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BETTER POLICIES FOR BETTER LIVES

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Table of contents

Thematic chapters

Boxes

Tables

Figures

This Survey was prepared in the Economics Department by Eduardo Olaberría and Christine de la Maisonneuve, under the supervision of Piritta Sorsa. Statistical research assistance was provided by Pedro Herrera with general administrative assistance provided by Raquel Páramo and Anthony Bolton. The Survey also benefitted from contributions at different stages by Dorothee Allain-Dupre, Bert Brys, Valerie Frey, Sarita Gomez, Laura Heras Recuero, Apolline Jaoui, Thomas Manfredi, Paul O'Brien and Anna Pons.

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BASIC STATISTICS OF COLOMBIA, 2015

(Numbers in parentheses refer to the OECD average)*

LAND, PEOPLE AND ELECTORAL CYCLE

Population (million)	48.2		Population density per km^2	42.2	(35.1)
Under 15 (%)	26.7	(18.0)	Life expectancy (years)[b]	74.1	(80.5)
Over 65 (%)	7.5	(16.3)	Men	70.5	(77.8)
			Women	77.7	(83.1)
Latest 5-year average growth (%)	1.2	(0.6)	Latest general election	June 2014	

ECONOMY

Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	292		Primary sector	6.9	(2.5)
In current prices (billion COP)	801		Industry including construction	31.9	(26.4)
Latest 5-year average real growth (%)	4.6	(1.7)	Services	61.2	(71.1)
Per capita (000 USD PPP)	14.0	(40.1)			

GENERAL GOVERNMENT

Per cent of GDP

Expenditure	37.4	(41.9)	Gross financial debt (2014)[c]	44.3	(115.9)
Revenue	34.3	(39.0)	Net financial debt (2014)[c]	33.8	(76.2)

EXTERNAL ACCOUNTS

Exchange rate COP per USD	2744.51		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	1185.03		Mineral fuels, lubricants and related materials	52.8	
In per cent of GDP			Food and live animals	14.2	
Exports of goods and services	14.7	(28.9)	Chemicals and related products, n.e.s.	9.6	
Imports of goods and services	24.2	(28.7)	Main imports (% of total merchandise imports)		
Current account balance	-6.44	(0.1)	Machinery and transport equipment	36.8	
Net international investment position	-43.9		Chemicals and related products, n.e.s.	18.6	
			Manufactured goods	14.0	

LABOUR MARKET, SKILLS AND INNOVATION

Employment rate for 15-64 year-olds (%)	67.6	(66.2)	Unemployment rate, Labour Force Survey (age 15 and over) (%)	9.2	(7.0)
Men	79.9	(74.1)	Youth (age 15-24, %)	17.7	(14.0)
Women	55.9	(58.5)	Long-term unemployed (1 year and over, %)	0.6	(2.2)
Participation rate for 15-64 year-olds (%)	74.5	(71.3)	Tertiary educational attainment 25-64 year-olds (%)	21.6	(35.0)
Average hours worked per year	2 194	(1766)	Gross domestic expenditure on R&D (% of GDP, 2014)[c]	0.2	(2.4)

ENVIRONMENT

Total primary energy supply per capita (toe, 2014)	0.7	(4.1)	CO_2 emissions from fuel combustion per capita (tonnes, 2013)[b]	1.4	(9.5)
Renewables (%, 2014)	23.5	(9.6)	Water abstractions per capita (m^3, 2012)[c]	773	(819)
Fine particulate matter concentration ($PM_{2.5}$, µg/m^3, 2013)[b]	12.6	(14.0)	Municipal waste per capita (kilogrammes, 2012)[c]	186	(516)

SOCIETY

Income inequality (Gini coefficient)[a]	0.522	(0.3)	Education outcomes (PISA score, 2015)		
Relative poverty rate (%)[a]	27.8	(10.9)	Reading	425	(493)
Public and private spending (% of GDP)			Mathematics	390	(490)
Health care, current expenditure (2014)	7.2	(9.0)	Science	416	(493)
Pensions[b]	5.0	(9.1)	Share of women in parliament (%)	19.9	(28.6)
Education (primary, secondary, post sec. non tertiary, 2012)[a]	4.5	(3.7)	Net official development assistance (% of GNI)	-0.34	0.38

Better life index: *www.oecdbetterlifeindex.org*

a) 2012 for the OECD aggregate.
b) 2013 for the OECD aggregate.
c) 2014 for the OECD aggregate.
* 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.

