramírez, 2002[28]; Andres, Guasch and Straub, 2007[29]). Despite completing all legal requirements for its creation in 2015, the entity has never been set up. In the same vein, the 2013 law foresaw the creation of a much needed regulation commission for transport infrastructure. Colombia has good experience with similar agencies in other key sectors such as energy, where both a unit in charge of planning and a regulator were set up and were instrumental to improve performance in that sector.

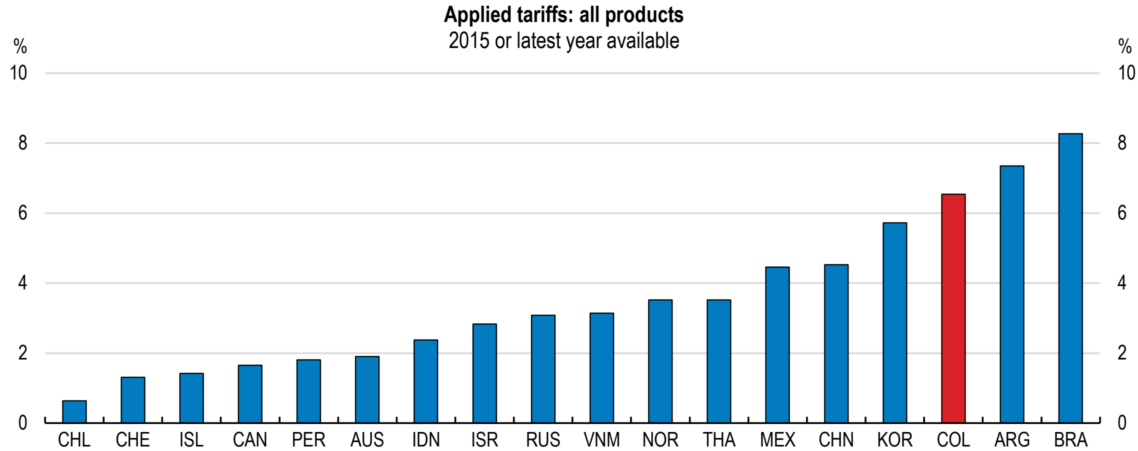
Lowering input costs for exporters

Trade tariffs have fallen

Colombia has made important efforts to promote trade integration in the recent years. In the last years, following the negotiation of several trade agreements, average tariffs were reduced from 12.4% in 2000 to 6.5% in 2015. Yet, Colombia holds the fourth highest tariffs in Latin America, after Venezuela, Argentina, and Brazil. Average tariffs are five times higher than in Chile (Figure 1.29).

Tariffs have been decreasing across all product groups (Figure 1.30). Largest differences with respect to tariff levels in OECD and peer countries are found in consumer goods and raw materials. Since 2011, Colombia has been reducing the tariffs on capital goods not produced in the country to zero. This covers around 3 600 tariff positions. For those produced in Colombia tariffs range from 5% to 10%. This suggests that, notwithstanding progress achieved to facilitate the use of capital goods, there is still scope to foster higher competition in capital goods, which would improve Colombian firms’ competitiveness.

Figure 1.29. Tariffs are higher than in peer countries



Source: World Bank, World Integrated Trade Solutions.

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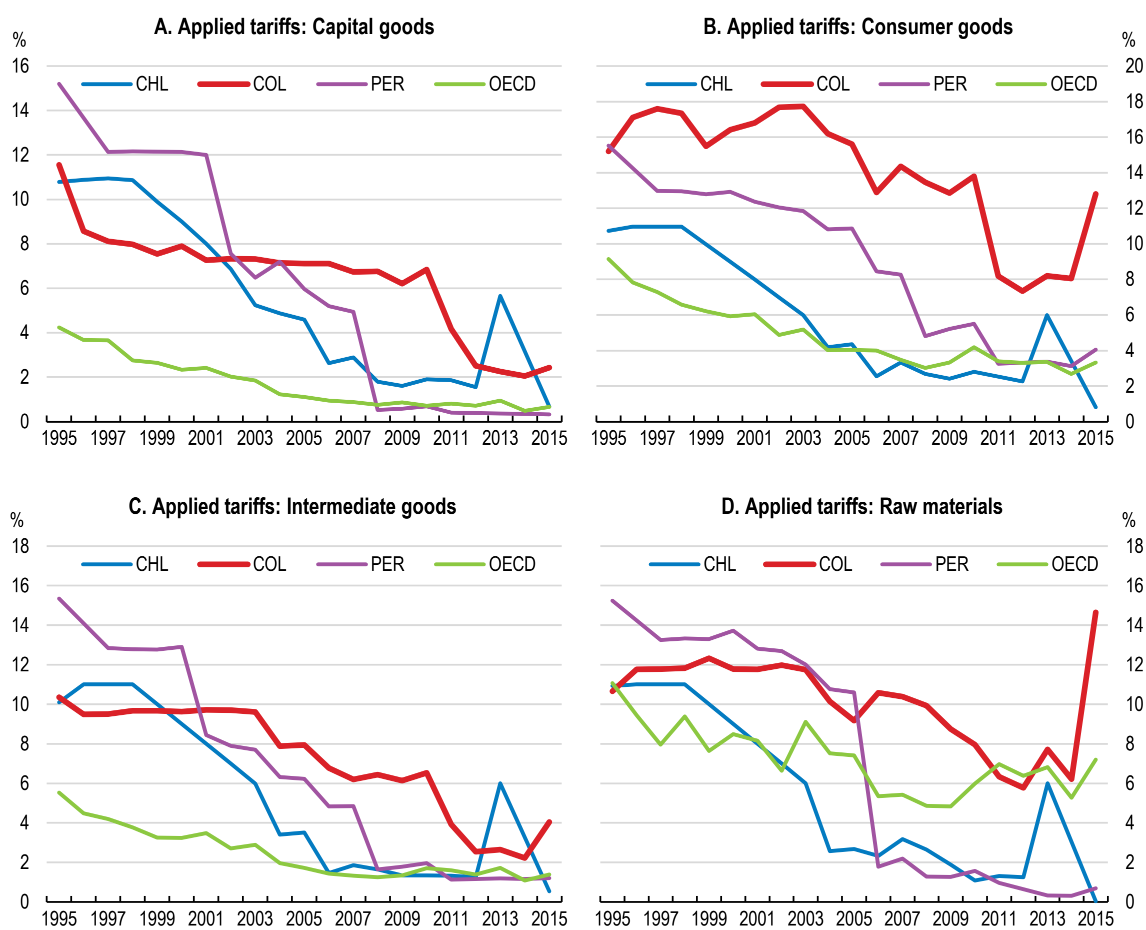
Figure 1.30. Tariffs have fallen



Source: World Bank, World Integrated Trade Solutions.

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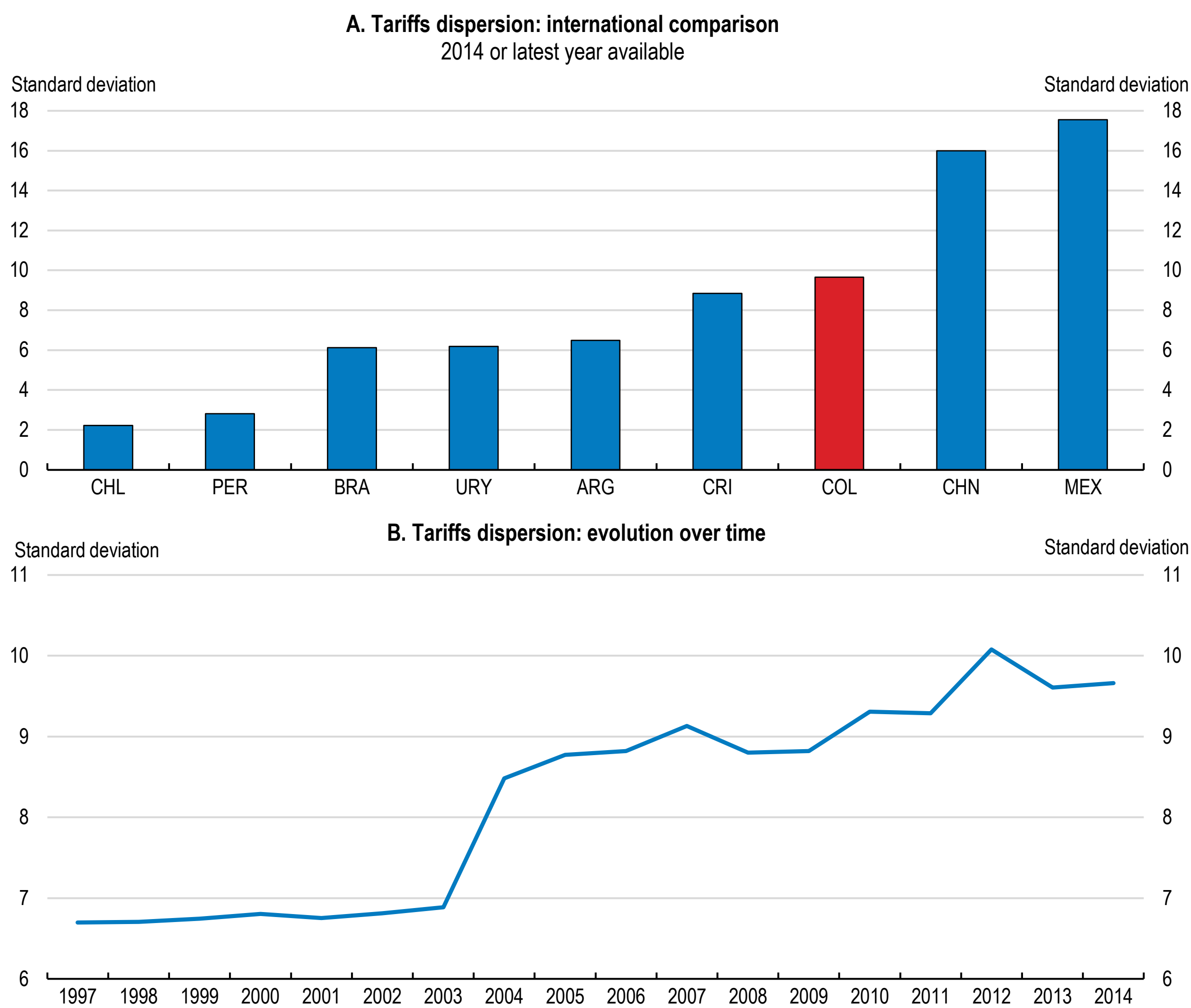
Tariffs dispersion is high

The high tariff dispersion (Figure 1.31, Panel A) has been increasing overtime (Figure 1.31, Panel B). The highest tariffs are in agricultural and manufacturing sectors (Figure 1.32). Nominal tariffs on agricultural products average 18% but can be as high as 70% for beef and 49% for dairy. In manufacturing clothing, footwear and the automotive sector have the highest tariffs.

Figure 1.31. Tariffs dispersion has increased over time



Note: Data show the standard deviation of tariffs based on the 6-digit product category classification available in UNCTAD's TRAINS.
Source: UNCTAD, TRAINS.

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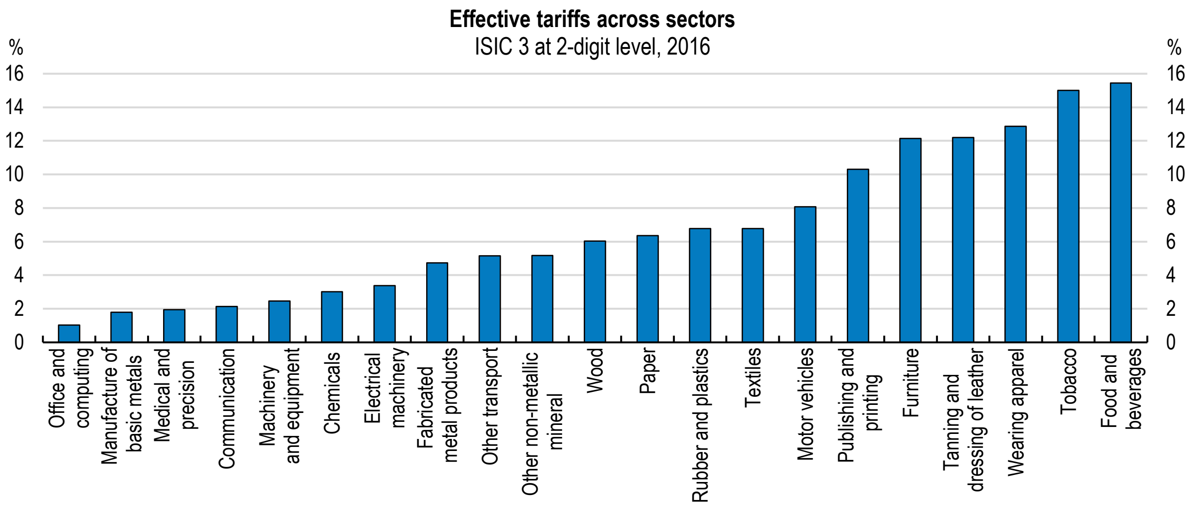
Continuing to reduce tariffs, particularly those in capital goods and raw materials, would help to increase firms' productivity and competitiveness. Firms would gain improved access to intermediate and capital inputs not only through inputs but also via the reaction of domestic producers to rising competition. This would help sectors more intensive in capital goods, but it will also help traditional sectors, which would access better inputs at lower prices. This includes the textile sector, highly dependent on raw materials, such as threads. Colombia's domestic production of threads is scarce, which implies higher costs, limiting Colombian firms' competitiveness in foreign markets and their job-creation potential.

Figure 1.32. Tariffs are highest for food and some manufacturing sectors



Source: World Bank, World Integrated Trade Solutions.

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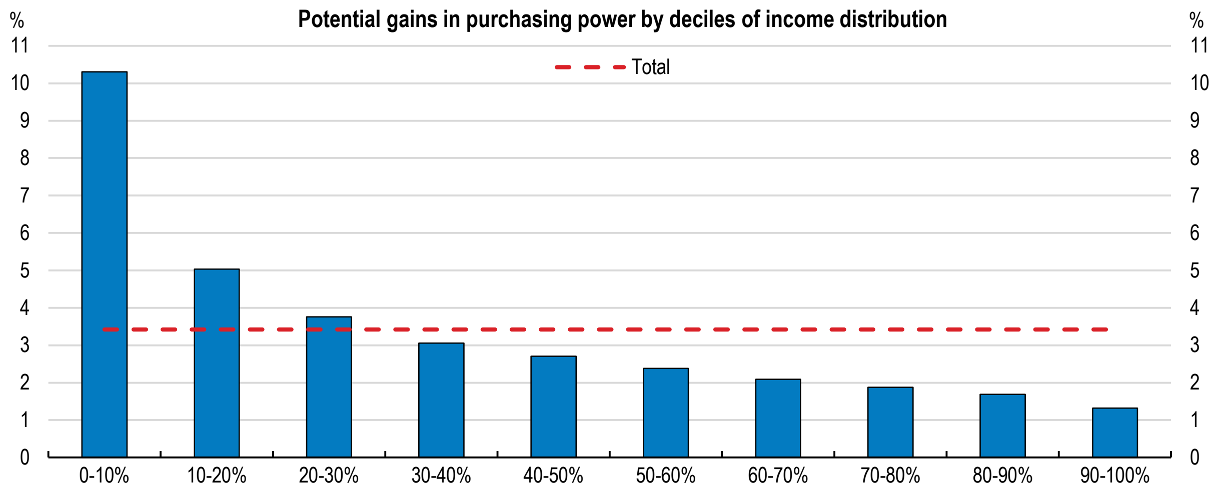
Previous episodes of tariff reductions attest that this channel can be strong in promoting productivity and inclusive growth (Eslava et al., 2013[30]). This will have a positive impact in terms of job-quality, as higher productivity would help more firms tap external markets, and Colombian exporters tend to pay 43% higher salaries than non-exporters (Brambilla, Depetris Chauvin and Porto, 2017[2]).

Opening up to the world economy would entail some job reallocations across sectors, implying that some workers will need to search for a new job. In previous episodes of tariff reductions, workers displacements have been found to be relatively short-lived (Eslava et al., 2010[31]). For affected workers, active labour market policies can go a long way to reduce the burden of adjustment. Such policies can also help workers move across sectors through training, job search assistance and activation measures (World Bank, 2013[32]; Flanagan and N. Khor, 2012[33]). Supporting workers with unemployment insurance and relevant training (see Chapter 2) would be the best way to equip them with the means to succeed in an open and changing world.

The tariff structure has also important repercussions in terms of well-being and income distribution. Tariffs are taxes on imported goods and since people with different levels of income consume these goods at different intensities, changes in tariff reductions will also have a distributional impact. Analyses of the incidence of tariffs across the income distribution conclude that tariffs tend to have a regressive effect (OECD, 2018[34]; Furman, Russ and Shambaugh, 2017[35]; Porto, 2006[36]).

An analysis based on Colombian household survey data conducted for this chapter reveals similar results. Reducing tariffs would result in income gains across the entire income distribution, but the largest benefits of lower tariffs would accrue to lower income households. In a scenario of tariffs being halved, the purchasing power of the poorest households, i.e. those in the lowest income decile, would increase by more than 10% (Figure 1.33). Overall, average household income would increase by 3.5%. The marked pro-poor feature of the tariff reduction is explained by the fact that lower income households spend more on traded goods as a share of their income. In addition, the higher tariffs are placed on key consumer goods, such as food and clothing, which represent a relatively larger share in the consumption basket of lower income families. This finding is in line with other studies indicating that phasing out tariffs on rice would lift 1.2 million Colombians out of poverty and a further 443000 out of extreme poverty (Perfetti et al., 2017[37]). Thus, from a consumption perspective, the Colombian tariff structure is regressive. Reducing tariffs would therefore also contribute to reduce income inequality and poverty.

Figure 1.33. Reducing trade barriers would benefit especially low-income households



Source: OECD calculations based on Household and Consumption surveys.

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Non-tariff trade measures are numerous

Besides tariffs, other policies also affect trade flows, but often in a much less transparent manner.

This includes sanitary measures, technical barriers, border control measures and quantitative restrictions. Even without protectionist intent, non-tariff measures can raise trade costs, divert managerial attention, and penalize small exporters and those located in disadvantaged areas where access to legal and regulatory information is difficult. Countries imposing non-tariff measures may end up hurting their own competitiveness by making it difficult for domestic producers and exporters to access critical inputs in a timely fashion (Cadot, Malouche and Sáez, 2012[38]).

Colombia has been making an increasing use of non-tariff measures (Garcia et al., 2014[39]). The number of products affected is relatively large (Table 1.1.), and larger than in other countries in the region such as Chile or Mexico (Cadot, Gourdon and van Tongeren, 2018[40]). In particular, Colombia makes ample use of quantitative restrictions (Figure 1.34.), which can take the form of registration and import licensing requirements and quotas, and are deemed to be the more distortive kinds of barriers, as they directly restrict trade flows. Many non-tariff measures aim only at protecting incumbents in certain sectors (World Bank, 2015[41]).

Table 1.1. Non-tariff measures are prevalent across all sectors

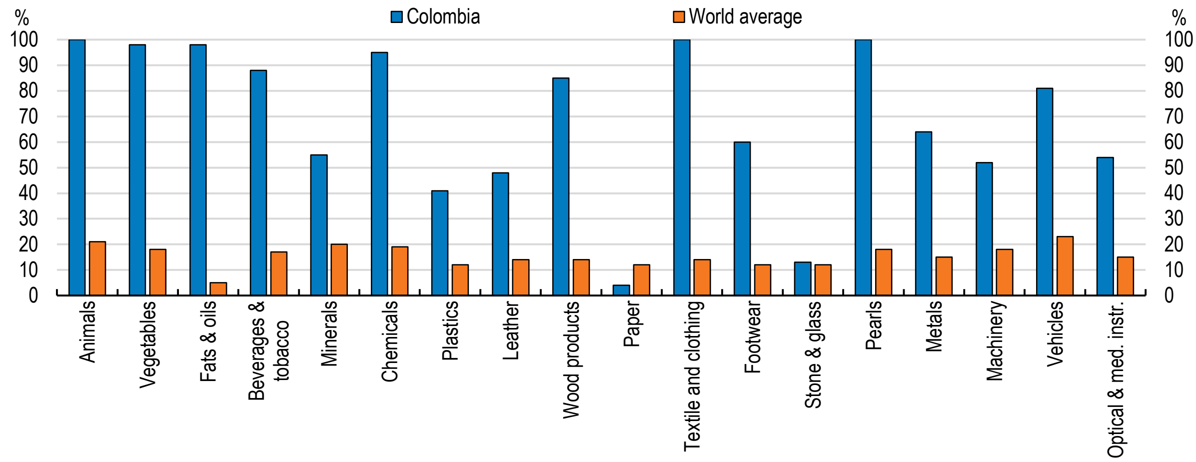
	Frequency index				Prevalence score			
2017	Sanitary and phyto sanitary	Technical barriers to trade	Border control measures	Quantitative restrictions	Sanitary and phyto sanitary	Technical barriers to trade	Border control measures	Quantitative restrictions
Animals	100	99	100	100	6.8	3.9	1.0	1.1
Vegetables	100	100	82	98	4.6	5.8	0.8	1.0
Fats & oils	100	100	100	98	4.7	6.9	1.0	1.0
Beverages & tobacco	89	100	85	88	4.9	6.1	0.8	0.9
Minerals	32	35	2	55	0.5	1.0	0.0	0.6
Chemicals	89	92	7	95	2.7	3.5	0.1	0.9
Plastics	20	41	0	41	0.4	0.8	0.0	0.5
Leather	19	94	9	48	0.9	1.3	0.1	0.6
Wood products	76	73	27	85	1.6	0.6	0.2	0.6
Paper	8	72	0	4	0.3	1.8	0.0	0.0
Textile and clothing	2	34	100	100	0.1	0.4	2.0	1.1
Footwear	0	57	53	60	0.0	1.3	0.6	0.7
Stone & glass	13	23	0	13	0.2	0.5	0.0	0.1
Pearls	0	9	2	100	0.0	0.2	0.0	1.0
Metals	1	8	20	64	0.0	0.2	0.2	0.7
Machinery	0	12	2	52	0.0	0.1	0.0	0.6
Vehicles	0	46	1	81	0.0	0.9	0.0	1.3
Optical & med. instr.	20	27	1	54	0.4	1.0	0.0	0.8
Arms	0	11	0	100	0.0	0.2	0.0	1.9
Miscellaneous	0	11	0	25	0.0	0.2	0.0	0.3
Work of Arts	0	13	0	13	0.0	0.1	0.0	0.1

Note: The frequency index captures the percentage of products that are subject to one or more non-tariff measures. The prevalence score captures the average number of non-tariff barriers which apply to a product.
Source: OECD calculations based on (Cadot, Gourdon and van Tongeren, 2018[40]).

While frequency measures of non-tariff measures are useful to learn how extensive the use of non-trade barriers is across an economy, they do not give information about its impact in terms of higher costs to import. For that non-tariff measures have to be converted into ad-valorem tariff equivalents. The OECD has developed a novel method to estimate trade equivalents, distinguishing explicitly the different impact that different types of measures can have on trade (Cadot, Gourdon and van Tongeren, 2018[40]). Estimates for Colombia show that non-tariff measures imply significant increases in trade costs both in agriculture and in manufacturing sectors, reaching 40% in footwear or 20% for vehicles (Figure 1.35). This adds to the high tariffs that these sectors also have. Quantitative restrictions are the ones that imply higher tariff equivalents, particularly in manufacturing.

Figure 1.34. Quantitative import restrictions are prevalent across all sectors

Frequency index of quantitative restrictions in Colombia in comparison with world average



Source: OECD calculations based on (Cadot, Gourdon and van Tongeren, 2018[40]).

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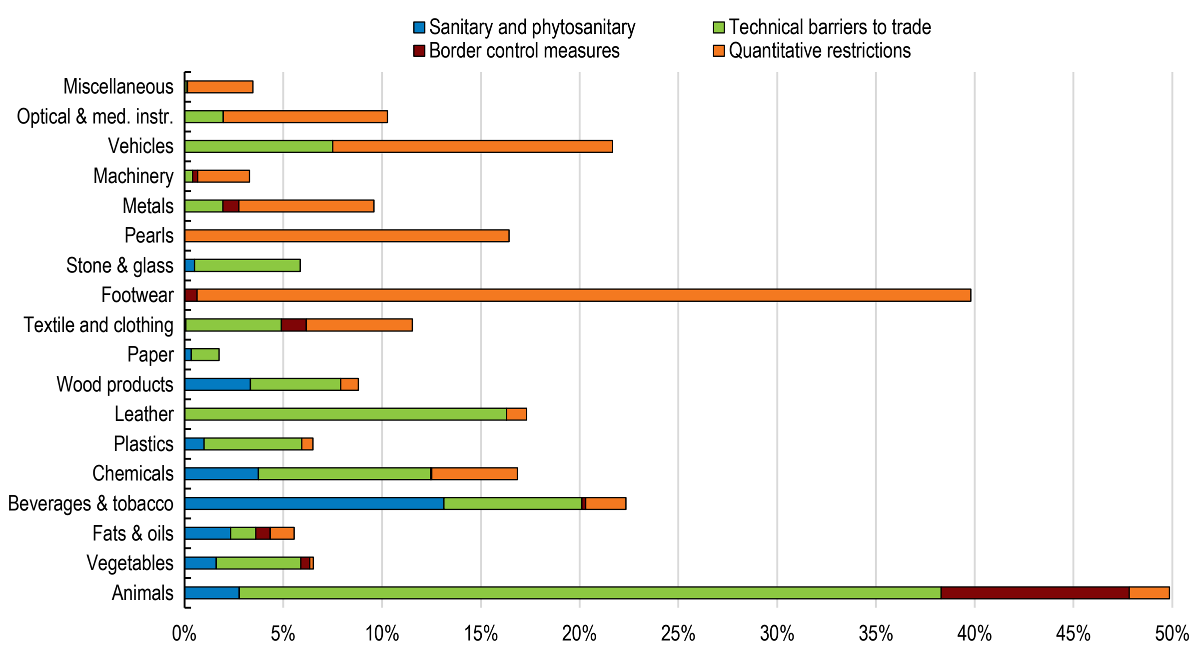
Figure 1.35. Non-tariff barriers imply high additional tariffs on imports



Source: OECD calculations based on (Cadot, Gourdon and van Tongeren, 2018[40]).

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Because non-tariff measures increase costs they can have a detrimental impact on competitiveness and export performance. Studies for Colombia show that existing non-trade barriers in 2001 implied a tariff of 40% on exports (Garcia et al., 2014[39]). The use of non-tariff barriers have increased substantially since then, which suggest that the implicit tax on exports would be larger now. From a consumption perspective, similar to tariffs, non-tariff barriers also have distributional implications, whose detrimental effects are largest for low-income individuals.

This indicates that reviewing these measures, with a view to reducing their scope and impact, should be a priority in an agenda to boost export performance. Quantitative measures would require particular attention, as they are the most distortive, and in addition, to higher economic costs they also entail significant administrative costs. Reducing further the processing times of import license applications, via the single window for foreign trade, including through faster issuance of import-related permits, would also be important. Adopting common standards can also be a promising way to reduce the costs associated to other non-tariff measures, such as technical barriers, as they help to build trust and facilitate smoother trade.

Colombia plans to submit all new non-tariff barriers to a regulatory impact assessment. This holds the promise of ensuring that new measures respond to genuine reasons and do not act to safeguard vested interests in some markets. However, there is also a need to deal with the stock of existing measures, many of which will continue to penalize firms and competitiveness. International experiences show that dealing successfully with the legacy of measures requires intensified public-private dialogue, in which the private sector can flag problems and contribute to the solution, and a strong technical team (Cadot, Malouche and Sáez, 2012[38]). Colombian legislation provides a good basis for the review of the legacy of measures, as it establishes that regulators must review their technical regulations every 5 years to decide whether regulations should remain in place or need an update. Mexico and Indonesia illustrate that an agenda to streamline existing non-tariff barriers can act as a powerful tool to implement reforms essential to strengthen the competitiveness of domestic firms. There is also a need to ensure greater coordination between all institutions in charge of dealing with non-tariff trade barriers (García, Collazos and Montes, 2015[42])

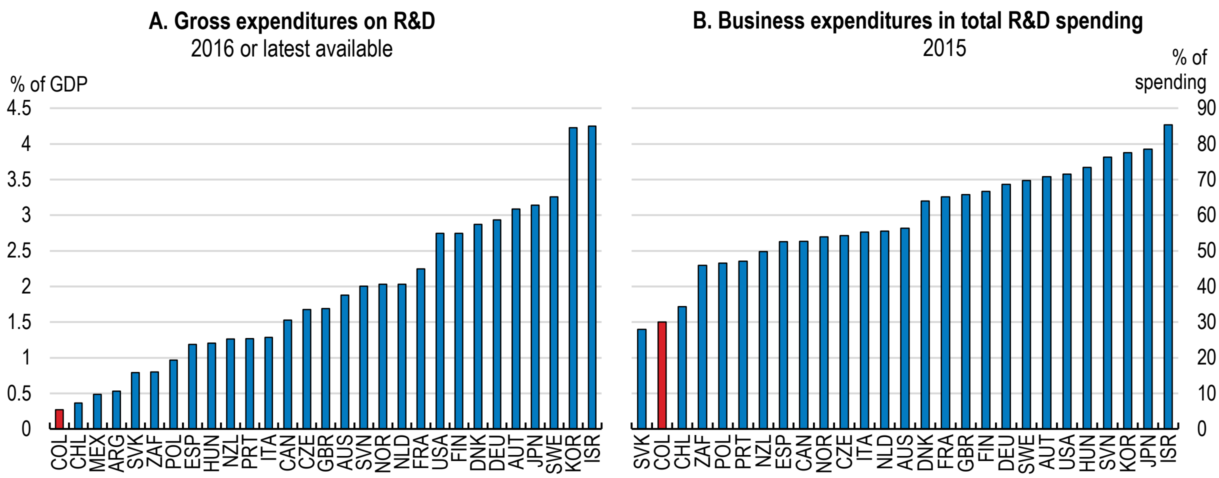
There is also room to enhance cooperation with other countries in terms of rules of origin, sanitary measures and other technical barriers. This would help particularly to boost intra-regional trade. Considering more systematically international standards in the development and revision of regulation can reduce trade costs (OECD, 2017[43]). International standards are increasingly pursued in Colombia, although this still rests on a discretionary regulatory framework. Consolidating explicitly the use of international standards in regulations would be desirable. There are also capacity constraints in Colombian standardisation and accreditation systems (OECD, 2014[25]). Developing further laboratory and testing facilities would enhance the ability of firms to expand globally, as the demand for certified products is growing strongly.

Gathering information on regulatory requirements in target markets can also imply significant trade costs for exporters (OECD, 2017[43]). The measures with a more negative impact on Colombian exporters to other countries in Latin America are those related with labelling, certificates of origin and product certificates (ICT, 2015[44]). Relevant information is dispersed among the different government entities related to foreign trade and is not easily accessible, generating additional costs for exporters. Beyond engaging in intergovernmental cooperation to harmonise rules and regulations, centralising all the information in one single tool, and making it easily available, would also help.

Boosting innovation

Innovation can be a powerful engine to boost productivity and improve exports prospects. Innovation can be particularly helpful to facilitate small non-exporting firms entering external markets (Cassiman, Golovko and Martínez-Ros, 2010[45]). Innovation also boosts product diversification (Crespi et al., 2015[46]). Spending on research and innovation is relatively low (Figure 1.36, Panel A), amounting to 0.25 % of GDP, which is well below the OECD average of 2.4%. The gap is especially pronounced for business R&D (Figure 1.36, Panel B). Acknowledging that innovation is a key pillar for boosting growth and diversifying the economy, the authorities aim at increasing R&D spending to 1% of GDP.

Figure 1.36. Spending on R&D is low



Source: OECD, Research and Development Statistics and National Account databases; OECD, Main Science and Technology Indicators database.

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According to firm survey data, firms introducing innovation in products, processes, organizational processes or marketing remain rare (OECD, 2017[27]). Competitive pressure is one of the most powerful incentives to innovate, and limited competitive pressures on Colombian firms may have significantly restrained innovation. Fostering a more competitive business environment would be a powerful way to promote more innovation. Cooperation between firms and universities is also low (OECD, 2017[27]). Colombia remains below other countries in Latin America, such as Argentina, Brazil and Chile, in number of patents. The number of PhD students has increased, suggesting improving prospects for innovation activities.

Innovation programmes, such as the R&D tax credit, have improved overtime. Until 2016, it was mainly used by one company, Ecopetrol. Efforts to promote its use have proven to be useful and the take up increased to 150 companies in 2017. Any company can use the tax credit regardless of size or sector; however, most tax credits have been awarded to large companies (89% in 2017).

Additional resources have become available to fund R&D activities, including allocating 10% of natural resources royalties to a specific R&D fund (*Fondo de Ciencia, Tecnología e Innovación*). However, weak governance implies that a large part of funding remains unused. Recent reforms have tried to improve governance by allocating the funding directly to research centres. This could also avoid excessive fragmentation in projects and would favour larger projects with larger impact.

Further efforts to simplify the innovation system are warranted, as several reviews have identified an excessive dispersion of public support programmes (OECD, 2014[47]). SMEs, whose capacity to navigate complex support systems is more limited, would benefit the most if the system is streamlined. There is also a need to improve accountability. Multiples institutions are involved simultaneously in the design, implementation and monitoring of support programmes. This makes the evaluation of programmes difficult (OECD, 2014[47]).

Going digital

The adoption and effective use of ICT hardware and software is a form of business innovation (OECD, 2018[48]), which can boost firms' competitiveness and the connectivity of regions. Going digital, by promoting further adoption and use of ICT technologies, has been identified by the government as a key pillar to boost growth and inclusiveness.

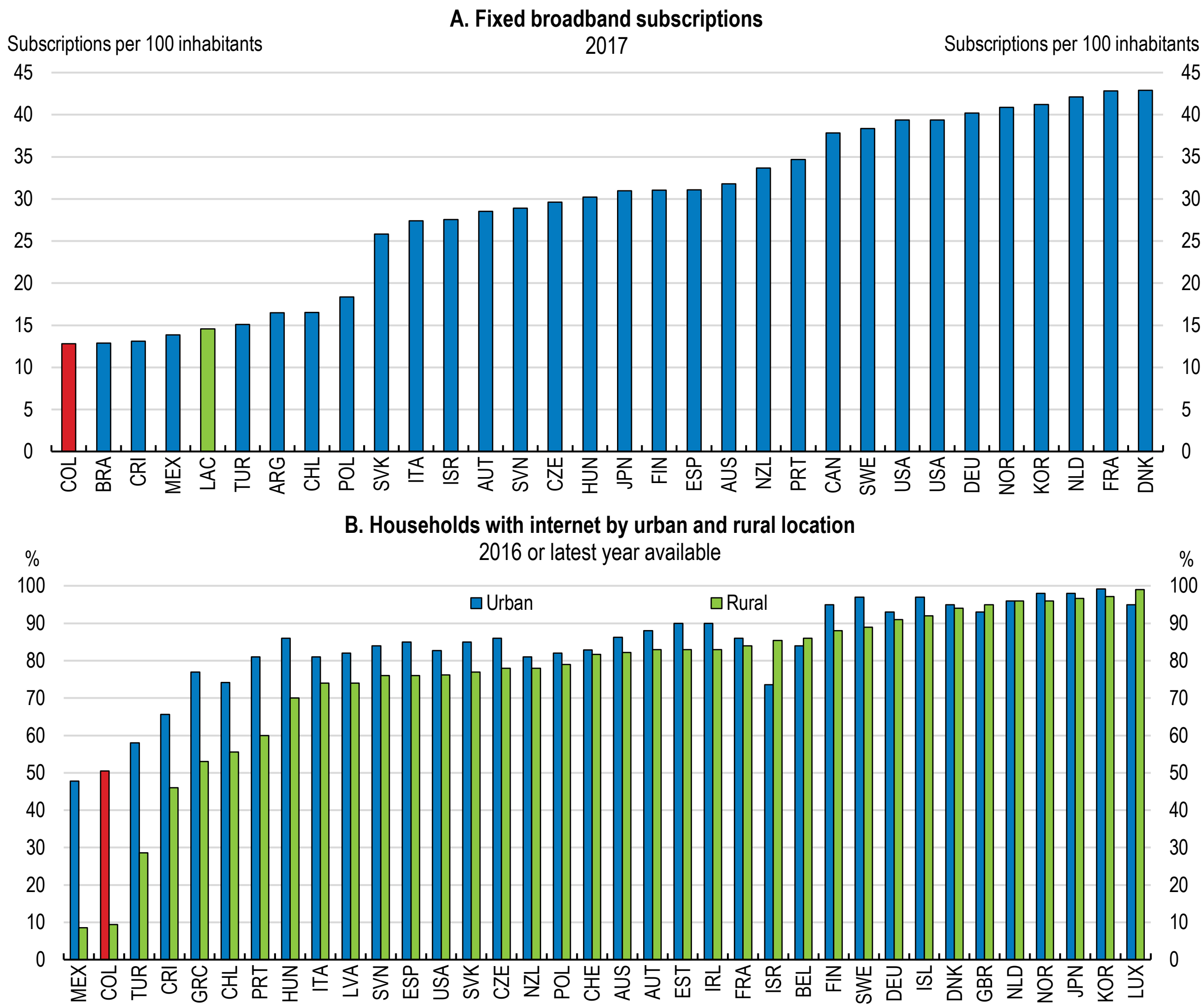
Going digital offers a large potential for firms to internationalise activities. Some recent examples of successful Colombian start-ups include a mobile application aimed at facilitating the arrangement of home services, which has made Colombia a regional leader in this area. This case shows that digital technologies can be a powerful tool to diversify exports, particularly in intensive-knowledge and high-growth areas and tap new external markets.

Despite good progress in terms of digital adoption, connectivity remains relatively low (Figure 1.37, Panel A). Low connectivity can be partly explained by the cost. The price of a subscription to a fixed broadband represent 12% of the average wage for the poorest 40% of the population (Roseth et al., 2018[49]). This is 4 times larger than in the OECD and nearly two times more than in Chile or Mexico. Prices have recently fallen, following some regulatory changes that favour entry and competition in the telecommunications sector (SIC, 2017[50]). This illustrate that, beyond deploying the needed infrastructure, further strengthening the position of the regulator, and effective enforcement of pro-competition regulations help to promote higher use of ICT technologies. It will also help to close digital divides, which remain high along the lines of firm size or individuals' income.

Progress has also been achieved in closing the gap between urban and rural areas. Yet, it remains significant (Figure 1.37, Panel B). Rural areas suffer also from low quality, as services become unavailable some times and access to high-speed connections lags behind. Further efforts to bridge the digital divides so that services attain the greatest national coverage are warranted. Encouraging further broadband investment in remote areas would help to bring the benefits of the digital transformation to all Colombians. Given high market concentration in telecommunication systems at the regional level, surveillance of market practices is also warranted.

Improving the attractiveness of Colombia for investment in digital activities would also be key. Reducing the regulatory burden faced by companies, as analysed in the Key Policy Insights section of this survey, would be particularly important. Improving access to finance by young and innovative firms would also be fundamental. This includes bank finance (see next section) but also improving funding for riskier investments.

Figure 1.37. There is room to boost the adoption of ICT, particularly in rural areas



Note: LAC refers to the unweighted average of Argentina, Brazil, Chile, Costa Rica and Mexico.
Source: OECD, Broadband Portal; OECD (2018).

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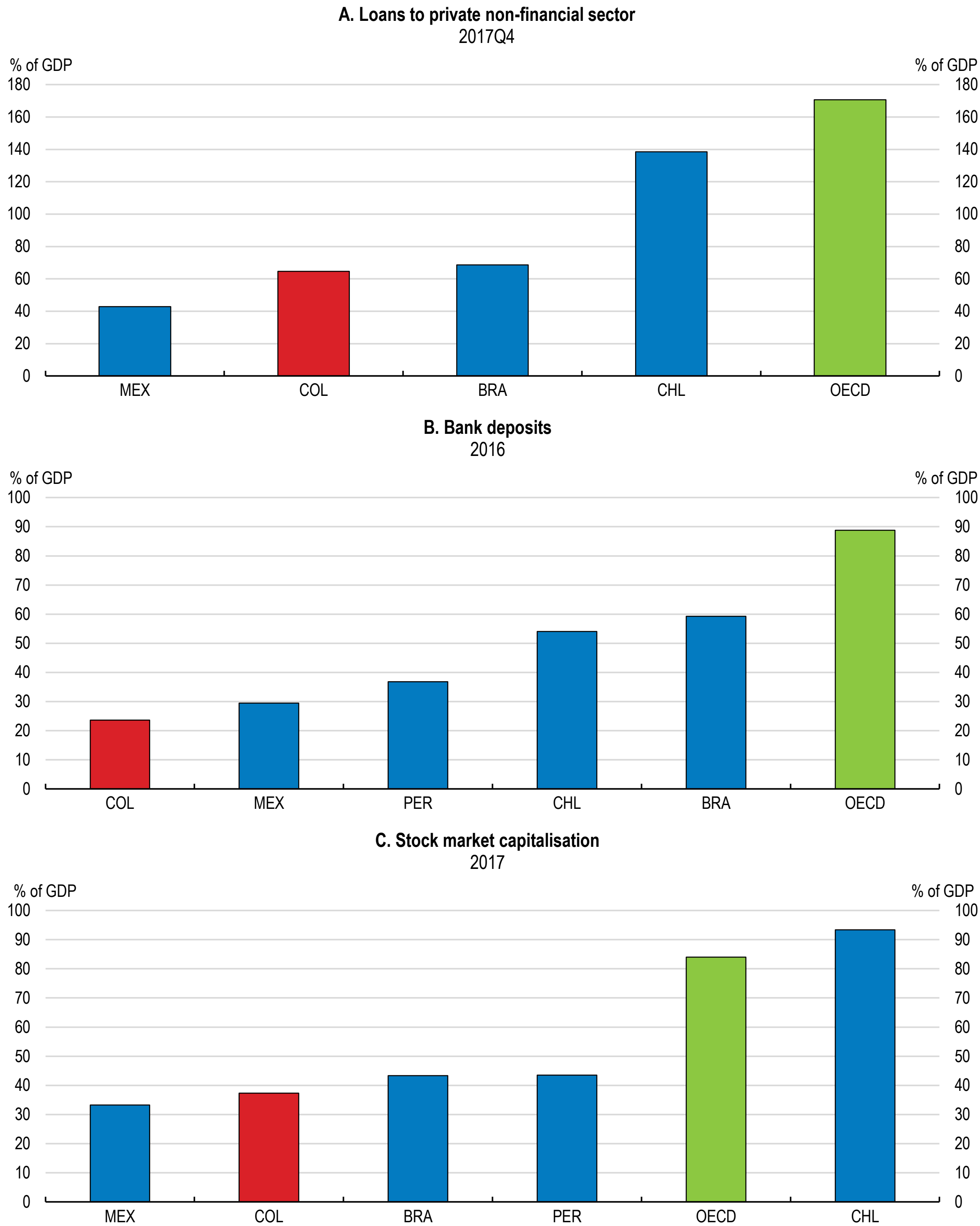
Easing access to finance

Access to finance has improved in recent years. However, financial markets remain less developed than in other OECD countries and peer countries in Latin America (Figure 1.38). Empirical evidence shows that financial development enhances trade (Johansson and Olaberría, 2014[51]), particularly in goods whose production tends to be more dependent on external finance. Empirical analysis confirms that credit availability is an important driver of trade performance in Colombia (Restrepo Ángel, Cuervo and Uribe, 2012[52]). Thus, higher financial development would facilitate higher exports and diversification.

Figure 1.38. There is room to develop financial markets



Source: Bank for International Settlements; For Panels B and C: World Bank, Financial Development and Structure Dataset.

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Long-term financing is little developed, constraining investment and growth. Commercial banks are the principal source of long-term corporate and project finance. Loans rarely have a maturity in excess of five years. Only the largest companies participate in the local stock or bond markets, with the majority meeting their financing needs either through the banking system, by reinvesting their profits, or through credit suppliers.

Improving bank financing

Domestic credit to the private sector has increased but interest rate margins remain high (Figure 1.39, Panel A). Margins, calculated as the difference between deposit and loan rates, exceed 7% in Colombia, well above the margins observed in Chile or Mexico. Despite efforts to broaden access to finance by SMEs, the cost of bank finance remains particularly high for SMEs (Figure 1.39, Panel B).

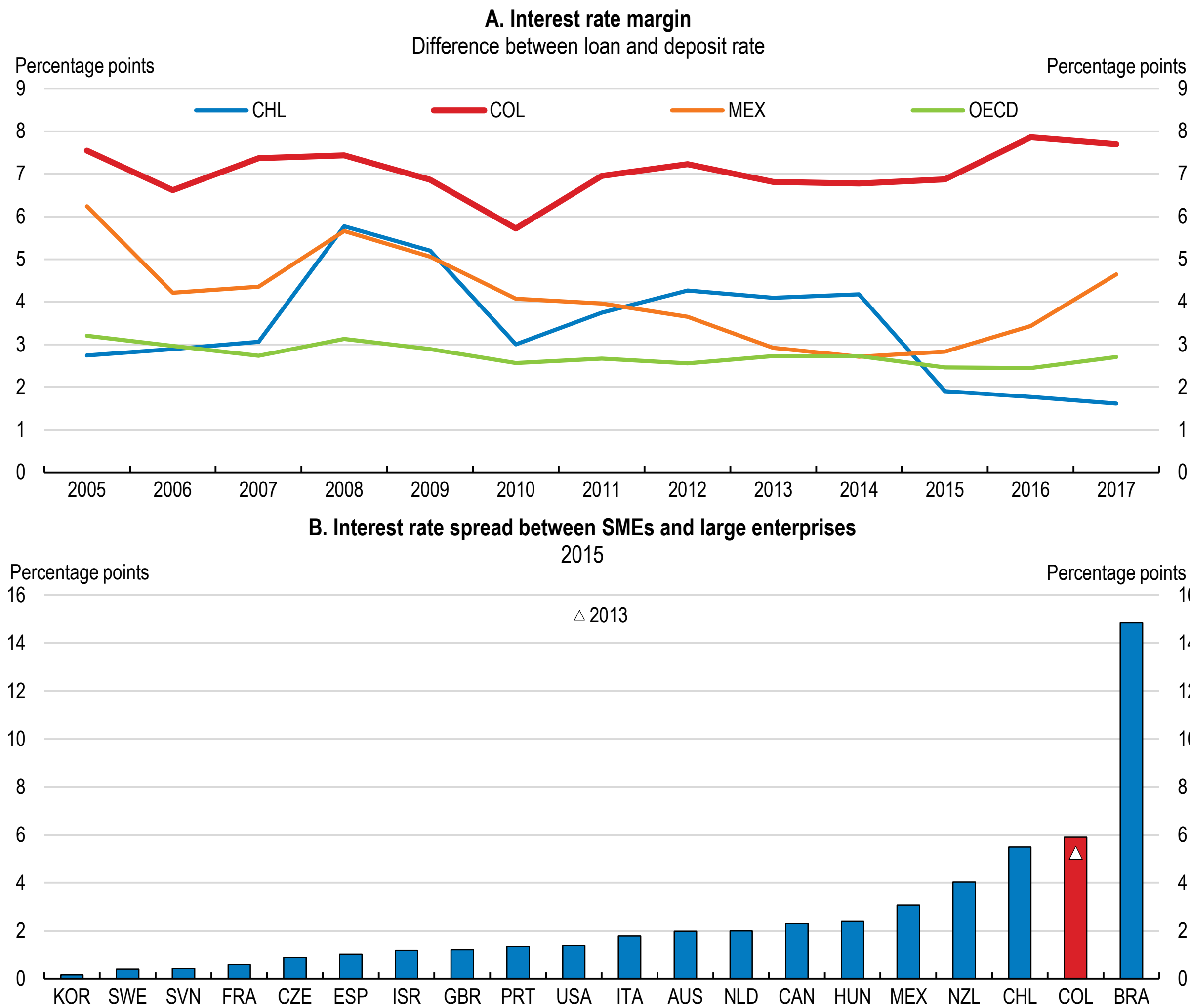
High margins have been associated with low competition in the banking sector (OECD, 2015[20]). Low competition particularly affects lending activities, while there is more competition on the deposits side (Banco de la República, 2017[53]). Colombia's financial institutions are characterised by a high degree of concentration, with 70% of assets concentrated in three main banking groups. Colombia allows bank branches and subsidiaries to have business in the country but relaxing the prior approval process for establishing representative offices of banks and securities companies, which is relatively stringent (OECD, 2018[54]), would help to improve competition in the sector.

Costs associated with forced investments by banks in certain instruments (such as agricultural development bonds) can also partly explain the high margins. Relaxing the forced investment requirementswould reduce costs for banks, which would help to reduce margins. Phasing out the financial transaction tax would improve financial inclusion and provide room for more competition among banks.

Some progress has been achieved in improving access to credit by SMEs. In particular, the activities of Bancoldex have been useful in improving access in terms of lower interest rates, higher loan amounts and better payment terms. As a second tier bank, Bancoldex grants credit to commercial banks, which in turn use these resources to fund loans to firms. The credit lines of Bancoldex are not subsidized, and most of them are not directed to specific sectors of activity, or to specific types of firms. This horizontal approach has been found to be key for Bancoldex's good performance. (Eslava, Maffioli and Meléndez, 2014[55]) find that Bancoldex credits have a positive impact on firms output of about 5 percentage points per year, with a positive impact on investment of about 20 percentage points. The effect on employment and exports is also significantly positive. These results suggest that the second-tier model succeeds in assigning credit to profitable activities that would not have access to credit in the absence of Bancoldex.

There are plans to expand Bancoldex activities, which is welcome given its positive impact. In case of an expansion into lending to specific sectors or firms, it will be important that the focus is on segments where low access to credit is caused by a market failure. This is the case of young companies, which have little access to finance in Colombia, and firms initiating export activities.

Figure 1.39. Interest rate spreads are high



Source: World Bank and OECD (2017), Financing SMEs and Entrepreneurs 2017: An OECD Scoreboard, OECD Publishing.

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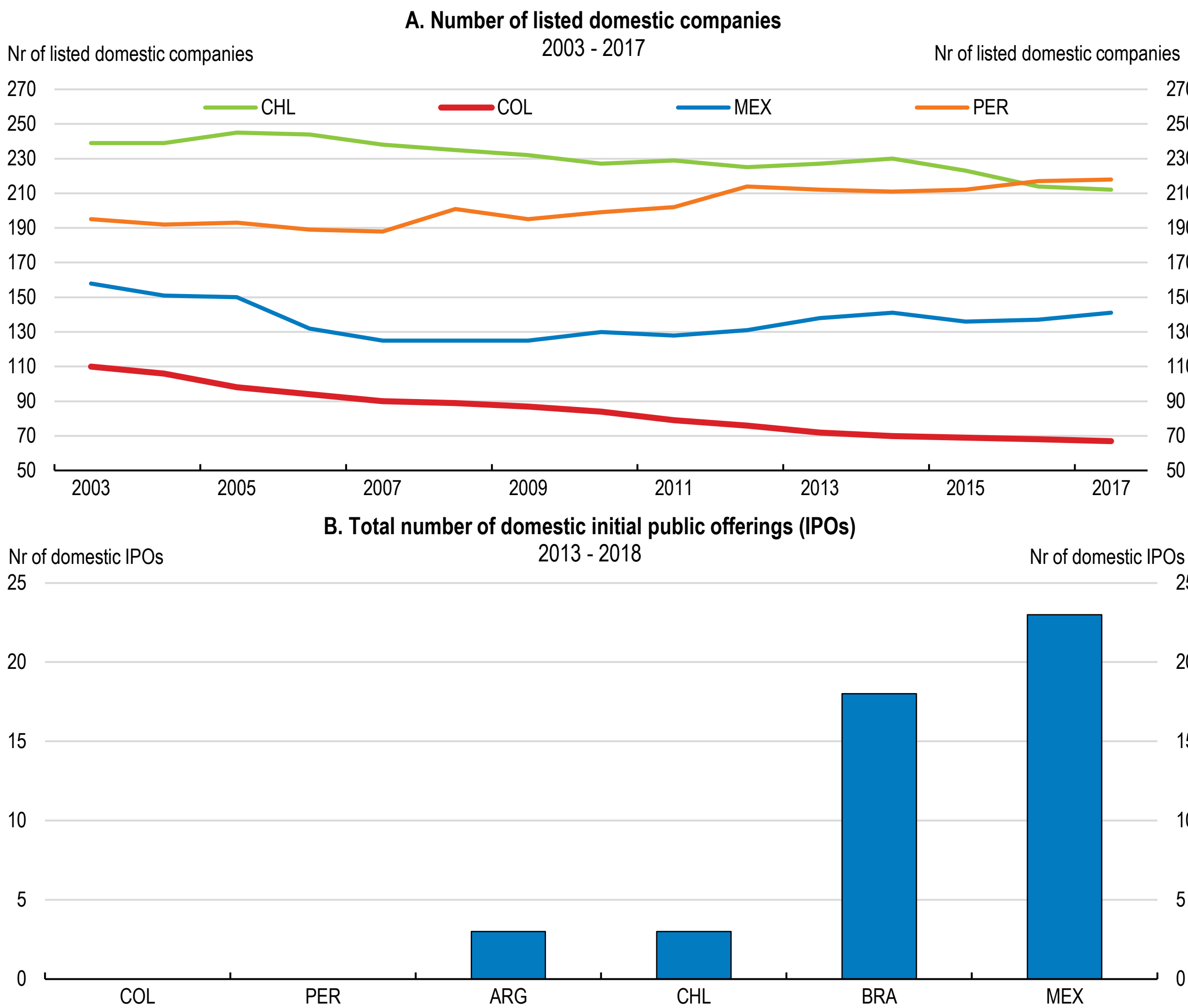
Developing the equity market

The government bond market has flourished since its development in the 1990s, and is widely perceived to be a well-functioning and liquid market. In contrast, several major obstacles impede the further development and growth of Colombia's corporate bond market and equity market (WEF, 2016[56]) The government issued decree 1019 of 2014 with the aim to expand the number of issuers. Though issuances have risen in recent years, the corporate bond market remains underdeveloped, has low liquidity and is dominated by financial-sector issues.

The stock market is dominated by only a few companies (Figure 1.40), including Ecopetrol, the state-run oil company that accounts for nearly 45% of the total market capitalization. Contrasting with experiences in other countries in the region, there has not been any initial public offering in the last 5 years. Liquidity in the Colombian equity market is among the lowest among peer emerging economies. This lack of liquidity increases transaction costs for market participants, prevents participation of certain investor types and increases risks (namely, systemic and liquidity).

Figure 1.40. Few firms participate in the stock market



Note: For Panel B, data until May 2018 are included.
Source: World Bank, World Development Indicators database; World Federation of Exchanges database.

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Policy actions to facilitate the development of the equity market include simplifying requirements and reducing costs for SMEs. Several emerging economies, such as India, Thailand or Singapore have successfully created specific market segments for SMEs within their main exchanges, with less thight listing and disclosure requirements and lower costs (WEF, 2016[56]). Another option would be to eliminate the restriction for banks from participating in the equity market. Allowing them to participate as investors and intermediaries would help greatly to develop the market, given that banks have greater access to liquidity. Adequate controls and restrictions on their participation could mitigate risks associated with their expanded role in the markets (WEF, 2016[56]). Acknowledging the importance to bolster capital markets the authorities have just finalised a capital markets expert commission with the aim of examining policy options to boost and diversify financing sources beyond the traditional banking channel, including for SMEs. This is a promising step to promote and give further impetus to a policy agenda for the development of capital markets in Colombia.

Boosting financial inclusion

There is also a large potential to increase financial development by extending banking services to a greater share of the population. Positives steps have recently been taken in that direction, such as the simplification of procedures for opening bank accounts. Yet, the lack of interoperability across financial institutions and instruments remains a key concern, as it implies high fees, which limit financial inclusion. Fostering, modernising and unifying the payments system should be a priority and there are ongoing efforts in that direction. The government has also prioritised the coverage of the banking network and the use of digital transactions. Mobile banking systems also present unused opportunities in this context, as most of the population, including those in low to medium income brackets, own a mobile phone (Fernández De Lis et al., 2014[57]). Moving in this direction, an enabling framework for mobile money has been established, allowing financial institutions, different to banks, to offer digital financial services.

Facilitating the transition from cash payments into bank or electronic payments would also foster financial development and help to reduce informality (Rogoff, 2016[58]). Policy options include banning cash for transactions above a certain threshold, as done recently by France, Spain, Italy, Mexico or Peru, or taxing cash transactions as opposed to transactions through banks or electronic platforms. South Korea illustrates the potential of using the tax system with that purpose, as it introduced a tax incentive for electronically traceable payments, which succeeded in reducing cash transactions, increased financial inclusion and tax revenues and reduced income inequality (Jae et al., 2017[59]).

Box 1.4. Recommendations for boosting exports and integration into the world economy

(Key recommendations are in bolded text)

Trade policies

- **Phase out import restrictions and review other non-tariff barriers with a view towards reducing them.**
- **Reduce tariff dispersion.**
- **Widen the scope of regulatory impact assessment, including also the stock of regulations.**

Logistics and trade facilitation

- **Reduce barriers to entry and competition in transport.**
- **Improve customs logistics, including by increasing inter-agency cooperation and making further use of paperless online solutions for permissions and payments.**Move to inspection processes in which all inspections happen in a single time and place.

Infrastructure

- **Prioritise improving multimodal transport connectivity of ports and customs.**
- Proceed with the creation of the agency dedicated to planning and harmonised evaluation of projects and a regulator for the transport sector.

Agriculture

- Update and complete the cadastre to promote investment in rual areas and boost property tax revenues.
- Refocus policy efforts on providing public goods and services, such as training centres or technical assistance, instead of on providing direct payments to producers.

Innovation

- Simplify the innovation support system by reducing the number of programmes and improving the accountability of agencies in charge of its delivery.

Access to finance

- Induce more competition in the banking sector, phase out gradually the financial transaction tax and reduce regulatory requirements for banks to hold certain instruments.
- Simplify requirements and reduce costs for the participation of SMEs in the equity market.

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Chapter 2. Fostering high-quality jobs for all in Colombia

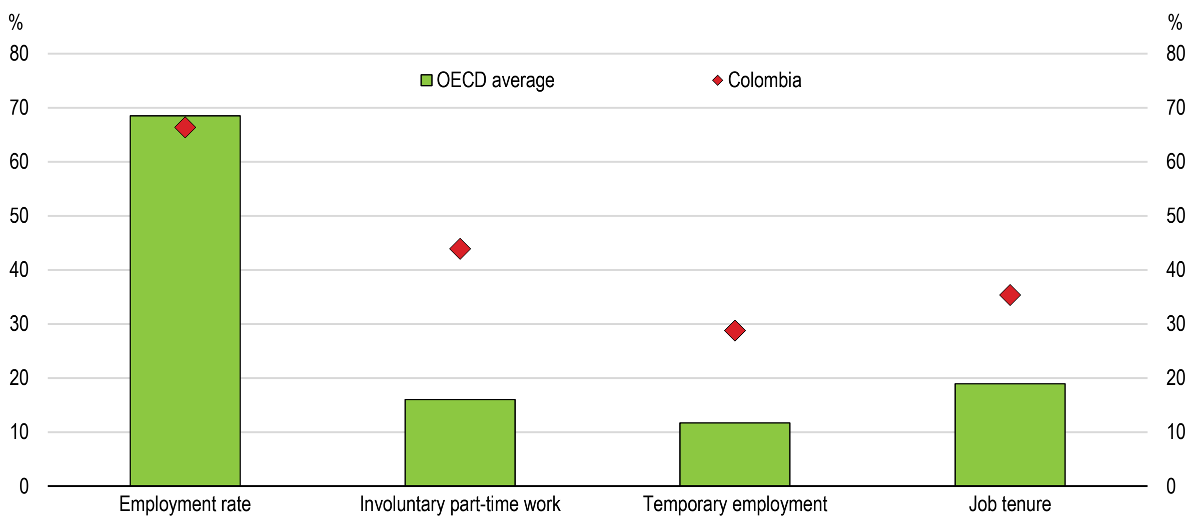
Colombia has achieved important social and economic improvements in recent years. Employment grew at an average annual rate of 3% between 2008 and 2018. Thanks to Government efforts to fight against informality, the informal employment rate decreased substantially in the last decade. However, many jobs are still of relatively low quality, affecting well-being and productivity. More than half of employment is informal and many vulnerable groups, notably youth, ethnic minorities and women are out-of-work. A high share of the population lacks basic skills and the mismatch between the supply and demand of skills is widespread. Overcoming these challenges will require actions in several policy areas as indicated by the implementation of the OECD Jobs Strategy for Colombia developed in this chapter. Effective actions include lowering the costs of formalisation for workers and firms, enhancing enforcement, better training and labour intermediation, and a better functioning unemployment benefit system. Greater efforts to make the education and training system more responsive to labour market needs by improving relevance would help. In particular, enhancing an apprenticeship system linked to formal education and encouraging more work-based learning would improve quality employment opportunities. Better skills assessment and anticipation information as well as greater efforts to involve employers in the education and training system would also help. Policies to boost female employment, such as expanding opening hours of childcare centres and continued efforts towards a universal early education, are also needed to reduce gender gaps. Reforms to boost export performance and enhance productivity can help to support business growth and employment and lay the foundations for more and better quality jobs (Chapter 1). All these policies can create a virtuous cycle between labour productivity and equity, increasing access to higher quality jobs, higher wages, and coverage of pensions, training and unemployment benefits.

Setting the scene: Job quality in Colombia

Colombia has achieved important social and economic improvements in recent years. Inequality and poverty have been reduced markedly and employment grew at an average annual rate of 3% between 2008 and 2018. Thanks to Government efforts to fight against informality, the informal employment rate decreased by 5 percentage points to 53% between 2008 and 2017. However, further progress is needed to address remaining structural issues to make the labour market more inclusive, including in rural areas.

Strengthening job quality can foster productivity growth and increase workers' well-being while reducing inequalities in the labour market. The new government identified fostering the creation of formal jobs as one of its key priorities (Box 2.1), which will boost job quality. While the employment rate is at similar levels to the average OECD country, Colombia performs relatively poor in a range of other labour market indicators (Figure 2.1). Labour informality remains high, with one third of employees not contributing to the health system. In addition, more than half of the employed population works as self-employed and largely outside the formal labour market. Among employees, 28% have a temporary contract, the highest share among OECD countries and nearly three times the OECD average, and 36% have a tenure of less than one year, compared with 19% in the OECD on average. About 40% of all part-time workers would prefer to have a full-time job, 2.5 times the OECD average though not as high as in Spain, Italy or Greece where more than 60% of the part-time work is involuntary. The combination of all these indicators illustrate the challenges ahead to make the labour market more inclusive. This chapter provides detailed recommendations in a range of policy areas to boost job quality and make the labour market more inclusive.

Figure 2.1. Colombia underperforms on a range of labour market indicators



Note: The data refer to 2018. Involuntary part-time employment refers to part-time workers who could not find full-time work. The incidence of job tenure refer to workers with a job tenure less than 12 months as a percentage of total employment. OECD average is a weighted average.
Source: OECD Employment Database, www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm and *OECD Earnings Distribution Database*, www.oecd.org/employment/emp/employmentdatabase-earningsandwages.htm.

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Box 2.1. Government priorities for a more inclusive labour market

The government is giving high priority to the reduction of informal jobs, as it considers it has a critical and large detrimental impact on productivity, inequality, tax revenues and access and financing of pensions.

The promotion of sustainable growth will be key for creating the best conditions for the formalisation of employment. The National Development Plan 2018-2022 envisages a module of firm formalisation including measures to decrease indirect and direct costs of formalisation. Other policy actions to promote the formalisation of employment also include supporting business development programmes, apprenticeships and vocational education and training, and mechanisms to engage with regions and local employers to ensure that the supply and demand of skills match.

Proposed policy actions to tackle inequality and create a more inclusive labour market include a deepening of social security protection on health, education and pensions, and helping the most vulnerable to transition into the middle class. The government plans to advance a pension reform that concentrates on equity, to focus subsidies on the most vulnerable, eliminating distortions in the contributory pension system. Finally, emphasis is placed on a better inclusion of minority groups in employment, education and the society as a whole.

Implementing the new OECD Jobs Strategy

A well-functioning labour market is a key condition for achieving inclusive growth and rising levels of well-being. As discussed in the new OECD Jobs Strategy (Box 2.2), the main challenge for policy makers is to reconcile the ability of an economy to sustain aggregate productivity gains with the capacity to generate jobs with good working conditions (both monetary and non-monetary) as well as ensuring that the gains from growth are fairly shared. To support countries in this difficult task, the new OECD Jobs Strategy provides a comprehensive set of policy recommendations organised around: i) the quantity and quality of jobs; ii) labour market inclusiveness; and iii) resilience and adaptability (OECD, 2018[1]).A comparison of labour market outcomes in Colombia with those in OECD countries (see the OECD Jobs Strategy dashboard in Annex Table 2.A1) highlights the country's challenges in terms of both job quality and skills (Figure 2.2). Reforms and policy actions should therefore focus on improving these two labour market outcomes. The remainder of the chapter will discuss each of the policy areas in detail.

The OECD Jobs Strategy stresses that policy reform strategies need to be adapted to the specific characteristics of a country in terms of its institutional set-up, social preferences, administrative capacity and social capital. Hence, policy recommendations in this chapter closely follow the OECD Jobs Strategy framework but they are adapted to Colombia's specific situation. Labour market outcomes do not only depend on labour market policies but also on a range of other policies, including sound macroeconomic policies, productivity-enhancing policies in product markets and social policies. Policy recommendations in these areas are discussed in the Key Policies Insights section of this survey and in Chapter 1.

Box 2.2. Good jobs for all in a changing world of work: The OECD Jobs Strategy

Low productivity growth, high levels of income inequality in many countries, as well as rapid economic change related to technological progress, globalisation and demographic changes raise new policy challenges for good labour market performance. The aim of the new OECD Jobs Strategy is to help countries addressing these challenges.

The OECD Jobs Strategy goes beyond job quantity and considers job quality and inclusiveness as central policy priorities, while emphasising the importance of resilience and adaptability for good economic and labour market performance in a changing world of work. It recognises that flexibility-enhancing policies in product and labour markets are necessary but not sufficient. Policies and institutions that protect workers, foster inclusiveness and allow workers and firms to make the most of ongoing challenges are also needed to promote good outcomes.

The OECD actively supports countries with the implementation of the OECD Jobs Strategy through the identification of country-specific policy priorities and recommendations, for example, through the preparation of chapters in the OECD Economic Surveys, like the current chapter for Colombia. The process will be concluded with a synthesis report that will draw lessons from the country reviews and highlight good practices across the full range of policy tools identified by the OECD Jobs Strategy.

For further details, see http://www.oecd.org/employment/jobs-strategy/.

Curbing informality

Improving the job quality of Colombian workers hinges to an important extent on further reducing informality. Informal workers are beyond the reach of the state with respect to provision, protection, and redistribution. As put forward by the new OECD Jobs Strategy, a comprehensive strategy is required, with actions needed in several policy areas, such as tax and non-tax costs, enhanced enforcement, business and labour regulations or skills development. Policies to curb informality can reduce the incidence of low quality jobs and, in turn, improve labour market inclusiveness.

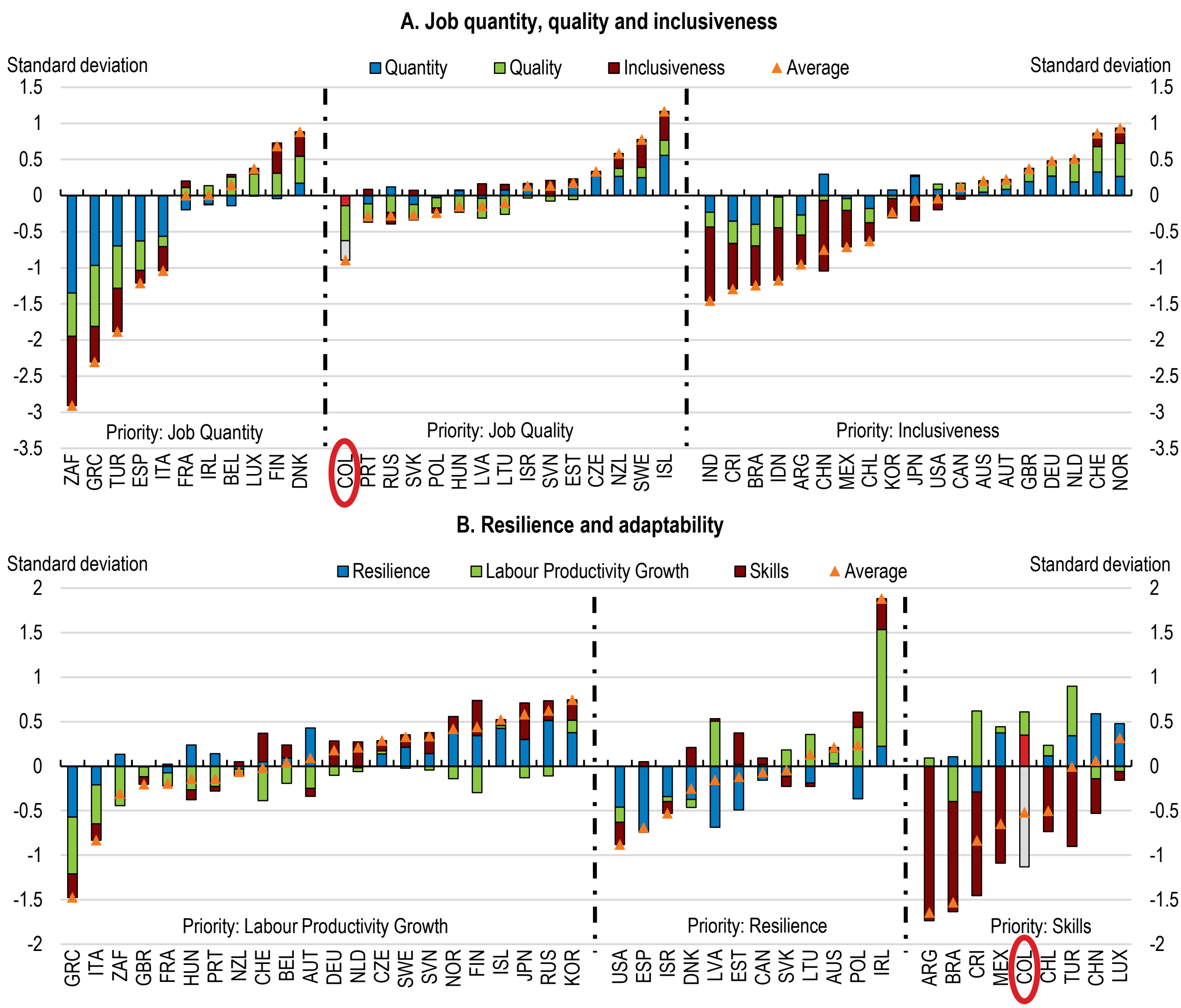
Learning from recent reforms

Over the past decade, the government has promoted labour formalisation through a series of structural reforms. The 2012 Tax Reform was particularly important in pushing formalisation by cutting payroll taxes from 29.5% to 16% of gross wage earnings for workers earning less than 10 minimum wages (OECD, 2016[2]). Available impact evaluations suggest that the reduction in payroll taxes led to a 2-to-4 percentage points reduction in the informality rate, with a stronger effect among employees than among self-employed workers (Kugler et al., 2017[3]; Morales and Medina, 2016[4]; Fernández and Villar, 2016[5]; Bernal et al., 2017[6]). Whereas Morales and Medina (2016[4]) found only a small effect on wages, Bernal et al. (2017[6]) estimated a positive effect of 2.7% on average firm wages. (Garlati-Bertoldi, 2018[7]) shows that the reform had long-term impact and it was broad-based, with manufacturing, services and agricultural experiencing reduced informality rates.

Between 2007 and 2017, the share of employees not contributing to social insurance declined from 43.0% to 30.8% of all employees (Figure 2.3). The decline among self-employed over the same period was negligible and in 2017, just one in four self-employed were registered. Overall, the gains in labour formality are in line with the general trend in Latin America where strong GDP growth and favourable labour market dynamics had a positive impact on labour formalisation (International Monetary Fund, 2018[8]).

Figure 2.2. Colombia should focus on improving job quality and skills

Standard deviations across OECD countries



Note: The figure shows contributions to absolute performance in Panel A and B of the Dashboard (see Annex Table 2.A1). Absolute performance is standardised based on the OECD average, with units on the vertical axis denoting standard deviations. On the horizontal axis, countries are sorted by priority and in ascending order of absolute performance (i.e. from the worst to the best performers).
Source: (OECD, 2018[1]).

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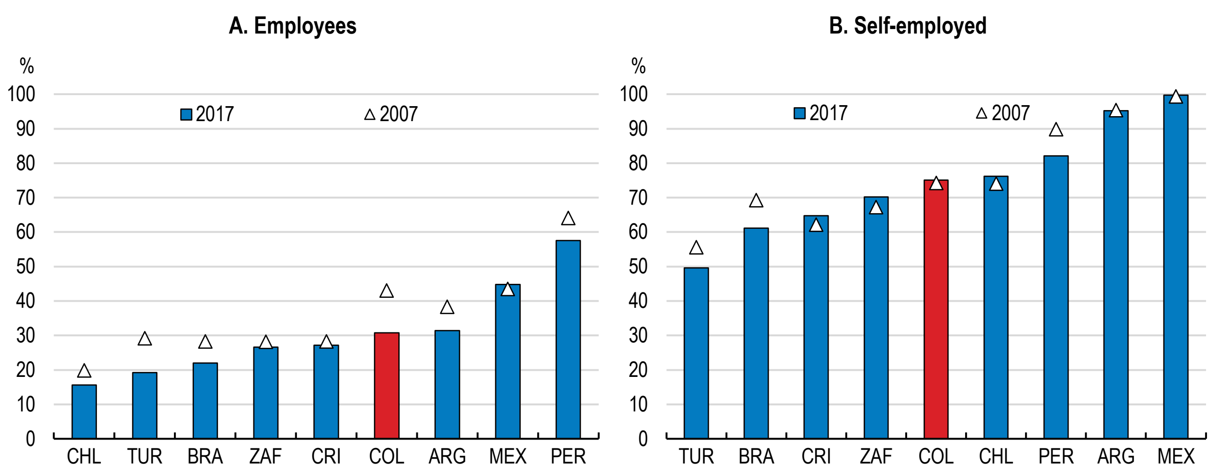
In addition, the government managed to reduce the misuse of service contracts through several legislative initiatives and stronger controls by the labour inspectorate. Companies have been misusing legal constructions like associated work cooperatives or union service contracts to circumvent labour rights. By subcontracting workers (often former employees) through such service contracts, workers are considered as services providers and no longer as employees. As such, they are not entitled to social insurance or other labour rights even though they (continue to) perform the same tasks (see OECD (2016[2]) for further details). The number of newly registered associated work cooperatives declined drastically between 2010 and 2017 (Figure 2.4, Panel A) and the rise in union service contracts reached a turning point in 2014 when both the number of contracts and workers covered started to decline (Figure 2.4, Panel B).

To tackle the remaining barriers to formalisation, further efforts and measures are needed. The OECD Jobs Strategy identifies four elements of key importance for labour formalisation: (1) low costs for employers and self-employed to formalise their business and labour; (2) clearly visible benefits of formalisation for firms and workers; (3) strong enforcement methods; and (4) promotion of skills development (see last section of the chapter and the Key Policy Insights chapter). Reforms to enhance productivity and boost export performance are also needed to support business growth and formal employment, laying the foundations for more and better quality jobs (Key Policy Insights and Chapter 1).

Figure 2.3. The decrease in informality has been much stronger among employees than among self-employed



Note: Informality is defined to include: i) employees who do not pay health contributions; and ii) self-employed who do not pay social security contributions (Brazil, Chile and Turkey), or whose business is not registered (Argentina, Colombia , Costa Rica, Mexico, Peru and South Africa). Data for Turkey refer to persons aged 15 and more. Data for Argentina refer to selected urban areas (according to the National Statistical Authority (INDEC), LFS series published after the first quarter of 2007 and until the fourth quarter of 2015 must be considered with caution).

Source: OECD calculations based on the EPH for Argentina, the PNAD for Brazil, the CASEN for Chile, the GEIH for Colombia, the ECE for Costa Rica, the ENOE for Mexico, the ENAHO for Peru, the QLFS for South Africa and the HLFS for Turkey.

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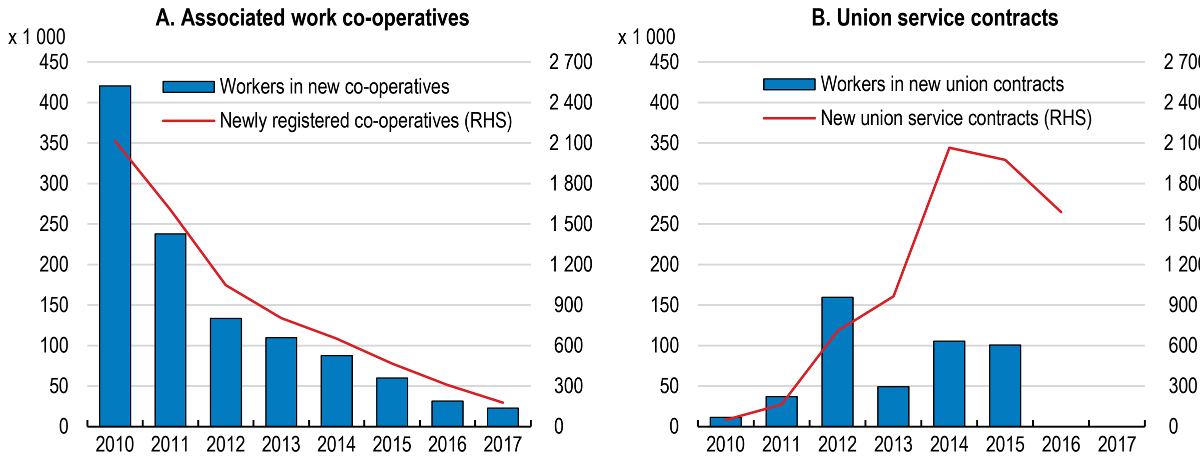
Figure 2.4. Declining use of non-standard contracts, 2010-17



Note: Data refer to December of each year.
Source: Data provided by the Ministry of Labour, based on data from DANE and the Superintendencia de Economía Solidaria.

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Lowering the costs of formality while enhancing its benefits

Promoting productivity growth hinges partly upon an efficient business environment that keeps the cost of being formal reasonable. Burdensome regulations, which remain prevalent in Colombia as indicated by the product market regulation indicator ranking (see the Key Policy Insights chapter), hold back competition, productivity growth and the creation of formal jobs. Complex procedures for the registration of companies can also discourage start-ups and formalisation. To facilitate the creation of formal firms, the government needs to simplify and possibly unify several procedures (e.g. commercial, tax and social security procedures) to reduce the time needed to start a formal business towards OECD practices (see Table 2.1 and Key Policy Insights chapter). After years of planning, a one-stop shop pilot exercise has started in Bogotá in 2018 for the registration of companies. It is planned to be extended to other cities and to include as well the affiliation of workers to social security.

Table 2.1. The cost to start a business in Colombia is high

Indicator	Colombia	OECD	Latin America and Caribbean
Starting a business (rank)	96	49	116
Procedures (number)	8.0	5.0	8.4
Time (days)	11.0	9.2	31.7
Cost (as a % of per capita income)	14.0	8.7	37.5
Minimum capital required (as a % of per capita income)	0	9.6	2.7

Source: OECD compilation based on information from the World Bank (2018[9]), Doing Business 2018: Reforming to Create Jobs, http://dx.doi.org/10.1596/978-1-4648-1146-3.

The high and binding minimum wage is also an important cost factor that reduces formal employment (Arango and Flórez, 2017[10]; Olarte Delgado, 2018[11]) as shown in Box 2.3.

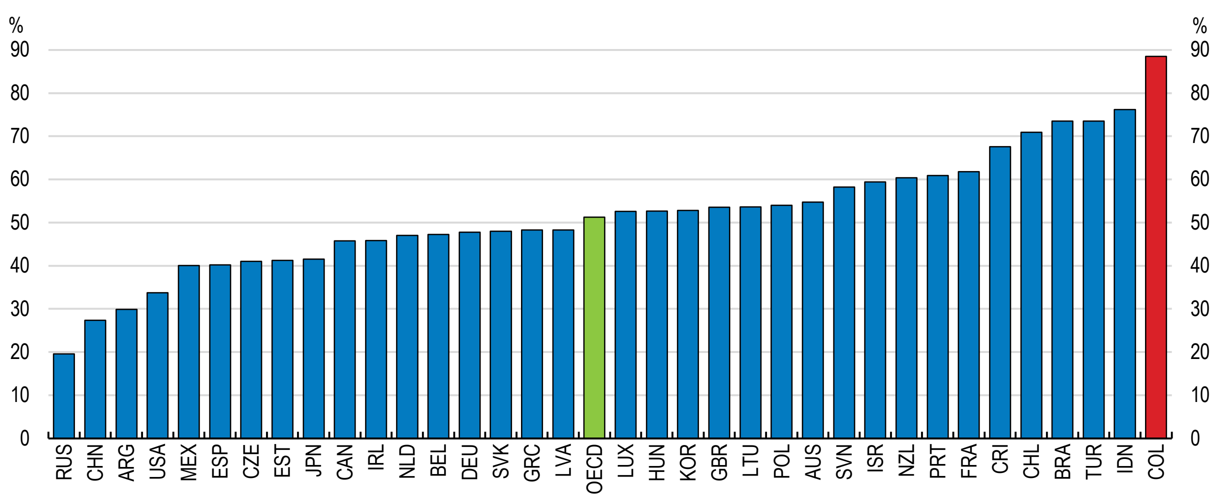
At 87% of the median wage of full-time formal employees, the minimum wage is higher in relative terms than in any other OECD country (Figure 2.5). Almost half of the total workforce earns less than the minimum wage. The high minimum wage reduces employment prospects for low-skilled workers, youth and people located in less developed regions (OECD, 2015[12]). Nevertheless, as argued in OECD (2016[2]), the high minimum wage should also be seen in the context of the limited role of collective bargaining in Colombia. Since the minimum wage is one of the few ways for trade unions to ensure decent working conditions for their affiliates, they tend to put strong pressure on raising its level. However, the high minimum wage has pushed many workers into informal employment and self-employment without any protection.

Limiting increases to inflation for some time would help the minimum wage to return gradually to a more job friendly level (OECD, 2015[12]). Other possible options include differentiating the minimum wage by age (OECD, 2015[12]) or by region (OECD, 2017[13]) or establishing an hourly minimum wage, which would avoid the current penalisation of part-time employment, given the need to contribute to the social security system on a weekly or full time basis. These measures would particularly help formalisation in the rural areas.

Further reductions in non-wage labour costs may also help formality (Box 2.3). Despite the 2012 reform, non-wage labour costs remain almost 50% of the salary, (Figure 2.8). Especially the transportation subsidy (7.5%) and the pension contributions (16%) are high compared with other Latin American countries. Employers also pay a 4% contribution to finance the family compensation funds (*Cajas de Compensación Familiar)*, which offer not only a wide range of services from housing and training programmes to sports and entertainment for affiliates, but increasingly also benefits and services to the rest of the population (OECD, 2016[2]).

Figure 2.5. The minimum wage is high relative to the median

As a percentage of median wages of full-time workers in 2017



Note: The OECD aggregate refers to the unweighted average of the data shown for its member countries.
Source: OECD, Going for Growth, Structural Policy Indicators database.

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Box 2.3. Drivers of informality in Colombia

Analysis based on microdata from the Colombian household survey (GEIH) for 2010-2017 allows gauging the drivers of informality in the labour market. A probit model for the probability of working informally (measured as those not contributing to the pension system) is used. It includes individual characteristics (such as age, gender, education, married, having children), firm characteristics (industry, firm size, rural area dummy and region) and labour market variables: minimum wages (relative to the median wage in the rural or urban area in each region) and non-wage labour costs as percentage of wages (including transport subsidy and contributions to family compensation funds, pensions, health and risk insurance).

Education is one of the most important determinants of the probability of working informally. Workers that attained higher education (tertiary or post-secondary education) show a 25 percentage points lower probability than those that attained upper-secondary education (Figure 2.6). Labour market policies are also important drivers. Reducing the ratio of the minimum wage relative to the urban or rural regional median wage by 10 percentage points would decrease the chances of working informally by 8 percentage points. Reducing non-wage labour costs by 4 percentage points would lead to average reduction of 9 percentage points in the probability of working informally (Figure 2.7).

Figure 2.6. Studying longer radically reduces the chances of working informally

Estimated average marginal effect of each educational level with respect to the baseline (primary education or less) on the probability of working informally.

Note: The bars show the estimated effect on the average probability of working informally of educational levels relative to the having attained primary education or less. Lines indicate the 95% confidence interval. Estimates are obtained through a probit estimation controlling for age, gender, children, marital status, firm size, rural area, and year, (2-digit) industry and regional effects. Labour market policy variables are included. Standard errors are clustered at regional-year level.
Source: Garda (*forthcoming*), "The drivers of informality in Colombia", OECD Economics Department working papers.

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Figure 2.7. Lowering non-wage labour costs and the relative minimum wage could significantly reduce informality

Estimated effects on the probability of working informally of reducing the ratio of the minimum wage to the regional median wage and non-wage labour costs.

Note: The bars show the estimated effects on the average probability of working informally of reducing the ratio of the minimum wage over the median wage by 10 percentage points and reducing non-wage labour costs by 4 percentage points. Lines indicate the 95% confidence interval. Estimates are obtained through a probit model and controlling for education, age, gender, children, marital status, firm size, rural area, and year, (2-digit) industry and regional effects. The minimum wage is measured relative to the median wage in the rural or urban area in each region. The average ratio of the minimum wage relative to the median wage ranged during 2017 from 82% in Bogotá to 240% in rural Cauca. Non-wage labour costs are measured as a percentage of gross wages. Standard errors are clustered at regional-year level.

Source: Garda (*forthcoming*), "The drivers of informality in Colombia", OECD Economics Department working papers.

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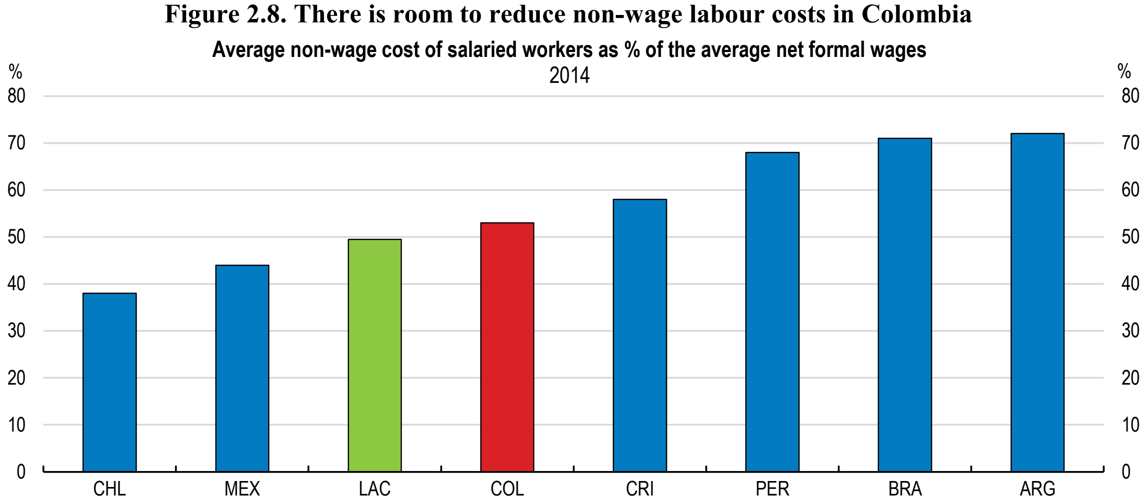
Figure 2.8. There is room to reduce non-wage labour costs in Colombia



Note: LAC refers to the average of 20 countries in the region. Estimations includes mandatory contributions (such as social security contributions for health and pensions, professional risk, transport subsidy), 13th salary in the form of bonuses, annual leave, severance payment and firing notice.

Source: Alaimo et al. (2017), "Measuring the Cost of Salaried Labor in Latin America and the Caribbean", *IDB Technical Note* N. 1291, https://publications.iadb.org/handle/11319/8430.

StatLink https://doi.org/10.1787/888934013700

The disconnection between the mandatory contributions that employers pay and the benefits their employees receive can also have negative effects on labour formality (Frölich et al., 2014[14]). For instance, part of the formal workers' contributions to health care and family compensation funds are used to finance benefits and services for which formal workers are not eligible (Box 2.4). Because of their unintended consequences of such taxes on formal job creation, it is important to broaden the sources of funding for general social services and benefits in order to reduce formal-sector employee contributions.

Finally, the financing of the family compensation funds should be reviewed, as recommended in previous OECD Economic Surveys (OECD, 2015[12]; OECD, 2013[15]). Many of their services, such as recreational and commercial activities, are not paid from employer contributions in other OECD countries and should be made optional for employers.

Box 2.4. Two examples of distortions between social contributions and entitlements in Colombia

Workers have limited incentives to formalise and pay into the contributory health care system (4% contribution for employees and 12.5% for self-employed) because: 1) the subsidised health care system offers nearly the same services and is free of charge; 2) part of the formal workers' health care contribution is used to finance the subsidised system and thus it acts as a tax; and 3) there is a temporary discontinuity in health care coverage when an individual changes health care system as a result of a change in employment status.

To stimulate the formalisation of labour without jeopardising universal health care coverage, it would be important to broaden the sources of funding for the subsidised health system. Additional resources would allow the government to gradually reduce the share of total health funding coming from formal-sector employee contributions and increase funding from the general budget. Expanding the use of mechanisms such as co-payments and moderating fees, without diminishing the access of people with fewer economic resources, would help. Rising formality will also be key to rising revenues.

Second, there is an important disconnection between the 4% employer contributions and benefits of the family compensation funds. Many of the funds' services (such as cultural and recreational services, training and education) are located in the regional capitals and are unavailable to formal employees in smaller cities or those living at the other side of town. The government should make these services optional to allow employers to opt out from the contribution to family compensation funds.

In addition, family compensation funds have increasingly been mandated by the government to provide benefits and services to non-affiliates. As such, an increasing part of the contribution is in reality a tax to finance social policy programmes for which formal workers are not eligible. Substantial variation in the quality of services offered by the different funds, with less developed regions lagging behind, further exacerbates inequalities. To reduce the negative effects of the payroll tax on labour formality and to improve the quality of services in all regions, the social services provided by the Family Compensation Funds should be provided through different institutional arrangements (Arango and Flórez, 2016[16]).

Source: OECD (2016[2]).

Ensuring effective labour law enforcement

Tackling informality also requires a better labour law enforcement through an effective judiciary and well-equipped labour inspectorate. In the past few years, Colombia has taken an impressive amount of measures to improve the labour inspection system (OECD, 2016[2]). In particular, the number of labour inspectors more than doubled between 2011 and 2015, the budget significantly increased and the fines collection system has been revised and strengthened (see Box 2.5). The government also raised salary scales for labour inspectors to attract better candidates and organised a civil career exam to improve job security and limit job staff turnover. However, recent information suggests that the collection of fines is weakening again (Figure 2.10) and illegal subcontracting persists (Ministerio del Trabajo, 2018). Increased rural actions are also necessary to inform employers and workers about the benefits of formalisation and stimulate formal employment.

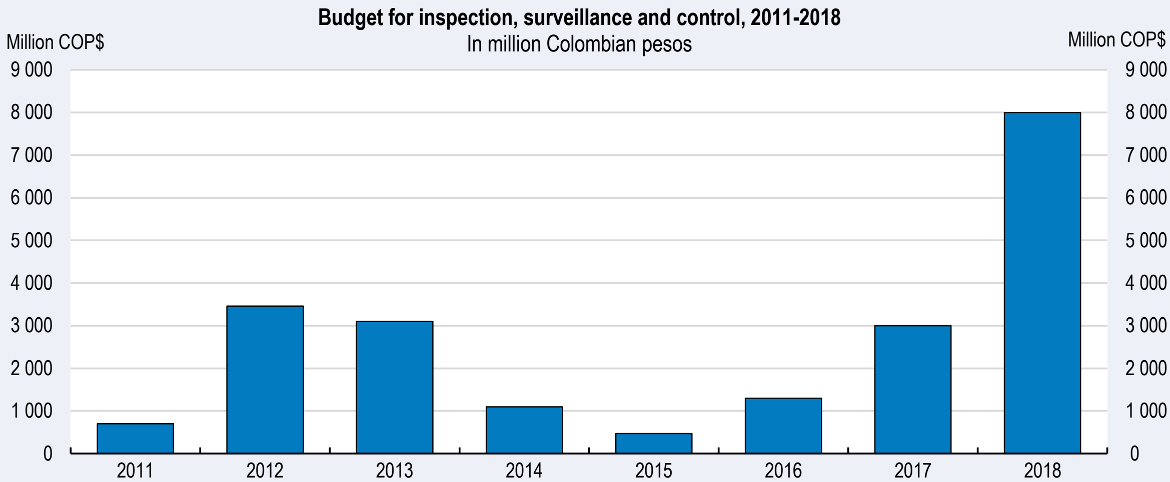
Social dialogue and social norms should also play a key role in ensuring effective labour law enforcement. In particular, trade unions can provide a voice to workers and support them in their complaints against non-compliance. However, significant changes in the Colombian collective bargaining system are needed to allow for an increase in trade unionisation and improve the respect of trade union rights in the country (see section on Sharing gains with workers). Social norms, for instance in the form of the OECD Guidelines for Multinational Enterprises and the National Contact Points, are equally important tools to promote responsible business conduct of firms (see OECD (2018[17]) for a specific example on Colombia).

Box 2.5. Significant improvements have been made in the Colombian labour inspection but continued efforts are needed

In 2018, 8 000 million Colombian pesos were assigned to labour inspection, surveillance and control, nearly three times the budget that was available in 2017 (3 000 million Colombian pesos) and a multitude of the budget of 2015 (468 million Colombian pesos) (Figure 2.9). The large increase in the budget is the result of a co-operation programme with the United States and the ILO aiming at the systemic improvement of labour law enforcement. The co-operation focuses on frequent training of labour inspectors and the development and implementation of an electronic case management system in all regions to facilitate the supervision of cases and collection of sanctions.

In 2017, a total value of 13 700 million Colombian pesos of fines were collected, 38% more than a year earlier (Figure 2.10). The progress was largely the result of an effective collaboration with CISA, a for-profit public entity under the Ministry of Finance specialised in collecting debts. However, recent information suggests that the collection of fines is weakening again. The total value of fines collected during the first eight months of 2018 is only about one third of the value of 2017. Extrapolation over the full year would suggest a fine collection similar to 2014. Even so, the total value of imposed fines is at the highest level since seven years, indicating that employers continue violating the labour law and renewed efforts are needed to ensure an adequate collection of the outstanding fines.

Figure 2.9. The budget for labour inspection has seen an exponential increase in recent years



Note: The budget for 2018 is an estimate.
Source: Ministry of Labour.

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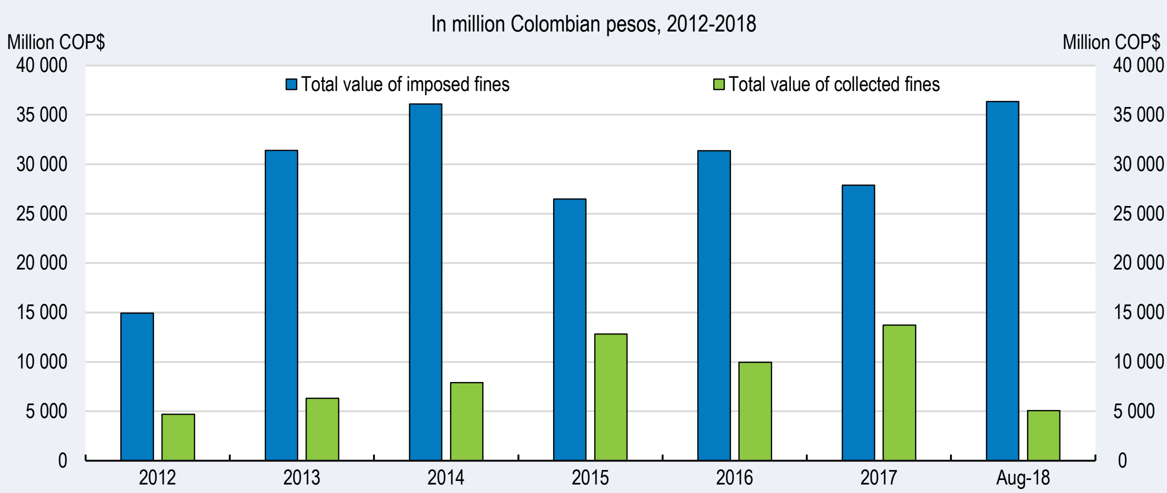
Figure 2.10. The improvement in fines collection seems to have been reversed in 2018



Source: Data provided by the Ministry of Labour, updated with information from the quarterly newsletters on the inspection system on the website of the Ministry of Labour (http://www.mintrabajo.gov.co/).

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Ensuring adequate support for workers in a flexible labour market

Finding the right balance between employment flexibility and job stability

An important challenge facing governments is to nurture labour market dynamism while keeping the adjustment costs borne by workers as low as possible. Employment protection legislation is the policy instrument most commonly used to limit overuse of economic dismissals. Mandatory severance payments and some other procedural requirements (e.g.

reinstatement procedure) increase employer-borne costs associated with job displacement discouraging layoffs. However, experience has shown that employment protection needs to be used cautiously because it can hinder efficiency-enhancing labour mobility and possibly generate dual labour markets if there is a strong gap in the stringency of regulations for permanent versus other contracts (OECD, 2013[18]). Employment legislation may also fail to provide adequate protection to job losers if firms renege on their severance pay commitments at the time of dismissal (OECD, 2011[19]).

Employment protection regulations in Colombia are rather flexible for individual dismissals and there are very few restrictions on the use of fixed-term contracts. Only temporary work agencies are heavily regulated (OECD, 2016[2]). However, rather than restricting employment protection regulation, workers would be better supported through a well-functioning unemployment compensation system (Vodopivec, 2013[20]) and job-relevant training.

Reorganising unemployment insurance

Colombia already has the basis of an individual unemployment savings account system for formal workers, but would need to improve the system to provide proper income protection to unemployed workers. In 1990, Colombia transformed its traditional system of severance pay into a system of individual severance accounts (Kugler, 2002[21]). Instead of having to pay one month per year of service at the time of dismissal, employers are mandated to make an annual deposit equivalent to one month's salary to a severance fund (an independent financial institution) on behalf of every employee. In addition, employers pay 12% of interest on the annual amount of severance pay into the employee's severance account (PricewaterhouseCoopers, 2018[22]). In 2018, there were around 8 million people affiliated to the individual severance accounts (*cesantías*), corresponding to 90% of all formal workers and 36% of both formal and informal workers.

However, over the years, the system has lost its purpose of income protection in the event of unemployment as workers can cash the savings before job loss for a variety of reasons – for instance, to finance education, purchase a house or undertake house renovations. In 2017, two thirds of the funds were withdrawn for reasons other than unemployment (ACRIP and Fedesarrollo, 2018[23]).

To redirect the system of individual severance accounts towards income support provision in the case of unemployment, the government introduced in 2013 a bonus proportional to the savings amount for those who keep at least 10% of their savings in the fund, 25% for those who earn more than twice the minimum wage (OECD, 2016[2]). However, it may be worth restricting withdrawal from the fund altogether, or increase the minimum savings level to ensure sufficient protection during periods of unemployment.

By restricting withdrawal, the individual severance account system can regain its role of income protection during periods of unemployment and function as an individual unemployment savings account system, like in Chile (Robalino, 2014[24]). The advantage of individual unemployment savings accounts over other unemployment insurance systems is that they significantly limit the risk of moral hazard. By allowing workers to run down their personal savings accounts during periods of unemployment, workers internalise the cost of unemployment benefits, thus strengthening the incentives of the employed to prevent job loss and those of the unemployed to return to work quickly. This feature is particularly relevant in developing countries with a large informal sector where monitoring the behaviour of unemployed people is complicated (Sehnbruch and Carranza, 2015[25]). Individual unemployment savings accounts can also strengthen incentives for working formally since social security contributions are less seen as a tax on labour and more as a delayed payment (OECD, 2018[1]).

In the medium term the government may also want to add a solidarity element to the individual savings accounts to pool risks across workers and redistribute across income groups, similar to the Chilean unemployment insurance system (Acevedo, Eskenazi and Pagés, 2006[26]). Indeed, without a solidarity fund, the system provides less protection to those who need it most: workers who experience frequent and/or long lasting spells of unemployment.

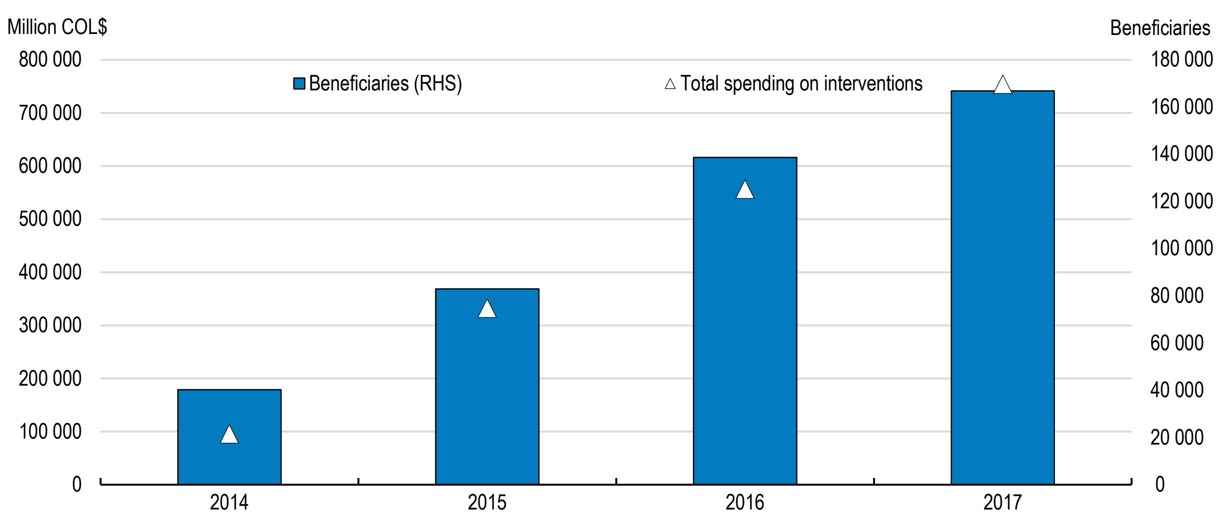
Ensuring better regional coverage of the unemployment protection mechanism

As a complement to the individual savings accounts, the government introduced in 2013 a "protection mechanism for dismissed workers" (*mecanismo de protección al cesante*). The system ensures continuation in family subsidies and health and pension contributions, provides access to public employment services and vocational training and offers, since 2017, a food voucher. Only formal workers whose employer contributed 4% of their payroll to a family compensation fund for at least 12 months in the three years before job loss occurred (24 months for independent workers) are eligible for benefits and services.

Since the introduction of the unemployment protection mechanism, both the expenditure and number of beneficiaries multiplied by four (Figure 2.11). About half of the budget is devoted to benefit payments; 32% is spent on training programmes and the remaining 16% goes to the provision of placement services and overall management. Despite the substantial increase, the total number of beneficiaries (167 thousands in 2017), remains only a fraction (7.2%) of the 2.3 million people who were unemployed in 2017 according to data of the Colombian Statistical Office. Most unemployed people do not qualify as they have been working in the informal sector or their employer did not contribute long enough.

Figure 2.11. Substantial expansion of the protection mechanism for dismissed workers

Spending is expressed in million pesos, 2014-2017



Source: Data provided by the Ministry of Labour.

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Improving public employment services

As part of the protection mechanism for dismissed workers, the government created in 2013 the national public employment service (OECD, 2016[2]). The PES operates through a national network of approved but independent front line service delivery agencies that meet specific standards. Public employment services include vacancy registration and job matching for employers and job seekers supplemented by career workshops and, for some clients, more in-depth orientation and assessment. All unemployed people, regardless whether they contributed or not, can use services of the PES network. However, PES providers have considerable flexibility about which employers and jobseekers they work with and in how they deliver services (Finn, 2015[27]).

The number of public employment service providers has rapidly increased over the past few years and currently there are 260 PES providers spread out over the country (even though coverage remains restricted to the main cities), including 66 public providers and 193 approved private providers, and there are 140 virtual spaces were jobseekers can consult information. In 2017, the public employment services registered more than one million CVs and 1.6 million vacancies. Employers are required by law to notify their vacancies, which are posted on an easily accessible website that has more than six million visits per month. Vacancies for salespersons and services account for one third of the vacancies, while engineers, technicians, lawyers and social workers are also frequently requested (Table 2.2). According to the figures of the Ministry of Labour, around 650 000 people found a job through the public employment services in 2017 and 256 000 unemployed people have been trained. While initially there was a general perception that these services mainly served low-skilled people (International Labour Organization, 2016[28]), four in ten users now have a higher education degree and an equal share is younger than 28 years.

Table 2.2. Type of vacancies registered with the public employment service during 2017

	Number of vacancies	Percentage in total	Growth %, 2016-17
Salespersons	25 407	18.2	-0.3
Services	20 815	14.9	88.4
Technicians and middle-level science and engineering professionals	8 721	6.3	>100
Science and engineering professionals	7 860	5.6	>100
Professionals in law, social sciences and culture	6 501	4.7	>100
Garment and food processing officers and operators, carpenters and the like	6 477	4.6	>100
Accounting clerks and registration officers	6 346	4.6	-21.7
Technicians and middle-level finance and administration professionals	4 598	3.3	-33.5
Personal service workers	3 890	2.8	75.9
Health professionals	3 786	2.7	59.5
Other	30 492	32.3	-

Source: Data provided by the Colombian Ministry of Labour.

To address strong variation in the service quality across regions and providers, the Ministry of Labour set up in 2018 a team of regional officials who visit regional offices and verify their infrastructure, human resources, planning and user satisfaction. A technical quality standard has also been developed to standardise services and quality across providers in terms of basic management, placement services (reception and registration, occupational guidance, pre-selection and referral) and user satisfaction.

To further improve labour market support for jobseekers, the public employment services could expand the range of services and active labour market programmes it offers. When doing so, it is important to maintain a close co-operation with employers, as they are a crucial partner for the good functioning of employment services (Finn, 2015[27]; Mazza, 2017[29]). The National Training Service (*Servicio Nacional de Aprendizaje*, SENA) is also a public employment agency having a wide range of short-term and longer-term training offers (see last section on Promoting skills development).

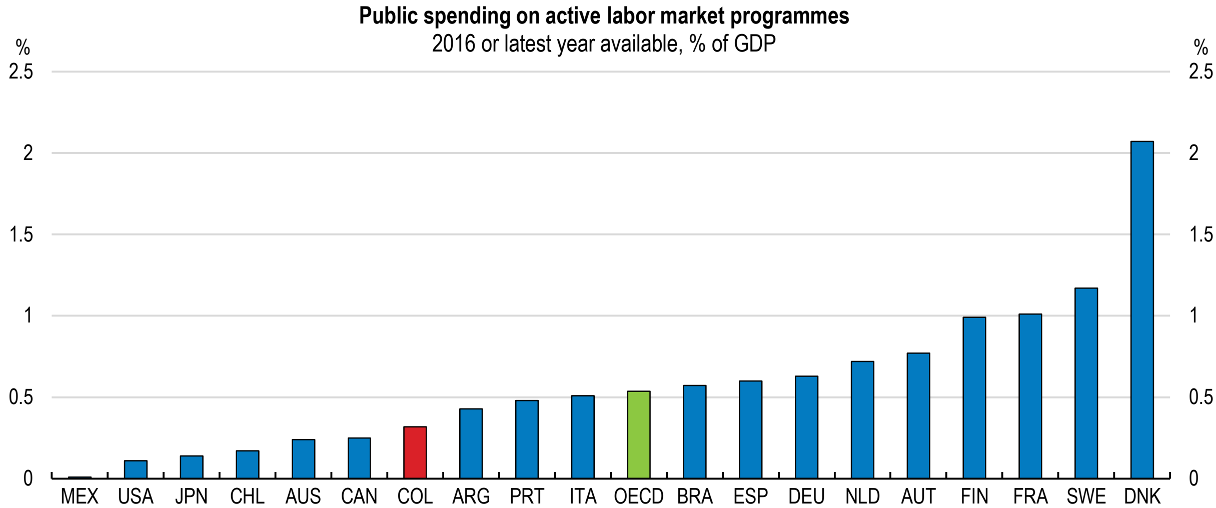
Public employment services can also enhance the information they provided to employers and workers. For instance, information on reservation wages and labour market wages should be published, as well as information that allows workers to move to other cities (such as living costs across cities and provision of public services) (Arango and Flórez, 2016[16]).

Focusing on active labour market programmes proved to work

Before expanding active labour market programmes, it is important to carefully evaluate existing and potential programmes. As discussed in the new OECD Jobs Strategy, experiences with active labour market programmes in OECD and developing countries show mixed results (Betcherman, Olivas and Dar, 2004[30]; Brown and Koettl, 2015[31]; Escudero et al., 2017[32]; McKenzie, 2017[33]; OECD, 2015[34]). In particular, the large informal sector and weak capacity to implement active programmes in developing countries may limit its impact. However, well-designed and targeted measures can increase the employability of jobseekers and their employment opportunities in a cost-effective manner. Improving governance would also help, with the Ministy of Labour having a greater role in overseeing the quality of the different stakeholders providing active labour market programmes. Several Latin American countries managed to make labour market policies more effective by adding an active labour market component, such as training, to existing conditional cash transfer programmes (Cecchini and Madariaga, 2011[35]; López Mourelo and Escudero, 2017[36]). Cash transfers provide income support in times of need but become more effective if supplemented by a training component that improves participants' chances to find more autonomous and sustainable income generation opportunities.

Spending on active labour market programmes is low in Colombia compared with other countries in the region and in the OECD (Figure 2.12) and few in-depth evaluations exist of the different programmes. While some programmes have shown long-term positive effects, for instance Youth in Action (Attanasio et al., 2017[37]), it would be good to invest in systematic impact assessments to focus funding on those interventions that are cost-efficient and limit deadweight, substitution and displacement effects on non-participants (see, for instance, Mazza (2017[29]) for concrete guidelines).

Figure 2.12. Spending in active labour market policies is low



Note: Data are from 2010 for Argentina, Brazil and Colombia. OECD refers to an unweighted average of the latest available data of its member countries.

Source: OECD, Public expenditure and participant stocks on Labour Market Programmes database. Data for Argentina, Brazil and Colombia are from Cerutti et al. (2014), World Bank.

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An interesting and innovative approach is the recent introduction of a Social Impact Bond (see Box 2.6 for further details about the pilot). Social Impact Bonds follow a pay-for-success approach to finance social programs where private investors provide up-front capital for social services and are repaid by the government on the achievement of agreed-upon results. This approach seeks to increase the effectiveness of social investment and innovation in the public sector, promote flexibility to solve social problems and better allocate public resources (Inter-American Development Bank, 2017[38]).

Box 2.6. The Colombia Workforce Development Social Impact Bond

The Colombia Workforce Development Social Impact Bond is the first social impact bond launched in a developing country[1].The social impact bond is a pilot, targeting vulnerable, unemployed individuals in Bogotá, Cali, and Pereira, with a particular focus on extreme poor and persons displaced due to the internal conflict. The SIB finances employment measures such as skills training, psychosocial support, and intermediation services for formal job placement and retention for vulnerable individuals. Just under half of the outcome payment is provided by Department for Social Prosperity, with the remaining payment made by the Inter-American Development Bank, which channels the funds provided by the Swiss State Secretariat for Economic Affairs. The contract was signed in March 2017 and ended in July 2018.

The social impact bond is structured so that its investors, Corona Foundation, Mario Santo Domingo Foundation, and Bolivar Davivienda Foundation, are repaid only if the participants find stable, formal employment. In particular, there are three outcome metrics for this social impact bond: job placement, three-month job retention and six-month job retention. For each individual who is placed in a job, the outcome funders will pay 50 percent of the total per capita payment, with another 50 percent if an individual retains the job for three months, for a maximum of 514 individuals. For individuals who are still in a job after six months, the Inter-American Development Bank, with funds from Switzerland, will pay an additional bonus of 10 percent.

Preliminary results show that, by May 2018, 1 300 workers were trained, 605 participants were employed, of which 330 participants for 3 months and 131 for 6 months. However, it is too early to understand the full impact of the programme.

1. While two *development* impact bonds have been implemented in Peru and India, a distinguishing feature of the Colombian *social* impact bond is that the outcome funder is a government entity, and not a donor or foundation as in Peru and India.
Source: Based on Gustafsson-Wright et al. (2017[39]).

Strengthening equal opportunities

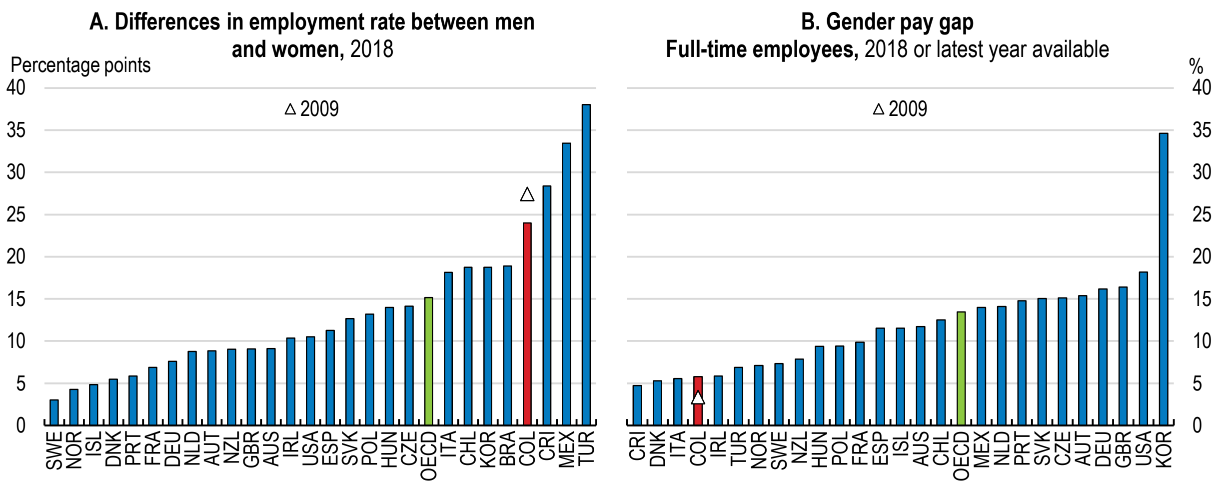
Promoting female employment opportunities

As stressed in the OECD Jobs Strategy (OECD, 2018[1]), equal participation of both genders in the economy is crucial for economic growth and well-being of the population. Increasing women employment rate can have a significant impact on productivity, economic growth and contribute to reducing income inequality (OECD, 2017[40]; Causa, de Serres and Ruiz, 2015[41]).

Political, social and economic empowerment of women has seen remarkable progress in Colombia over the past few decades (OECD, 2016[42]). However, gender gaps still remain. The employment rate of women has increased substantially in the past decade but the difference with the male employment rate is one of the largest among OECD countries (Figure 2.13, panel A). The gender wage gap has increased in recent years although is below OECD average (Figure 2.13, Panel B). There is also strong evidence of wage gap heterogeneity among the main cities in Colombia (Arango, Flórez and Olarte-Delgado, 2018[43]; Galvis, 2010[44]). OECD calculations indicate that wage gap increases to levels above OECD average after controlling for education, age, occupation and industry. Hence, women with the same age, education, occupation and industry as men occupy job positions with relatively lower pay than men do. This sheds light on the importance of other factors such as higher probability of career interruptions, discrimination or the long-working hours' culture that prevents mothers from participating in highly paid positions (OECD, 2016[45]).

Gender equality is increasingly a priority on the Government's agenda. The National Development Plan for 2014-2018 included the formulation and implementation of the National Public Policy on Gender Equity, including a plan on participation of rural women in the formulation of the comprehensive rural women's public policy and the creation of a rural women's directorate within the Ministry of Agriculture.

Figure 2.13. Gender gaps remain sizeable



Note: Gender pay gap is defined as the difference between male and female median wages divided by the male median wages.
Source: OECD Labour database.

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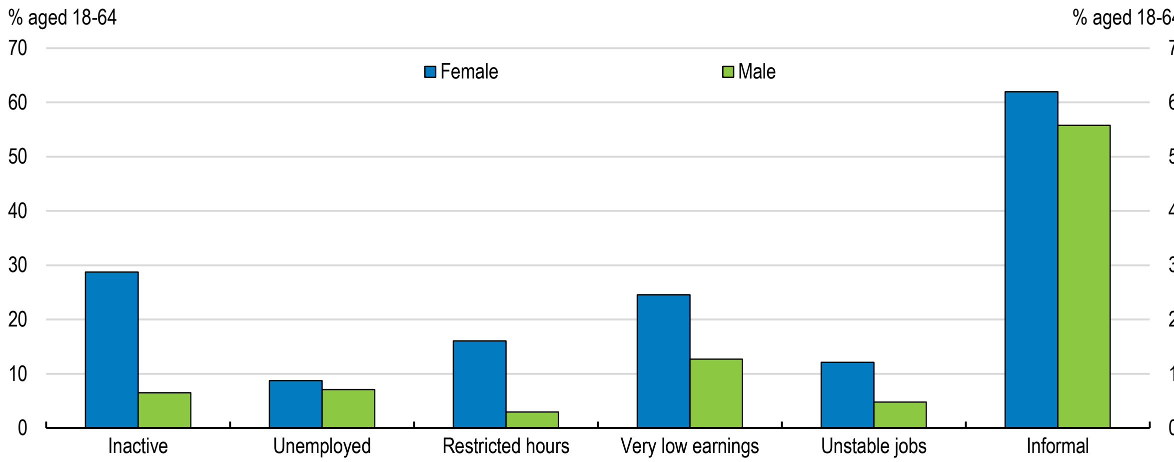
The over-representation of women out-of-work and in precarious jobs (Figure 2.14) is, at least in part, a consequence of the unequal gender distribution of unpaid work. Since 2013, a time use survey helps to gather information on upaid work. Colombian women carry out at least four times more unpaid household and care work than men (Amarante and Rossel, 2018[46]). This inequality affects women's ability to obtain and remain in high-quality jobs – given the hours and availability that some jobs require. Policies to promote flexible work arrangements, shared mother and father parental leaves together with incentives to allow fathers to take parental leave are needed. Sharing the costs of raising children is especially important since evidence in Colombia indicates that increases in the maternity leave has led to an increase in women inactivity, informal and self-employed jobs (Ramírez, Tribin and Vargas, 2015[47])

Figure 2.14. The gender gap on high-quality employment and participation is sizeable



Note: Year 2017. Precarious jobs are showed as % of employed aged 18-64, and are defined as unstable jobs (all those jobs being not permanent) or informal jobs (not affiliated or contributing to the pension system), having very low earnings (monthly labour income is lower than the 60% of the minimum wage) or jobs with restricted hours (working less than 20 hours a week).
Source: OECD calculations based on GEIH, DANE.

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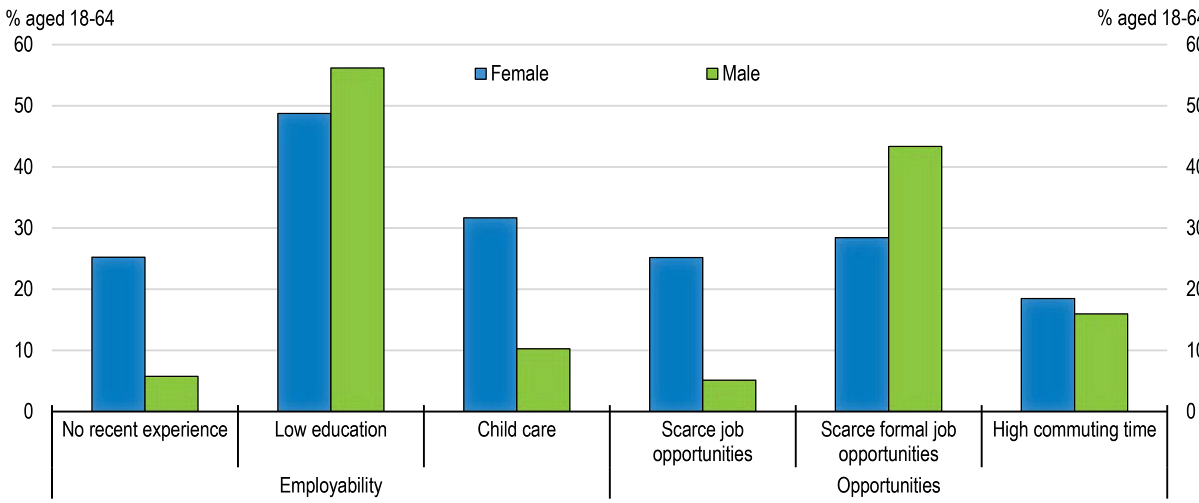
The participation of women in the labour market or in good-quality jobs is also held down by employment barriers related to childcare (Figure 2.15). Motherhood typically implies negative effects on workforce participation, pay and career advancement, reflecting women's disproportionate responsibility for unpaid caregiving (OECD, 2017[40]; Castellani et al., 2017[48]). Efforts towards expanding early education have raised coverage to 48% and 75% for 3 and 4 year olds in 2015, still below the OECD averages of 70% and 82%, respectively. For children aged 5 the coverage is 54% (OECD, 2016[49]). In rural areas, the coverage is only 45%. The government has made Early Childhood Education and Care (ECEC) a priority with its Early Childhood Comprehensive Care Strategy: De Cero a Siempre. However, the educational component of early childhood education remains underdeveloped and there are challenges to articulate provision and resources between two existing different systems: the Ministry of Education and the Colombian Institute of Family Welfare (Instituto Colombiano para el Bienestar Familiar, ICBF) which manages early childhood services for 0-5 year-olds.

Measures such as continuing to expand access to early high-quality public childcare education and enlarging opening hours are needed to facilitate quality employment for mothers, notably for the poorest children and in rural areas. The Government has incentivised enrolment in early childhood through the expansion of the conditional cash transfer programme *More Families in Action,* by covering children of 5 years-olds. Further expanding coverage in rural areas and providing full-day school for 5-years-olds would help increase coverage for children in the transition year to school. Funding can be obtained through a reallocation of resources from ill-targeted benefits for households and firms, pro-growth reforms and a rebalancing of the tax-mix (see Key Policy Insights chapter).

Figure 2.15. Employment barriers in Colombia



Note: Year 2017. No recent work experience: if is an individual has not been working for more than a year. Low education: individuals facing this barrier have achieved less than upper secondary education as the highest educational level. Child-care responsibilities: individuals face care responsibilities when they have a family member who requires care (child aged 13 or less) and dedicated more than 30 hours a week in child-care or stopped searching for a job for childcare reasons or the working time is not compatible with childcare responsibilities. Scarce (formal) job opportunities: individuals face lack of formal opportunities when their probability of being out-of-work (informal) is 1.6 times the median probability given the individual's gender, age, educational attainment and region of residence and household characteristics (number of children, working spouse). High commuting time: individuals face high commuting times if the estimated time (using Heckprobit estimation) from work to job is 1.6 times higher than the estimated time according to the place of residence,age, and gender.
Source: OECD calculations based on GEIH, DANE.

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Cultural and social factors play also a significant role explaining the low female labour force participation (Bernal, 2014[50]). Parents need to understand the importance of sending the children to early education, and centres need to be near the house or work with available transport and compatible opening hours.

A large share of women work part-time and informally. In 2017, 85% of women working part-time were holding an informal job. This is driven by a legal disincentive to part-time employment in the formal economy in which contributions should be made for at a full-time or weekly minimum wage. Allowing social security contributions proportional to the hours worked would increase formalisation among female workers.

Red Unidos, United Network, the government strategy to eradicate extreme poverty can do more to tackle female employment barriers (Martínez-Restrepo, Mejía and Enriquez, 2015[51]). The *Red Unidos* strategy includes three components: psychosocial support for families and the community; supply management and preferential access to social services. Evidence shows that the programme had a positive impact on the probability of finding jobs for men, but not for women, especially in rural areas. Strengthening the coverage and delivery of social services in rural areas, particularly to develop income generation strategies for women will be crucial to help them participate in the labour market. Due to the lack of employment opportunities in rural areas, this could be achieved by offering access to financial services including strong financial planning and financial education components to help women develop their own entrepreneurial activities. Implementation of the measures included in the peace agreement incorporating the gender perspective in the promotion of access to and use of unproductive lands, the formalisation of property, the delimitation of the agricultural frontier and the protection of reserve zones will be key for rural women employment.

Gender inequalities in academic performance have important consequences for women´s careers and their role in society. In Colombia, girls underperform boys in science and math according to PISA. Factors such as attitudes, academic environment, and differences in the roles played by men and women in Colombian society are contributing to explain part of this gap (Karime Abadía and Bernal, 2017[52]).

Girls' underperformance reduces their access to available opportunities for higher education. For example, women are underrepresented in the national scholarship programme *Ser Pilo Paga* that gives access to higher education to good students from vulnerable backgrounds. In 2015 the programme awarded 43% of females, although 54 % of students taking the qualifying exam were female. When women lack skills and knowledge in math and reading, they have fewer opportunities to attend college in areas such as science, technology, engineering, and math (STEM) or other fields that "pay-off". Combating sexism and gender stereotyping since young age is key. Encouraging women's access to these fields should be encouraged by increasing information on the field labour market outcomes. In addition, developing training programmes in fields that pay-off for women, belonging to the poorest households, and with low or weak formal labour force participation should be encouraged trough *Red Unidos* or *Más Familias en Acción*.

Boosting job-quality of ethnic minorities

Colombia has a wide ethnic diversity. According to OECD calculations using the Colombian Household Survey, 11% of the population identified herself as an ethnic minority, with 8% being afro-descendants, 2% as indigenous and the rest raizales, palenqueros and Rrom origins. According to the National Land Agency, as of July 2018, Colombia has 38 000 hectares entitled to ethnic groups, representing nearly 33% of the country's surface. Ethnic status is often associated with less favourable welfare conditions. Ethnic minorities are more concentrated in rural areas and poverty among these groups is more frequent. In 2016, multidimensional poverty reached 33% among the ethnic population, affecting more severely indigenous groups (46%).

Ethnic groups often face barriers to access high-quality jobs. People with an ethnic background suffer higher rates of unemployment, face more barriers to work and receive lower pay than non-ethnic groups. Not in Employment, Education or Training (NEET) rates are especially higher among youth with ethnic background. Informality accounts for 72% of employed among ethnic minorities, 14 percentage points above non-ethnic groups. When in employment they occupy positions requiring lower qualifications and are often paid less than non-ethnic groups (Table 2.3). Access to high-quality jobs will hinge on implementing and strengthening income generation productive community projects and providing technical and social support to these communities, such as relevant education and training. The successful resolution of land rights for minorities and promoting rural development, as foreseen by the peace agreement, will be key for the inclusiveness of this group and the reduction of inequalities.

Table 2.3. Ethnic minorities often face barriers for high-quality jobs

Percentages, Year 2017.

	Without ethnic background	Ethnic background
Unemployment rate	8.8	10.9
NEET	26.5	34.2
Employment rate	53.4	51.0
If employed:		
Informal	57.8	71.6
Low earnings	31.6	45.2

Note: Informality is defined as not contributing to a pension system. Low earnings refers to those that earn less *than 60% the minimum wage.*
Source: OECD calculations based on GEIH (2017).

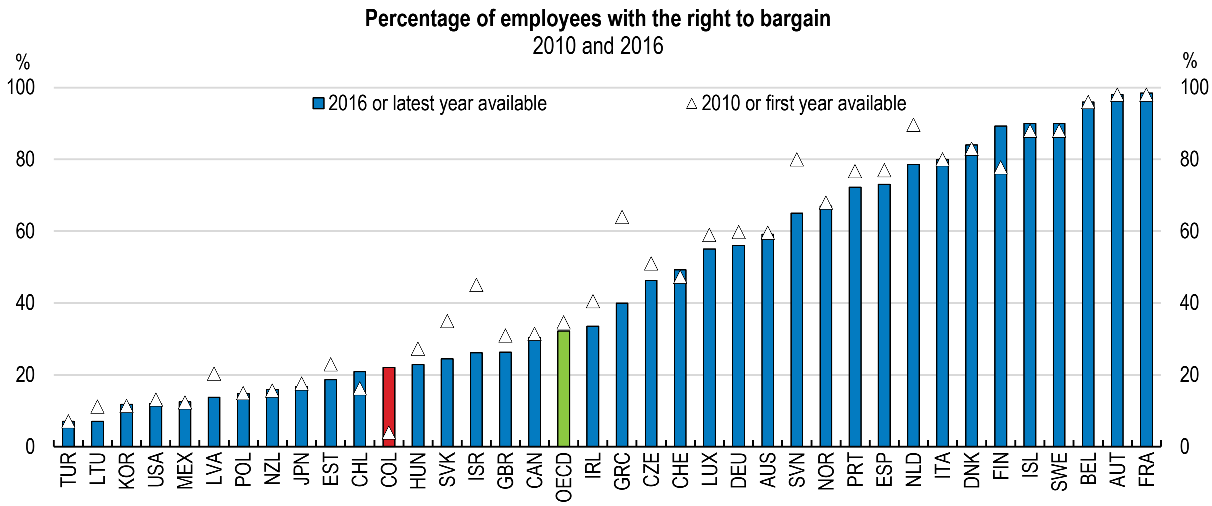
Sharing gains with workers

Collective bargaining and social dialogue can help promote a broad sharing of gains, including with those at the bottom of the job ladder. Recent empirical analysis by the OECD demonstrates that there is a wage premium for workers who are covered by firm-level bargaining compared with those not covered or those covered only by sector-level bargaining (OECD, 2018[53]). Moreover, the work environment tends to be of higher quality in firms with a recognised form of employee representation and collective bargaining is associated with lower levels of inequality.

Colombia has ratified all fundamental ILO conventions and the Constitution and Labour Code recognises freedom of association. However, important challenges for the enforcement of trade union rights and a constructive social dialogue persist (see OECD (2016[2]) for an extensive discussion). With trade union density estimated at 9.5% of salaried workers (formal and informal) in 2017, Colombia is at the lower end of the OECD ranking and considerably below Chile and Mexico. Despite low trade union density, important progress was made in collective bargaining for public sector employees. The coverage of collective bargaining expanded from 3.9% of all formal employees in 2011 to 22% in 2014, corresponding to 11% in the private sector and 70.4% in the public sector.

Progress in collective bargaining coverage has been remarkable (Figure 2.16). However, it should be kept in mind that formal employees account for only one third of the total workforce in Colombia. In addition, about half of the collective agreements in the private sector are either union services contracts or collective pacts with non-union workers, which have both received a lot of critic in recent years as they have been undermining workers' rights rather than enhancing them, see (OECD, 2016[2]) for a discussion.

Figure 2.16. Collective bargaining coverage in Colombia has significantly increased



Note: Data for Colombia refer to 2011 and 2014.
Source: OECD Collective Bargaining database.

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As discussed in OECD (2017[54]), the level of co-operation and trust between social partners in a country is the result of decades of history and is deeply rooted into broader social and cultural factors. Colombia is a country with anti-trade union culture and violence history (see Box 2.7 for a discussion on violence against trade unionists). While the Peace Agreement signed in 2017 will most likely further improve the security conditions in the country, the situation of violence against trade unionists requires a proactive strategy by the government to eliminate all violence through an adequate plan of further reforms and actions.

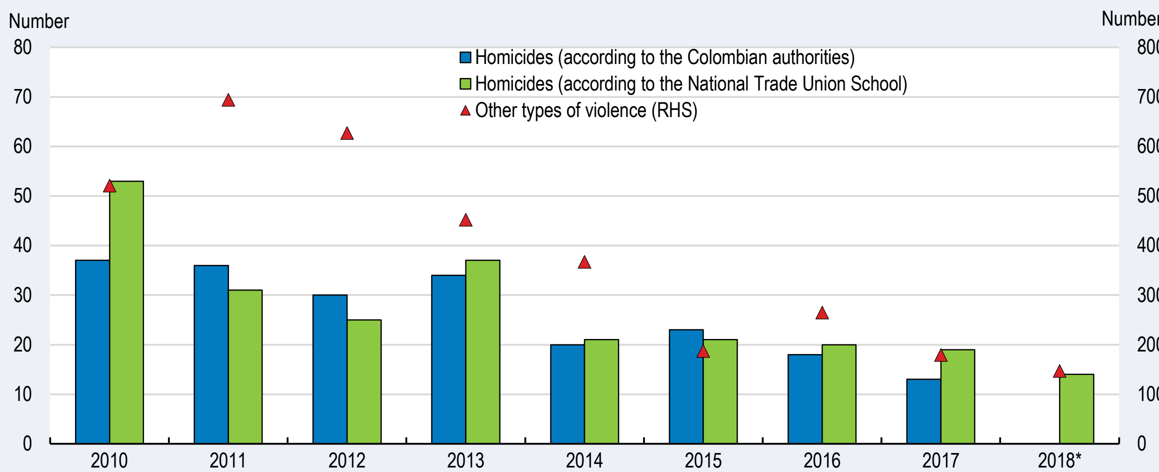
In addition, the government can play an active role to speed up the process by promoting co-operation between social partners at different levels to improve the quality of labour relations. For instance, involvement in committees, reforms, and institutions at higher levels, together with the expansion of sectoral bargaining helps building trust and a common understanding of challenges, solutions and positions. As a starting point, the regulations on sectoral collective bargaining should be developed in the Labour Code to stimulate sectoral negotiation on, for instance, working conditions and lifelong learning.

The presence of an independent body to mediate and settle disagreements can also contribute to improve labour relations, as is the case with the positive experience with the tripartite Special Committee for the Handling of Conflicts referred to the ILO (CETCOIT), which receives the confidence of both the employers' federations and trade unions federations. To further improve collective dispute settlement, the government made the process of convening arbitration tribunals more efficient, through the enactment of Decree 17 in 2016. The decree reduced the terms for convening courts by (1) establishing the documents that are required to request the convening of an arbitration tribunal; (2) determining the rules to group different conflicts within the same enterprise in a single arbitration tribunal; (3) describing the different steps to appoint arbitrators in case of reluctance of the parties involved; and (4) enabling the use of electronic means in the whole process.

Box 2.7. Reduced but persistent violence against trade unionists

In the last decade and a half, the overall homicide rate in Colombia went down from 66.5 per 100 000 population in 2000 to 26.5 in 2015, just above the average homicide rate of 23.7 in Latin America (UNODC, 2018[55]). Homicides of trade unionists also dropped considerably from over 200 per year in the 1990s to 20 in 2014, but have stagnated in the past four years (Figure 2.17). While other types of violence, such as threats, forced displacement and disappearances, also drastically declined between 2011 and 2018, they continue affecting a significant number of trade unionists.

Figure 2.17. Violence against trade unionists has diminished but is still present, 2010-18



Note: The homicides statistics of the National Trade Union School also include homicides of members of trade unions that are not registered with the Ministry of Labour. The data for 2018 refer to the period January-August 2018.
Source: Information system on human rights (SINDERH) of the National Trade Union School, and Colombian Ministry of Labour.

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The National Protection Unit, assigned to the protection of trade unionists, has undertaken an impressive range of measures to improve the protection programme for trade unionists and to tackle in-house corruption. As a result of the improved security conditions, the total number of protected trade unionists declined from 677 in 2014 to 370 in 2017. Meanwhile, the total budget for trade union protection decreased only slightly, implying an increase in the budget per trade unionist from COP 90 million in 2014 to COP 144 million in 2017. While all trade unionists covered by the programme have been successfully protected, a more pro-active prevention strategy may be needed.

Important steps have been taken in the past two years to address the low conviction rate for crimes against trade unionists in Colombia. Information provided by the Prosecutor General's Office shows that out of the 171 homicides of trade unionists that were reported to Prosecutor General's Office between 2011 and 2017, 26 cases have led to convictions and 112 persons have been jailed. Nearly two-thirds of those convictions happened in the past two years. In addition, 375 judgements have been handed down for crimes that occurred prior to 2011. It will be important to further build on these advances and ensure prosecution of all outstanding cases.

The Colombian Criminal Code (Art. 200) also allows for criminal sanctions against employers who undermined workers' rights to freedom of association and collective bargaining – see (OECD, 2016[2]) for a discussion. Even so, not a single conviction has been pronounced. Out of a total of 2 233 complaints submitted between 2011 and May 2018, 92% were closed without conviction by February 2018. To a large extent, the lack of convictions resulted from the impossibility to prove the existence of a crime or conduct leading to a crime. Furthermore, conciliation between the complaining worker(s) and the employer, a mandatory step in the judicial process of Art. 200 cases, is frequently used, with 127 cases settled in conciliation in the past 7 years. It would be worth to evaluate the effectiveness of such mandatory conciliation phases.

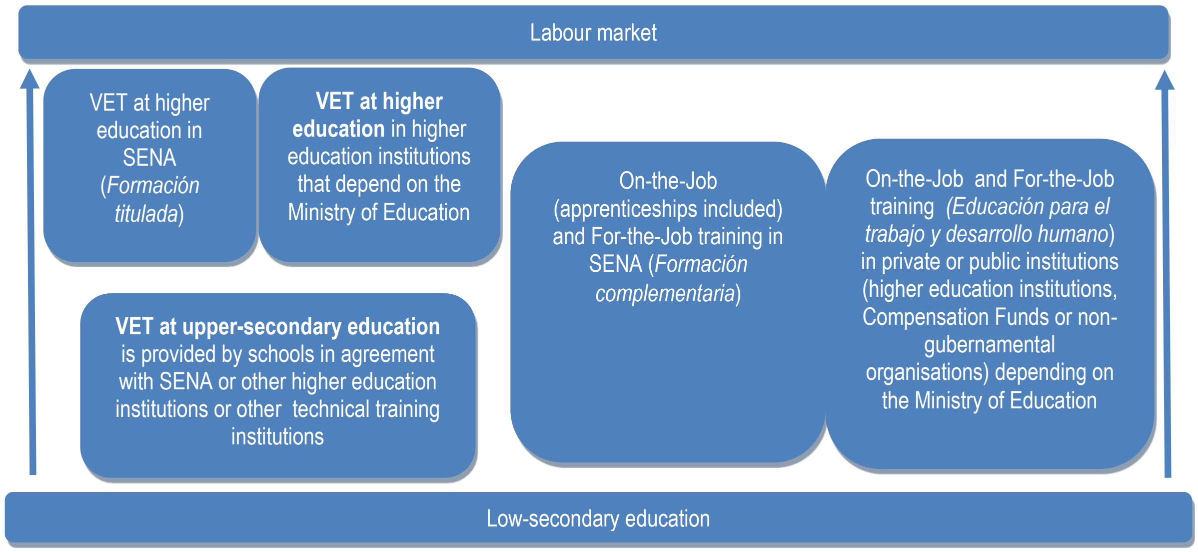
Promoting skills development

Low skill levels and accumulation of human capital or not possessing the right skills for the labour market are key drivers of the high share of low quality and informal jobs in Colombia. Education, from children's first years to the university, and training policies should ensure that workers are equipped with the right skills to thrive in the labour market and get high-quality jobs.

Access to high-quality education is a powerful tool to increase access to high-quality jobs (OECD, 2018[1]). Evidence shows that a change in labour force composition, toward a higher share of more-educated workers, has been an important driving force behind reduced informality rates in Colombia (International Monetary Fund, 2018[8]). A more-educated labour force increases the relative wages of low-skilled workers, reducing their incentives to work in the informal sector (Haanwinckel and Soares, 2017[56]). While the Key Policy Insights chapter addresses policy recommendations on how to increase attainment and quality from early childhood education to post-secondary education, this section will focus on how Colombia can develop skills for the labour market to help youth and older people who are struggling to catch up on the necessary skills to transition to high-quality jobs.

The Colombian vocational education and training system is offered under different modalities and stakeholders, which differ in terms of their governance and funding scheme. It is not framed in a single institutional environment (Figure 2.18). The main Vocational Education and Training provider is the National Training Service (*Servicio Nacional de Aprendizaje*), SENA, offering courses at formal (upper-secondary and tertiary) and complementary education. SENA depends on the Labour Ministry and operates under an institutional framework that is largely independent of that of the other providers of the job training system. SENA has a large budget of around 0.5% of GDP, bigger than similar institutions in the region (Huneeus, De Mendoza and Rucci, 2013[57]).

Figure 2.18. Vocational education and training system (VET) in Colombia



Source: OECD.

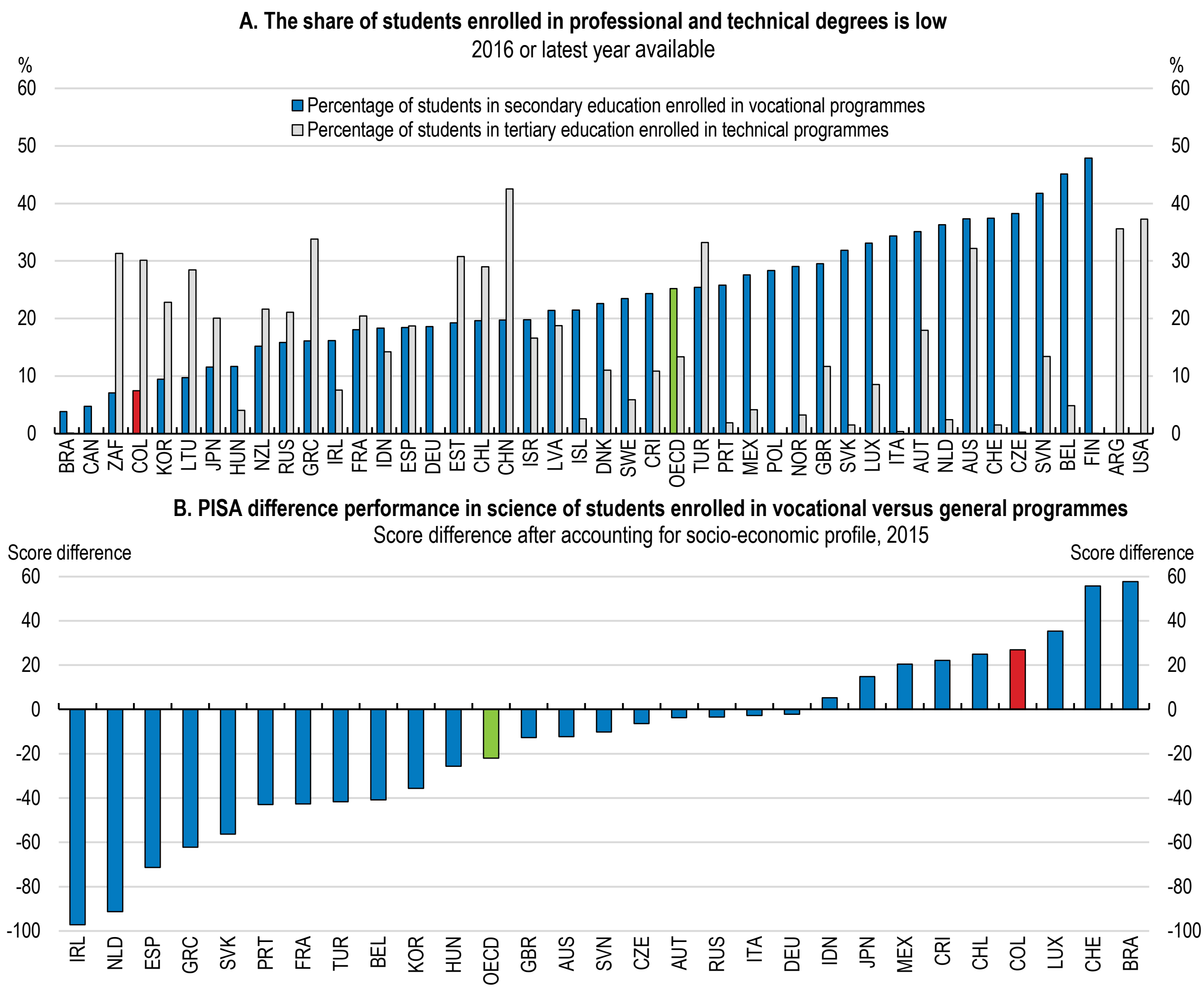
Expanding and upgrading upper-secondary Vocational Education and Training

Improving Vocational Education and Training (VET) can substantially enhance skills, inclusiveness and avoid skill mismatches for a large share of the population. Vocational programmes expanded in recent years in Colombia. However, quality and relevance remain key issues (OECD, 2016[49]). In 2017 about 1.4 million youth were enrolled in upper secondary education in Colombia, 63% of the youth aged 15-16 years old. More than three-quarters (76%) were enrolled in general academic programmes (*bachillerato académico*), and the remainder in programmes offering vocational education and training (VET) options (*bachillerato técnico*).

VET students perform relatively well in aptitude tests in comparison with students in general education. In PISA 2015 students enrolled in vocational programmes score 27 points higher in science than students in general programmes, after accounting for socio-economic status. However, the share of students at the secondary levels enrolled in professional and technical degrees is low (Figure 2.19) and dropout rates are high, especially in rural areas.

Strengthening VET offer and improving its quality would help the most disadvantaged groups of the labour market to get quality jobs providing them with the right balance of technical and broader skills. The general and the technical options are often offered in different institutions although students follow most of the same subjects. For the majority of students dependent on the public school system, however, the actual choice available is limited. In 2014, around two-thirds of schools offered only general academic courses. The schools that offer only vocational options are heavily concentrated in rural areas, where local government capacity is weak and SENA might be the only institution with the resources to provide courses at upper-secondary level (OECD, 2016[49]).

Figure 2.19. Enrolment in VET degrees at secondary level education is low although performance is good



Note: For Panel A data refer to 2016 or latest year available. Technical/vocational enrolment in secondary education (ISCED 2 and 3) includes teacher training. Enrolment in technical tertiary education is the enrolment at ISCED level 5B programmes.
Source: UNESCO Institute for Statistics and OECD PISA (2015).

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Ensuring the quality of VET programmes should be priority. All institutions providing courses at upper-secondary VET courses (SENA and tertiary institutions) and the regional secretaries of education have considerable autonomy. The mechanisms for ensuring the quality of technical and vocational programmes are weak. This is a concern given the limited capacity of local governments, secretaries of education and schools in Colombia to assess the quality of programme providers, the ability to build relations with employers and the absence of any information on the labour-market outcomes of secondary-level vocational courses.

A national qualifications framework, currently under development with 10 catologs of qualitifactions already elaborated, should be fully implemented. The national qualifications framework differentiates and classifies distinct qualifications issued by different types of providers. It can help promote greater coherence, transparency and student mobility across all levels of the education system. A well-designed qualifications framework and credit transfer system, with adequate engagement by employers, can help students improve transition to the labour market and to other learning tracks. Such systems could also help to facilitate the re-entry into upper secondary of the large number of students who dropout of the education system and enable the recognition of skills they may have acquired in the workplace. Improvements in assessment and certification would also help to ensure that what students learn in upper-secondary is recognised by tertiary institutions and employers.

Strengthening workplace experience in professional and technical degrees is an important instrument to increase relevance (Box 2.8). The provision of work placements in Colombia is left to the initiative of schools and there is evidence that only few provide students with such opportunities and they are mainly private schools (OECD, 2016[49]).

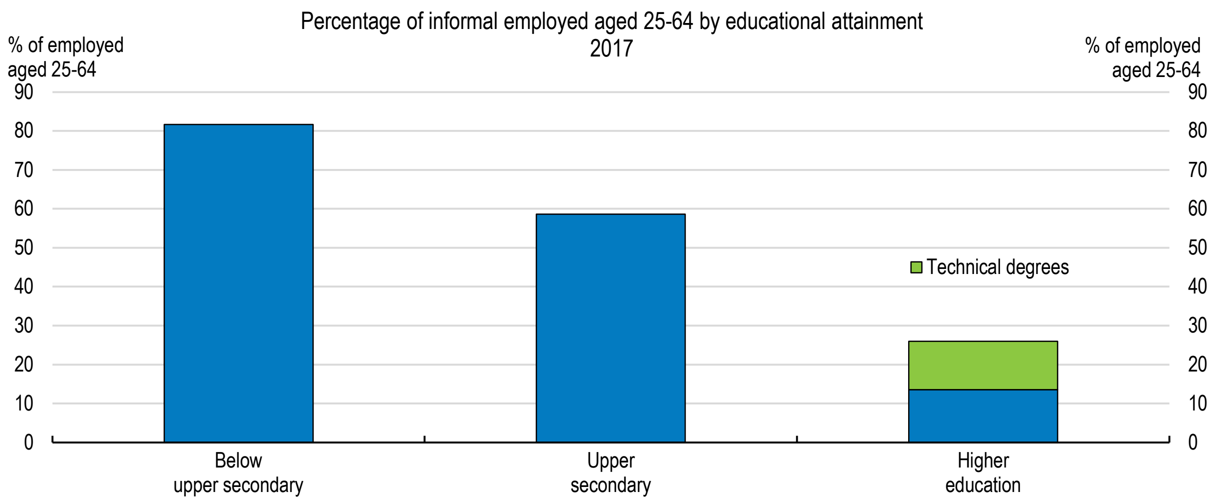
Boosting the relevance of vocational education at higher education

Colombia has seen a dramatic increase in higher education coverage. Gross enrolment rate in tertiary education is around 50%, double that of a decade ago, and 22% of 25-64 year-olds had attained a tertiary-level education. However, attainment is still low compared to the OECD average of 38%. Around half of tertiary students have graduated from vocational tertiary programmes. SENA provides the majority (58%) of technical and technological programmes at the tertiary level, but universities and technical and technological institutes complement the offer.

The government is strengthening VET at higher education by expanding a successful programme, Youth in Action (*Jóvenes en Acción*), to support income generation activities and boost employability for disadvantaged youth. Evidence indicated the programme has good results on employability and earnings (Attanasio et al., 2017[37]; Attanasio, Kugler and Meghir, 2011[58]; Florez et al., 2018[59]). The programme provides monthly allowance for study and living expenses to participate of in-classroom training and on-the-job training to young people between the ages of 16 and 25 in the lowest socioeconomic strata of the population.

Colombian tertiary graduates, including from vocational and technical programmes, are more likely to be in formal employment, which is better paid and more secure, than those who did not progress beyond school (Figure 2.20). Evidence indicates that workers with technical or technological training from SENA are between 7 and 10% more likely to find employment than similar people who have not participated in these programmes (Estacio et al., 2010[60]). However, the net returns to higher education have a large dispersion, being negative for a significant share of students. This means that these students net earnings (after paying for their studies) might have been higher if they had not earned a higher education degree (González-Velosa and Rosas Shady, 2016[61]). This negative result is particularly severe for higher technical degrees that are typically accessed by more disadvantaged students. This is at least partly explained by a disconnection with labour market needs and to the proliferation of low quality programmes and institutions (the so-called "garage universities").

Figure 2.20. Higher education leads to formal jobs



Note: Informal jobs are defined as those not contributing to the pension system. Higher education includes tertiary education and post-secondary non-tertiary education.
Source: OECD calculations using GEIH, DANE.

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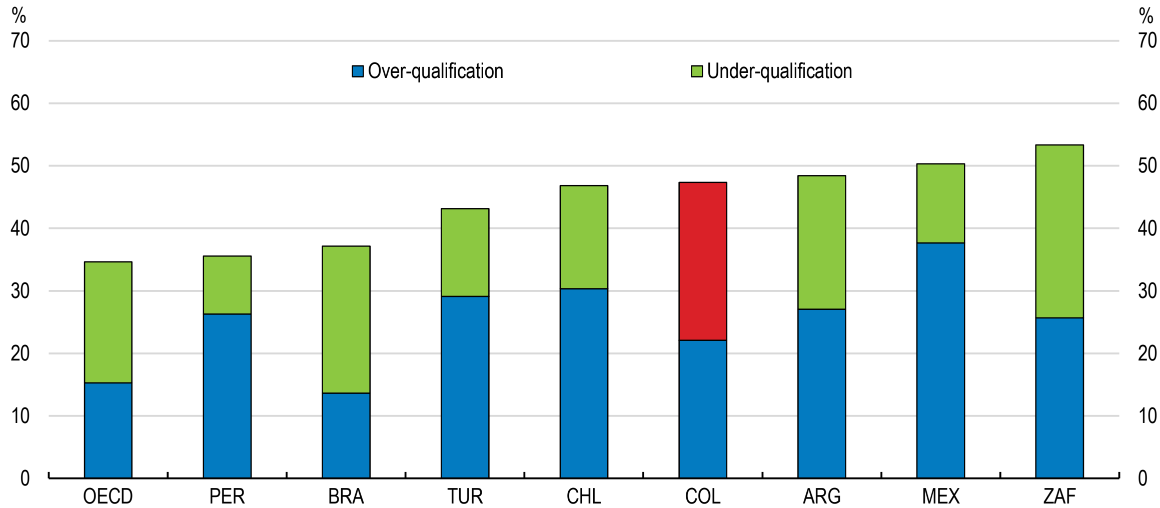
The disconnection of the education offer and labour market needs is evident in the skills and educational mismatch (Figure 2.21), contributing to the high wage inequality. The World Bank Enterprise Survey reveals that, in 2017, 38% of firms identified as a major constraint for operation an inadequately educated workforce, in contrast to 32% in Latin America. Other sources indicate that 65% of firms have problems to find workers with the right competences (OECD, 2018[62]). According to Lora (2015[63]) there is a deficit of higher education VET students, since it is the level of education that shows the greatest gap between supply and demand. Although Colombia has made good efforts in setting up information systems, like the ministry of education's labour market observatory, more accessible job market information and adequate student counselling and mentoring to support students in their decisions would help to increase relevance in their decisions.

Strengthening quality assurance would require to take steps to develop an effective and mandatory accreditation system for all tertiary VET programmes and institutions. Colombia has a quality assurance system based on licensing, registration, and accreditation processes. Licensing and registration is mandatory for all programmes and institutions that are required to meet the minimum standards for their operation. However, the accreditation process, peer-review based, is voluntary. SENA has still considerable autonomy in relation to the national government, although recent systems for accreditation and certification are intended to improve its integration into the tertiary sector. In 2017, only 44 institutions were accredited being only 12 non-universities. Accreditation should also include an assessment of the labour market outcomes of the graduates or take into account any other dimension associated with the relevance of skills in the productive sector.

Figure 2.21. Skill mismatch is high in Colombia

Percentage of mismatched workers



Note: Mismatch is calculated as the share of individuals with a higher (over-qualification) or lower (under-qualification) level of qualification than the modal level in his/her occupation.
Source: OECD (2018), Skills for Jobs database and OECD calculations based on the household survey GEIH, DANE.

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Colombia has recently developed useful tools that help monitor the quality of learning consisting of compulsory standardized tests (SABER-PRO) for higher education graduates. They may also be used to guide the accreditation system. However, information on graduate job performance has been absent from the evaluation and quality assurance processes. Thus, the government often designs policies and allocates public funds without taking into account the labour market relevance of the education projects or their private and social economic returns. This weakness is particularly costly in the case of technical degrees with the objective to train for work, which should be evaluated on their relevance and capacity to generate good quality jobs.

Ser Pilo Paga, an innovative programme has helped increase coverage in higher education among the vulnerable population. The programme provides good students from vulnerable backgrounds with college loans that are forgiven if they complete the degree in any private or public accredited tertiary education institutions. It has been successful in offering incentives for students to stay in high school and graduate. Preliminary results show improvement in the test performance of secondary school students, particularly among students from the lowest socioeconomic backgrounds (Londoño-Velez, Rodriguez and Sánchez, 2017[64]; Alvarez-Rivadulla et al., 2017[65]). Although the programme has been interrupted, more emphasis will be put to promote VET options trough Youth in Action *(Jovénes en Acción*) programme for students from vulnerable backgrounds. There is a need to make sure that good students from vulnerable backgrounds have the incentives to follow up higher education studies.

Strengthening on-the-job and for-the-job learning

Lifelong learning policies should allow vulnerable workers to acquire and maintain relevant skills. Policies to develop skills beyond the formal education system, through on-the-job training, work-based learning, and informal learning schemes are increasingly important. This is especially the case of Colombia, giving the difficulties youth face to find a first high-quality job, and the need of adults to adapt to the changing needs of the job market in terms of the type of skills demanded and provide them with the skills that would allow them to make the transition to a formal job.

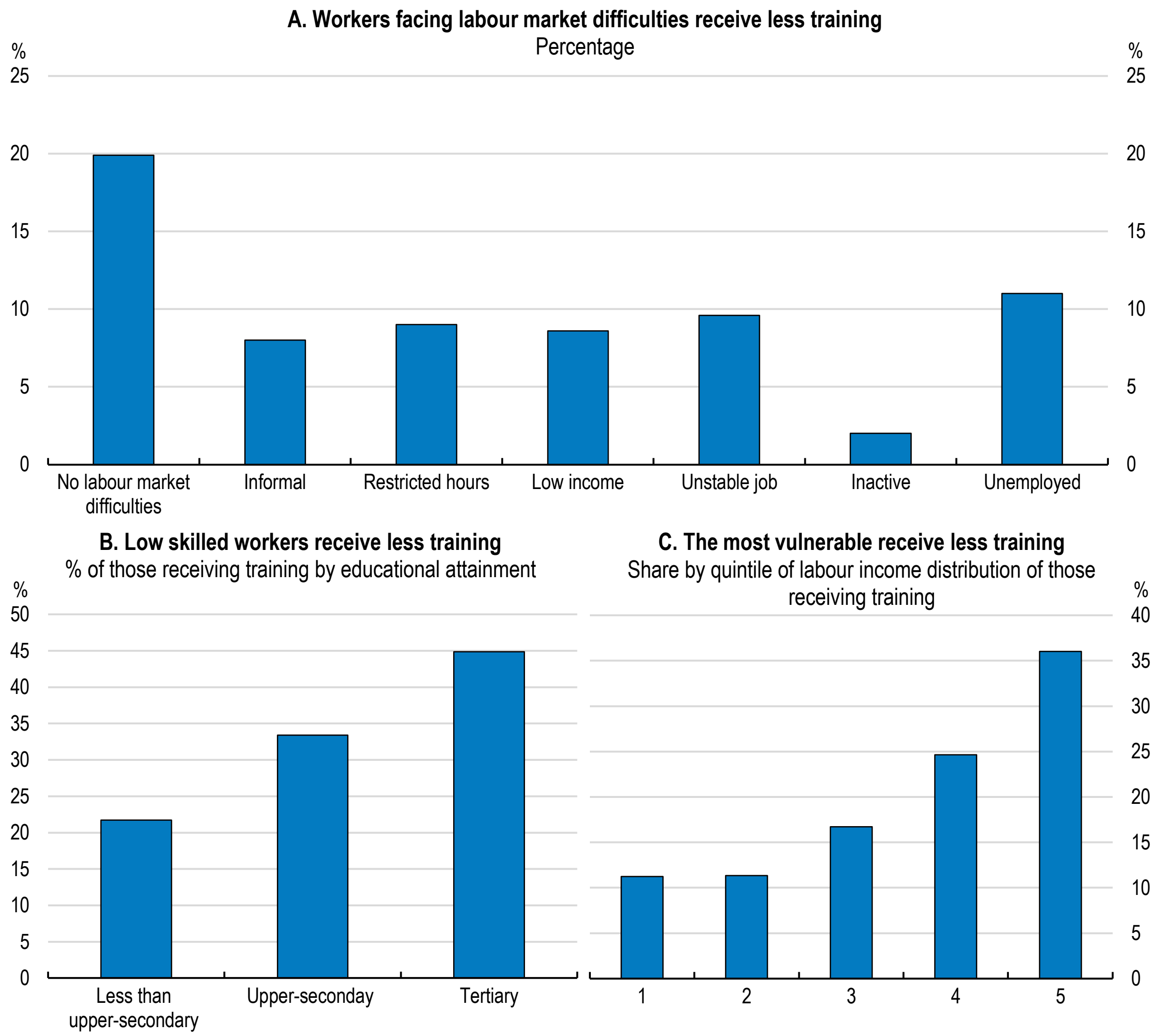
Colombia lacks a lifelong learning system with a clear national regulatory framework and a clear national plan. Most expenditure on training programmes are channelled into job training courses and executed by SENA, which is almost the only institution that reaches the most remote places of the country. The system is formed by: i) short-duration VET programmes (known in Colombia as Formación Complementaria in SENA and education for work and human development in other institutions) to develop, update and recognise individuals' knowledge and skills, ii) training programmes targeted primarily at vulnerable youth (e.g. *Jóvenes en Acción*) and iii) apprenticeships contracts.

The offer of courses by SENA has tripled in the last decade, showing the increased importance the government assigns to skills development. There are 4 400 institutions offering these types of trainings. However, only 9.7% of the working age population received training courses in 2015 and 85% of those were living in urban areas. Publicly funded training programmes are poorly targeted at those who need it most, such as low-skilled workers and those facing labour market difficulties receive the least training (Figure 2.22).

The job-training offer is fragmented and complex, lacks quality certification and shows great heterogeneity in terms of quality and relevance. Colombia offers a multiplicity of diplomas and certifications for training programmes that are not part of a coherent framework of learning pathways (González-Velosa and Rosas Shady, 2016[61]). The offer is not complementary and there is a lack of mechanisms to certify and validate learning in a uniform and coherent way. SENA has an independent financing and regulation scheme, and the quality assurance of a large part of its training offer is different from those applied to the rest of the training providers and is usually not regulated by external organisations. Other institutions offering these type of courses include compensation funds, non-governmental or private organisations, regulated by the Ministry of Education and its regional Secretariats. According to the Information System of Education for Work and Human Development (SIET), the country has 17 630 programmes, of which only 10% have a quality certificate, while from the 3 700 institutions 10% have a valid quality certificate. Fragmentation is a problem for students, who need to make decisions of programmes and for employers, since quality assurance, relevance of the studies and skills recognition remains heterogeneous.

Governance challenges are not unique for Colombia. Common challenges for VET governance in many OECD countries include institutional fragmentation, ineffective involvement of social partners and other non-state stakeholders, weak engagement of regional and local actors. The number of stakeholders VET serves, and the rapid changes to which it needs to adapt, result in a strong imperative for good governance models that ensure effective participation, leadership and coordination. In Colombia, moving towards effective governance, allowing the articulation of the system and establishing unified criteria for evaluation and financing is needed. A national system of quality and relevance assurance using unified criteria for all suppliers would help increase transparency and quality of the system. The training offer should be externally evaluated in terms of relevance and job market performance of its students. This will help to allocate resources in programmes that work best. A systematic assessment of the labour market impact of training programmes is needed. Even if there are some experiences with impact evaluations, rigorous evaluation mechanisms should be implemented to identify what works better for firms as well as workers, particularly in terms of earnings quality and job security.

Figure 2.22. Extending coverage of training courses to the most vulnerable is needed



Note: Year 2017. Unstable jobs are defined as those jobs being not permanent; informal jobs are those not affiliated or contributing to the pension system; jobs with low earnings are those with monthly labour income lower than 50% the minimum wage; and jobs with restricted hours are those with less than 20 working hours a week.
Source: OECD calculations based on GEIH, DANE, for-the-job learning module (2015).

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Box 2.8. Learning from well-performing dual-VET Systems in OECD countries

Some OECD countries such as Austria, Germany and Switzerland benefit from a very well developed vocational education and training (VET) system. In those countries, VET is a common pathway to stable and well paid jobs and it is well appreciated by students, enterprises and governments. It is a way to have skilled workers and avoiding young people failing out of the education system and the labour market. An analysis of their systems brings up four major points. In a first place, there is a strong stakeholder involvement; all parties are participating in the establishment of programmes. Secondly, countries help matching students and apprenticeship places by means of specifics programmes. Thirdly, they also give incentives to firms for hiring trainees. Finally, they monitor apprenticeship places by providing licences and staff training.

Austria, Germany and Switzerland have set up specific organisations to manage the dual-VET system and to make it responsive to labour market needs. Those organisations regroup social partners and VET teachers in order to build a system working for all parties involved. In Austria and Switzerland, social partners are responsible for introducing and updating 'ordinances'. Ordinances usually define the profile of the post, competencies that need to be acquired and set out final examination requirements. In Switzerland, employers are the only one entitled to initiate reforms procedures for VET ordinances. Germany has implemented an "Innovation Circle on VET" where employers, trade unions, academia and regions work together to think about upgrading the VET system.

Career guidance is used to ensure that the VET system is in concordance with labour market needs. It helps students to choose apprenticeships that best suit their interests and which correspond to employer demands. Switzerland has developed a good career guidance system. It is mandatory for students in compulsory secondary education. Counsellors are trained by the Swiss Federal Institute for Vocational Education and Training about VET courses and the associated labour markets in order to be perfectly informed. Career guidance offices are independent from schools.

In order to help apprentices to find a place where to train, countries have developed different strategies. In Germany, the Federal government has concluded an 'Apprenticeship pact' with the Chamber of Commerce and Industry to increase the number of apprenticeship places. They also started a new programme called JOBSTARTER which is supposed, among others things, to help students finding an apprenticeship place. In Switzerland, twice a year, the Link Institute for Market and Social Research conducts a survey for the Federal Office for Professional Education and Technology (OPET), called "apprenticeship barometer", in order to estimate demand and supply for apprenticeships. When there is a mismatch, the OPET takes measures; it finances the set-up of a host company network and takes initiative to help weakest students to find an apprenticeship place. In some sectors, when firms are too small or too specialised to train an apprentice, alliances are created. Firms work together in the training programme. Moreover, funds are developed to share costs of apprenticeships between all companies of a certain sector. In Switzerland, 13 funds have been made mandatory.

Besides, in Austria and Germany, governments provide subsidies or tax reliefs for enterprises participating in apprenticeship schemes to incite companies to take apprentices and for students to benefit from more apprenticeship places. In Austria, there is a tax exemption for training relationship and financial incentive for the creation of additional apprenticeship places per company. Training enterprises receive EUR 1 000 per apprentice and apprenticeship year and a lump-sum for every additional apprentice (EUR 400/month during the first apprentice year, EUR 200/month during the second, EUR 100/month during the third). In Germany, for students who have not found an apprenticeship place by the end of September, who are socially disadvantaged or have a learning disability, an internship programme has been implemented. It covers the intern's wages and social contributions for the company which takes the apprentice on probation for 6 to 12 months.

Quality is assured by a strict monitoring system on companies employing apprentices. In Austria and Switzerland, training firms have to obtain a licence to train apprentices. In Austria, the license is delivered by the Apprenticeship Office. It proceeds, with the help of the Federal Economic Chamber, at an examination of enterprises. In order to obtain the certificate of apprenticeship, enterprises have to fulfil some prerequisites: firms have to carry out the activity in which the apprentice is to be trained, need to be equipped and managed in a way that it is a position to impart to the apprentice all the knowledge and skills included in the occupation profile and have a sufficient number of professionally an pedagogically qualified trainers must be available in the company. In Germany, Austria and Switzerland, trainers in companies have to complete a formation to be allowed to train apprentices.

Source: Learning for Jobs, OECD Reviews of Vocational Education and Training for Austria, Germany and Switzerland.

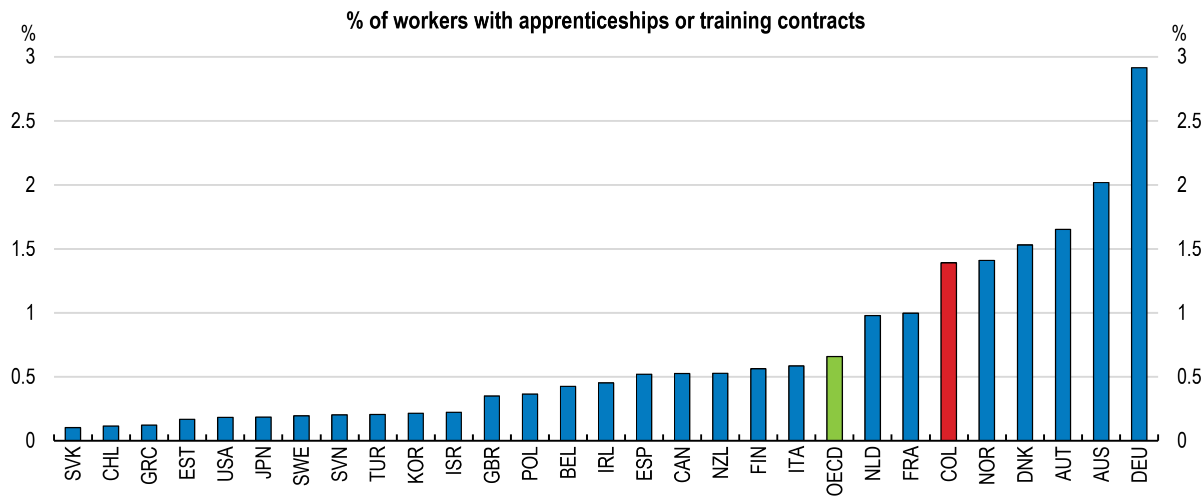
Enhancing apprenticeships

Developing an apprenticeship system would improve youth's opportunities to get better quality jobs (Kuczera, 2017[66]), avoid skill mismatches and enhance productivity (Fazio, Fernández-Coto and Ripani, 2016[67]). Apprenticeships can help young people to maintain the link with the labour market, gain useful work-relevant skills, reduce school dropout rates, improve employment opportunities and have a first formal job (OECD, 2015[34]; Dema et al., 2015[68]). In Brazil, for example, 80% of those who complete apprenticeship programmes find a formal job within two years. Yet, their effectiveness depends on ensuring access to high quality programmes, making apprenticeships valuable to youth and attractive to employers. Some vocational training programmes involving internships, such as *Jóvenes en Acción*, are proving good results on employability and earnings (Attanasio et al., 2017[37]; Attanasio, Kugler and Meghir, 2011[58]; Florez et al., 2018[69]), and including apprenticeships as part of the on-the-job training could help strengthen the positive impact.

Colombia has an incipient system of apprenticeship. Law regulates apprenticeships contracts combining on-the-job and off-the-job training. Firms of at least 15 employees need to hire an apprentice for every 20 employees or pay a fee to finance an entrepreneurship fund (equal to 5% of the total number of full-time employees times the value of the minimum wage). The law stipulates that the apprentice should receive a living stipend of approximately 50% of the minimum wage during the classroom-training phase and 75% of the minimum wage if the national unemployment rate is above 10%, and 100% of the minimum wage if the unemployment rate is below 10% during the on-the-job training phase. In the case of university students, the law states that they should always receive at least 100% of the minimum wage. In other OECD countries apprentices' wages can be between 25% and 60% of wage of skilled workers and tend to vary largely across sectors and increase over the duration of the apprenticeship programme (Kuczera, 2017[66]).

The apprenticeship system is developed (Figure 2.23) with 345 thousand apprenticeships contracts signed and 31 thousand firms hiring in 2016 (SENA, 2017[70]). SENA is in charge of providing the technical training. A number of governance issues could be improved. There are no mechanisms to ensure the quality of training and regulate it in terms of content and learning objectives. A national system of control and monitoring of the training provided by firms, the crucial element of the apprenticeship contract, needs to be set up. It is also key to develop an assessment and industry recognised certification of acquired competencies/qualifications. Also, offering the possibility to link it to formal education creating a dual-VET system (at upper-secondary and tertiary education) can increase work-based learning in formal education while making it more relevant for youth and employers, as done in other OECD countries (Box 2.8). Necessary resources could come from reallocation of resources from ill-targeted benefits for households and firms, pro-growth reforms and a rebalancing of the tax-mix (see Key Policy Insights chapter).

Figure 2.23. The apprenticeship system is well developed in Colombia



Source: OECD calculations using PIAAC (2012, 2015). For Colombia, data come from "Reporte de datos de formación profesional en Colombia" from SENA.

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Engaging small and medium-sized firms is key to increase apprenticeship opportunities. SMEs can be sensitive to the risks of engaging in this form of training, especially if they are unsure of what will be expected of them in the course of training an apprentice, or whether they will be able to retain the apprentice post-training. SMEs may need not only financial incentives, but also a supportive business environment offering practical assistance. To create such an environment, a coordinated strategy involving all stakeholders in a sector or community is paramount. A good example is the Australia's group training organisations (GTOs). GTOs recruit apprentices and sign the apprenticeship contract and place apprentices into host employers. It is attractive to SMEs as the administrative costs are reduced. GTOs also provide additional services such as broking vacancies for apprenticeship and candidates and reviewing the quality of training (OECD, 2016[71]).

Getting skills right

Improving labour market information on skill needs and ensuring that this information is used effectively to develop the right skills across formal and complementary education and training policies is paramount to increase relevance of the educational offer and reduce skills mismatches and shortages. This can be done by promoting skills assessment and anticipation (SAA) exercises. Typically, the results of assessment and anticipation exercises produce information on where (i.e. in what economic sectors, occupations, or geographic areas) and when (i.e. now, in the future, or both) the demand and supply of skills are (mis)aligned. It is useful for policy makers to steer policy action (e.g. in education, employment, and migration policy areas), and by individuals (e.g. students and jobseekers) to support their employment or education choices. In particular, it could be used to link formal and complementary education and training to the needs of the labour market.

Colombia has 85 sectoral round-tables (*mesas sectoriales*) including employers representatives. However, there is no clear evidence that the work of these roundtables feeds the development of courses (González-Velosa and Rosas Shady, 2016[61]). There are no national level exercises and the existing exercises rely on the analysis of labour market statistics. Colombia should develop a national and better-integrated skills assessment and anticipation exercise and use it to inform education, employment, and migration policy as well as students and jobseekers. This would help, particularly training systems and technical education, to become more attuned to employers' skill needs.

Box 2.9. Main recommendations for fostering good jobs for all in Colombia

Key recommendations for boosting formality

- Establish a comprehensive strategy to reduce the cost of formalisation by:
  - Reducing non-wage labour costs;
  - Reviewing the minimum wage to achieve a more job-friendly level;
  - Reducing firms' registration costs and simplifying the registration of workers.

Other recommendations:

- Enhance the benefits of formality by avoiding the use of formal workers' contributions to finance social services for non-affiliates.

Ensuring effective labour law enforcement

- Ensure sufficient resources to the labour inspectorate and improve its presence in rural areas.
- Stimulate social dialogue and effective collective bargaining to provide a voice to workers.
- Ensure prosecution of crimes against trade unionists.

Ensuring adequate support for workers

- Restrict the withdrawal from the funds of individual severance accounts or increase the minimum savings level to ensure unemployment insurance.
- Implement systematic impact assessments of active labour market programmes to focus funding on those that are performing well.

Promoting gender equity

- Promote shared mother and father parental leaves together with incentives to allow fathers to take parental leave.
- Increase affordable, good-quality childcare.

Promoting skills development

- Reduce fragmentation and improve the governance in vocational education and training by developing a single institutional framework with a clear national objective and regulatory framework.
- Fully implement the national qualification framework.
- Develop a mandatory accreditation system for all tertiary vocational education and training programmes and institutions.
- Develop work-based learning programmes based on apprenticeships across all levels of education and training.
- Foster the creation of group training organisations for SMEs.

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Annex 2.A. The OECD Jobs Strategy dashboard

Annex Table 2.A.1. Dashboard for labour market performance

Panel A. Dashboard of job quantity, job quality and inclusiveness

	Quantity			Quality			Inclusiveness		
	Employment	Unemployment	Broad labour underutilisation	Earnings quality	Labour market insecurity	Quality of working environment	Low-income rate	Gender labour income gap	Employment gap for disadvantaged groups
	Share of working-age population (20-64 years) in employment (%) (2017)	Share of persons in the labour force (15-64 years) in unemployment (%) (2017)	Share of inactive, unemployed or involuntary part-timers (15-64) in population (%), excluding youth (15-29) in education and not in employment (2016)	Gross hourly earnings in USD adjusted for inequality (2015)	Expected monetary loss associated with becoming and staying unemployed as a share of previous earnings (%) (2016)	Share of workers experiencing job strain (%) (2015)	Poverty rate after taxes and transfers, poverty line 50%, working-age population (18-64) (%) (2015)	Difference between average annual earnings of men and women divided by average earnings of men (%) (2015)	Average employment gap as a percentage of the benchmark group (prime-age male workers) (2016)
			OECD countries						
Iceland	87.2	2.9	12.6	22.7	2.2	23.8	6.5	35.3	9.2
Switzerland	82.1	5.0	18.3	28.4	1.7	..	6.4	48.3	14.6
Sweden	81.8	6.8	19.5	20.3	3.8	23.6	8.4	25.6	13.3
New Zealand	81.3	4.9	21.4	16.8	4.4	21.6	9.7	..	17.7
Japan	80.3	3.0	24.0	16.1	1.6	31.2	14.5	57.7	24.7
Germany	79.2	3.8	21.0	25.0	1.9	28.5	10.0	42.6	20.2
Estonia	78.7	5.9	21.9	7.5	5.2	23.0	12.9	30.4	22.1
Czech Republic	78.5	2.9	20.7	9.0	1.8	25.4	5.8	44.3	30.3
Norway	78.3	4.3	19.2	29.0	1.9	13.8	9.3	35.0	16.0
United Kingdom	78.1	4.5	23.5	17.7	2.7	20.7	10.1	42.6	22.9
Netherlands	78.0	4.9	22.9	28.7	1.9	23.4	8.8	46.2	22.2
Denmark	76.9	5.9	21.0	29.8	3.1	18.2	7.0	29.8	16.7
Canada	76.3	6.4	26.0	19.6	3.8	..	14.1	38.7	19.3
Lithuania	76.0	7.3	23.5	7.5	..	30.8	14.7	26.9	17.6
Australia	76.0	5.8	28.5	21.9	3.8	25.6	10.2	41.5	21.4
Israel	75.5	4.3	24.0	8.7	3.5	25.1	14.3	..	14.6
Austria	75.4	5.6	25.4	23.0	2.6	28.5	8.7	47.8	21.6
Latvia	74.7	8.9	26.8	6.4	..	30.3	13.0	24.9	17.7
Finland	74.3	8.8	26.6	21.2	2.0	16.3	6.8	21.4	18.6
United States	73.6	4.4	25.7	17.7	3.7	25.8	15.5	39.5	25.4
Slovenia	73.4	6.7	27.6	14.2	3.5	31.8	8.7	22.8	27.4
Portugal	73.4	9.2	29.8	8.7	7.0	33.2	12.3	29.0	22.0
Hungary	73.3	4.2	26.8	7.2	3.2	36.4	10.0	29.3	33.6
Ireland	72.7	7.0	33.5	19.3	3.1	23.9	9.9	39.9	26.3
Korea	71.6	3.8	..	9.9	2.4	..	8.5	61.0	31.8
Luxembourg	71.5	5.5	27.5	28.8	2.2	23.1	10.9	31.9	24.0
Slovak Republic	71.1	8.2	29.7	8.8	6.4	32.0	7.6	31.7	33.5
France	71.0	9.2	32.7	21.9	4.4	25.8	8.3	34.6	27.8
Poland	70.9	5.0	29.4	7.6	4.0	30.0	11.0	35.5	31.5
Chile	69.1	7.0	33.2	6.6	7.1	28.2	14.2	46.4	27.5
Belgium	68.5	7.1	30.0	29.3	2.4	25.8	9.5	33.3	30.0
Mexico	66.6	3.6	..	4.6	4.0	28.9	13.9	54.5	40.4
Spain	65.5	17.3	39.3	17.5	17.5	35.0	15.9	34.0	27.5
Italy	62.3	11.4	42.9	19.1	10.7	29.6	14.7	44.3	34.0
Greece	57.8	21.7	44.8	10.0	22.7	47.9	16.0	49.1	38.2
Turkey	55.3	11.2	44.2	5.8	13.0	42.9	13.5	..	47.1
OECD	72.1	5.9	27.2	16.6	4.9	27.6	10.9	38.1	24.7
Non-OECD countries									
Colombia	73.1	9.7	30.2	3.7	11.0	..	..	42.5	34.3
Costa Rica	66.6	9.2	37.8	5.5	7.2	..	17.5	48.5	44.9
Argentina	69.0	8.5	36.2	7.4	7.5	..	..	45.1	38.8
Brazil	65.9	13.0	32.7	4.8	6.6	..	17.3	48.2	39.2
China	79.0	2.9	..	..	5.8	28.9	26.0	..	32.0
India	59.5	3.7	..	2.7	3.6	30.7	17.1	78.1	50.1
Indonesia	72.6	5.6	29.6	1.6	8.2	..	..	62.7	40.1
Russian Federation	74.9	5.2	23.3	6.8	5.1	33.4	12.8	33.2	35.4
Saudi Arabia	60.0	5.7	..	..	..	..	..	..	..
South Africa	49.8	27.4	50.2	2.5	22.6	26.7	23.9	50.1	50.3

Above average performers (Top-third)	About average performers (Mid-third)	Below average performers (Bottom-third)

Panel B. Framework conditions for resilience and adaptability

	Resilience	Adaptability										
	Unemployment cost of a decline in GDP	Labour productivity growth		Ability of productive firms to attract workers		Wage-productivity decoupling		Adult skills: low-skilled adults	Student skills	Non-standard workers	Regional disparities	
	Average increase in unemployment rate over 3 years after a negative shock to GDP of 1%	Average annual labour productivity growth		Cross-firm employment growth differential associated with 10 pp productivity differential (%)		Difference between annual real median wage growth and labour productivity growth		Share of adults with numeracy skills below level 2 in PIAAC	Share of 15-year-olds not in secondary school or scoring below Level 2 in PISA (%)	Share of Own-account self-employed and temporary workers in total employment (%)	Coefficient of variation in regional unemployment rates (%)	
	2000-16	2000-16	2010-16	2003-13	2010-13	2000-13	2010-13	2012, 2015	2015	2013	2000	2016
OECD countries												
Iceland	0.1	1.5	1.4	..	..	..	..	..	28.8	20.6	15.0	22.3
Switzerland	0.4	0.4	-0.1	0.1	0.1	..	..	..	19.0	18.7	23.6	31.7
Sweden	0.3	1.3	0.9	0.2	0.3	0.4	1.9	14.7	25.9	19.0	30.9	12.2
New Zealand	0.4	0.7	0.9	..	..	0.3	-0.4	18.9	29.3	.	19.2	24.3
Japan	0.2	0.7	0.6	0.3	0.4	-0.5	0.5	8.1	15.4	20.2	18.6	13.9
Germany	0.4	0.6	0.7	0.8	0.9	-0.4	0.1	18.4	20.6	18.1	51.7	30.1
Norway	0.2	0.5	0.5	0.6	0.5	-0.5	-0.0	14.6	24.3	11.8	20.5	16.7
United Kingdom	0.4	0.8	0.7	0.1	-0.0	-0.2	-1.0	24.2	34.4	16.1	28.9	20.2
Denmark	0.6	0.6	0.8	0.1	0.2	0.1	0.8	14.2	23.1	13.6	13.0	6.6
Netherlands	0.4	0.7	0.8	1.1	0.3	-0.7	..	13.2	20.8	25.9	26.5	20.0
Czech Republic	0.3	2.1	1.2	..	..	0.3	0.3	12.9	26.8	21.2	42.9	36.2
Estonia	0.7	2.8	1.2	0.4	0.4	..	..	14.3	17.6	8.4	26.2	38.5
Canada	0.5	0.6	1.0	..	..	-0.6	-0.5	22.4	28.5	21.2	42.3	29.3
Australia	0.4	1.0	1.3	..	..	-1.0	0.9	20.1	29.3	32.1	39.7	46.0
Israel	0.6	0.7	0.8	..	..	-0.6	..	30.9	36.4	.	15.1	17.3
Austria	0.1	0.4	0.2	0.7	0.7	-0.0	0.4	14.3	34.8	15.4	32.8	46.3
Finland	0.2	0.6	0.1	0.2	0.3	1.0	0.7	12.8	15.9	21.8	62.2	13.1
Latvia	0.8	3.9	2.5	0.5	0.3	..	..	..	30.2	.	23.6	40.7
United States	0.7	1.3	0.5	0.5	0.7	-1.5	-1.0	28.7	41.0	.	23.9	21.1
Hungary	0.3	1.7	0.1	0.4	0.3	-0.6	-0.3	..	35.5	15.9	34.8	43.9
Korea	0.2	2.5	1.3	0.3	0.5	-1.1	0.8	18.9	22.5	32.7	23.7	20.1
Portugal	0.3	0.8	0.3	0.2	0.3	0.5	-1.2	..	33.2	31.0	36.0	15.0
Luxembourg	0.1	0.0	0.3	0.1	0.0	..	..	..	35.0	11.9	..	..
France	0.4	0.6	0.6	0.3	0.4	0.7	0.9	28.0	30.4	20.8	35.7	17.2
Slovenia	0.3	1.0	0.9	0.2	0.1	..	..	25.8	22.2	18.6	22.7	15.9
Ireland	0.3	3.0	5.5	0.1	0.1	-1.1	-3.1	25.2	18.0	19.5	26.5	13.6
Slovak Republic	0.5	3.1	1.5	..	..	-0.8	0.5	13.8	35.5	22.3	41.6	38.5
Poland	0.6	2.7	2.3	0.2	0.5	-1.3	-2.0	23.5	24.7	37.4	20.0	24.8
Chile	0.3	1.4	1.2	..	..	..	..	61.9	59.6	.	31.3	25.2
Belgium	0.3	0.6	0.4	0.1	-0.0	-0.3	0.9	13.4	25.7	16.9	54.8	56.1
Mexico	0.2	0.2	1.3	..	..	..	..	..	73.2	.	29.6	28.7
Spain	0.9	0.7	0.9	0.5	0.4	0.5	-0.6	30.6	29.3	32.1	35.9	28.9
Italy	0.5	-0.4	-0.4	0.4	0.3	1.0	-0.4	31.7	38.4	27.9	73.6	46.8
Greece	0.8	0.2	-1.0	0.2	0.6	1.4	-1.4	28.5	41.5	35.6	26.3	19.7
Turkey	0.2	2.6	2.6	..	..	..	..	50.2	66.0	30.2	42.0	50.3
Lithuania	0.5	4.2	2.0	..	..	..	..	17.4	32.7	..	13.1	29.6
OECD countries	**0.4**	**1.3**	**0.8**	**0.3**	**0.3**	**-0.2**	**-0.1**	**22.5**	**31.3**	**22.0**	**31.6**	**27.4**
Non-OECD countries							..			..		..
Colombia	0.2	1.9	1.7	..	..	..	..	..	74.8	..	29.7	21.9
Costa Rica	0.6	2.1	2.7	..	..	..	..	..	76.2	..	..	..
Argentina	..	0.7	-0.3	..	..	..	..	..	75.9	..	..	..
Brazil	0.3	1.5	-0.2	..	..	..	..	..	79.0	..	33.7	33.6
China	0.0	2.1	2.0	..	..	..	..	..	46.2	..	53.9	..
India	..	6.5	5.6	..	..	..	..	..	..	..	..	..
Indonesia	..	3.6	3.8	..	..	..	..	..	78.6	..	..	..
Russia	0.1	2.8	0.6	..	..	..	..	..	22.8	..	38.2	63.2
Saudi Arabia	..	-1.8	-2.7	..	..	..	..	..	..	..	..	..
South Africa	0.3	0.6	-0.3	..	..	..	..	..	..	..	14.0	20.0

Notes: Panel A: Countries are ordered in descending order by the employment rate. Dark blue stands for better performance, light blue for worse one. Youth, aged 15-29 years, in education and not in employment are excluded from both the numerator and the denominator of broad labour underutilisation. The groups considered in the last columns are youth, older workers, mothers with children, people with disabilities and non-natives. Data on job quantity refer to 2017 (2016 for broad labour utilisation) except for China (2010), India (2011-12) and Saudi Arabia (2016). Data on earnings quality refer to 2015, except for Argentina, Japan and the Russian Federation (2013) and India (11-12). Data on earnings quality for non-OECD countries are provisional estimates. Data on labour market insecurity refer to 2016 except for Israel (2015) and non-OECD countries (2013). Data for job strain are preliminary estimates for 2015. Data on low-income rate refer to 2015 except for Costa Rica, Finland, Israel, Latvia, the Netherlands, Sweden and the United States (2016); Australia, Hungary, Iceland, Mexico and New Zealand (2014); Brazil (2013); Japan (2012), China, India and Russia (2011). Data on labour income gap per capita refer to 2015 except for Argentina, Chile, Colombia, Indonesia and the United States (2016); Canada, Iceland, Ireland, Italy, Luxembourg, the Russian Federation and Switzerland (2014); Korea (2013) and India (2011-12).

Panel B: OECD unweighted average. Resilience: The indicator of labour market resilience measures the estimated average increase in the unemployment rate over the 3 years following a 1% decline in GDP. The indicator is obtained from estimating the following model: $U_{t+s} - U_{t-1} = \beta_0^s + \beta_1^s dlnGDPV_t + \beta_2^s dU_{t-1} + \beta_3^s dlnGDPV_{t-1} + \beta_4^s dU_{t-2} + \beta_5^s dlnGDPV_{t-2} + \sum_{j=1}^{s} \beta_4^j \, dlnGDP_{t+j} + \varepsilon_{t+s}$, where U_t is the unemployment rate, $GDPV_t$ is real GDP in period t and s indicates the number of periods after the GDP shock. The model is estimated separately for each country and each s, with the estimated β_1^s denoting the impulse-response function of unemployment to a 1% increase in GDP. The average change in unemployment is computed as the average of β_1^s over the 3 years following a 1% reduction in GDP. Data refer to the period 2000-2016 for all countries. Labour productivity growth: Labour productivity is measured in per worker terms. Data refer to the period 2000-2016 for all countries except Colombia (2001-2016). Ability of productive firms to attract workers: The efficiency of labour re-allocation measures the elasticity of firm-level employment growth to lagged labour productivity. The baseline estimated equation is: $\Delta lnL_{i,j,c,t} = \sum_{c=1}^{26} \beta_c \, C_c lnLP_{i,j,c,t-1} + \theta x'_{i,j,c,t-1} + \gamma_{jct} + \varepsilon_{ijct}$, where $\Delta lnL_{i,j,t}$ denotes employment growth in firm i, industry j and country c; C_c are country dummies; $lnLP_{i,j,c,t-1}$ is labour productivity in gross output terms; $x_{i,j,t-1}$ are employment and age of the firm; and γ_{jct} are industry-country-year fixed effects to control for unobserved time-varying country-industry specific determinants of employment growth. The country-specific β_c parameters provide a measure of dynamic allocative efficiency. Data refer to the period 2003-13 for all countries except Portugal (2006-2008) and Hungary (2009-2013). To control for effects of the business cycle on the efficiency of labour re-allocation, over the sample period 2003-2013 the baseline specification is augmented with an interaction term of lagged labour productivity with a dummy variable taking the value 1 if the lagged change in the output gap is below 0. Countries omitted from the table do not have sufficient coverage of firms in the ORBIS dataset. Wage-productivity decoupling: The indicator of decoupling measures the percentage point difference between real median wage growth and labour productivity growth. Using the notation $\Delta\% \, X$ to denote the per cent growth rate of X, macro-level decoupling is defined as follows: $Decoupling \equiv \Delta\% \left(\frac{W^{med}}{P^Y}\right) - \Delta\% \left(\frac{Y/P^Y}{L}\right)$, where W^{med} denotes the nominal median wage, Y denotes nominal value added, P^Y denotes the value added price and L denotes hours worked. Data refer to the period 2000-2013 for all countries except Australia, Canada, France, Italy New Zealand, Poland, Spain and Sweden (2000-2012); Greece and Portugal (2004-2013); Israel (2001-2011); the Slovak Republic (2001-2012). Low skills adults: Data refer to 2012 for all countries except Chile, Greece, Israel, Lithuania, New Zealand, Slovenia, Turkey and Jakarta (Indonesia). Data for Belgium refer to Flanders; data for the United Kingdom are the weighted average (2/3 and 1/3) of the data for England and the Northern Ireland; data for Indonesia refer to Jakarta. Low-performing students in mathematics: Data for China refer to Beijing-Shanghai-Jiangsu-Guangdong. Argentina: Coverage is too small to guarantee comparability. Non-standard workers: Workers on temporary contracts and self-employed (own account) workers aged 15-64, excluding employers, student workers and apprentices. Regional disparities: Data refer to the Territorial Level 2 (TL2) classification except for Australia, Estonia, Latvia and Lithuania (TL3), and to 2000 and 2016 except for Denmark (2007, 2016); Estonia, Chile, Israel., Mexico and Russia (2000, 2014); Spain (2002, 2014); Latvia and Lithuania (2000, 2015); Slovenia (2001, 2016); Turkey (2004, 2016); Brazil (2004, 2013); China (2008); Colombia (2001, 2014) and South Africa (2008, 2014).

Sources: Panel A: Chapter 1 of the 2016 OECD Employment Outlook, Chapter 1 of the 2017 OECD Employment Outlook, Chapter 1 of the 2018 OECD Employment Outlook, OECD Employment Database, OECD Job Quality Database and OECD Income Distribution Database.

Panel B: Resilience: OECD calculations based on OECD Employment Outlook 2017, http://dx.doi.org/10.1787/empl_outlook-2017-en; Labour productivity growth: OECD Economic Outlook database and WEO - IMF data; Wage-productivity decoupling: OECD calculations based on OECD National Accounts Database and OECD Earnings Database; Ability of productive firms to attract workers: OECD calculations based on the 2013 ORBIS vintage; Low-skilled adults: OECD (2016), Skills Matter: Further Results from the Survey of Adult Skills, http://dx.doi.org/10.1787/9789264258051-en; Low-performing students in mathematics: OECD (2016), PISA 2015 Results (Volume I): Excellence and Equity in Education, http://dx.doi.org/10.1787/9789264266490-en. Non-standard workers: OECD (2015), In It Together - Why Less Inequality Benefits All, http://dx.doi.org/10.1787/9789264232662-en. Regional disparities: OECD (2018), OECD Regional Statistics Database, https://dx.doi.org/10.1787/region-data-en.

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Volume 2019/17
October 2019

OECD*publishing*
www.oecd.org/publishing

ISSN 0376-6438
2019 SUBSCRIPTION
(18 ISSUES)

ISBN 978-92-64-65664-2

9 789264 656642