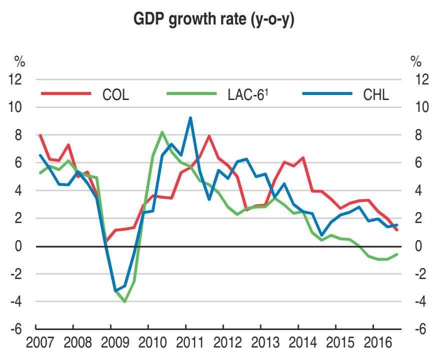
Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, International Monetary Fund and Inter-Parliamentary Union,Unesco Institute for Statistics, International Labour Organization, DANE and Ministerio de Hacienda y Crédito Público de Colombia.

Executive summary

- *The economy has been more resilient than other Latin American countries to the commodity shock*
- *Making growth more inclusive and raising productivity*
- *The business environment has improved but productivity growth is low with wide regional differences*

The economy has been more resilient than other Latin American countries to the commodity shock

GDP growth rate (YOY)



1. LAC-6: ARG, BRA, CHL, COL, MEX and PER. Weighted average based on GDP in 2011 constant PPPs.

Source: *OECD Economic Department Database* and the IMF World Economic Outlook Database.

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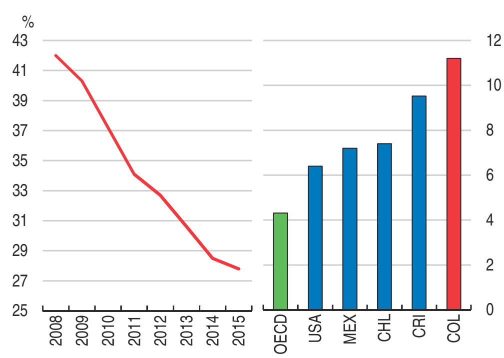
Growth has been among the strongest in the region, reflecting the flexible exchange rate and inflation targeting monetary policy, and fiscal rules. The effects of the fall in global commodity prices were borne by a rise in the fiscal deficit limited by the fiscal rule and a large depreciation of the exchange rate. Monetary tightening ensured that the second round effects of the depreciation and climate-related (*El Niño*) price rises did not feed through into an inflationary spiral. The comprehensive tax reform of December 2016 will help the economy adjust to lower oil prices and reduce the dependence of the budget on oil revenues. Higher tax revenues would increase the scope for redistributive policies to reduce inequality and sustain public investment.

Making growth more inclusive and raising productivity

Economic growth needs to be more inclusive



1. For the OECD, data refer to the average of OECD countries' latest available figures. For Chile, data refer to 2013. The P90/P10 ratio is the ratio of income of the 10% of people with highest income to that of the poorest 10%.

Source: DANE, OECD and SEDLAC (CEDLAS and The World Bank).

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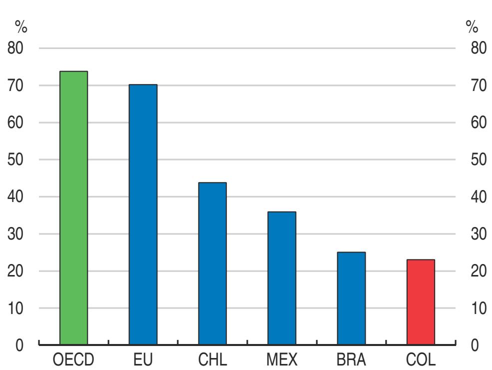
Strong growth and welfare programmes to the most vulnerable groups have substantially reduced poverty. Lower taxes and fees on wages have brought more people to better quality formal jobs, thereby raising both productivity and inclusiveness. Health coverage is universal. Productivity and job opportunities have also been enhanced by recent reforms facilitating the opening of business, obtaining construction permits, registering property and paying taxes. However, productivity growth is low and the gap between rich and poor among the highest in Latin America. Informality and gender gaps remain high, and social mobility low. Years of armed conflict, stringent local regulations and distortions in the tax system have created disparities in productivity and access to basic services across regions.

GDP per person employed as percentage of the US, constant 2010 PPPs, 2015



Note: For the OECD, data refer to 2014.

Source: OECD, *Productivity Statistics Database*, January 2017.

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Further simplifying procedures for company registration and the affiliation of workers to social security, improving labour market programmes, expanding early childhood education, and raising education quality would boost inclusion, social mobility and living standards. Greater and more affordable child, elderly and disability care would open the job market to more women. Colombia needs to increase the redistribution of income through the tax and transfer system. Raising productivity will be fundamental to continued increases in living standards for all Colombians, and will require better job opportunities in poorer regions and higher public investment to improve infrastructure and lower costs of trade. Better incentives for firms to invest on R&D and stronger links between the business sector and research institutions would foster innovation. In some sectors such as rail, electricity and roads, greater competition and less regulation are needed to support private investment.

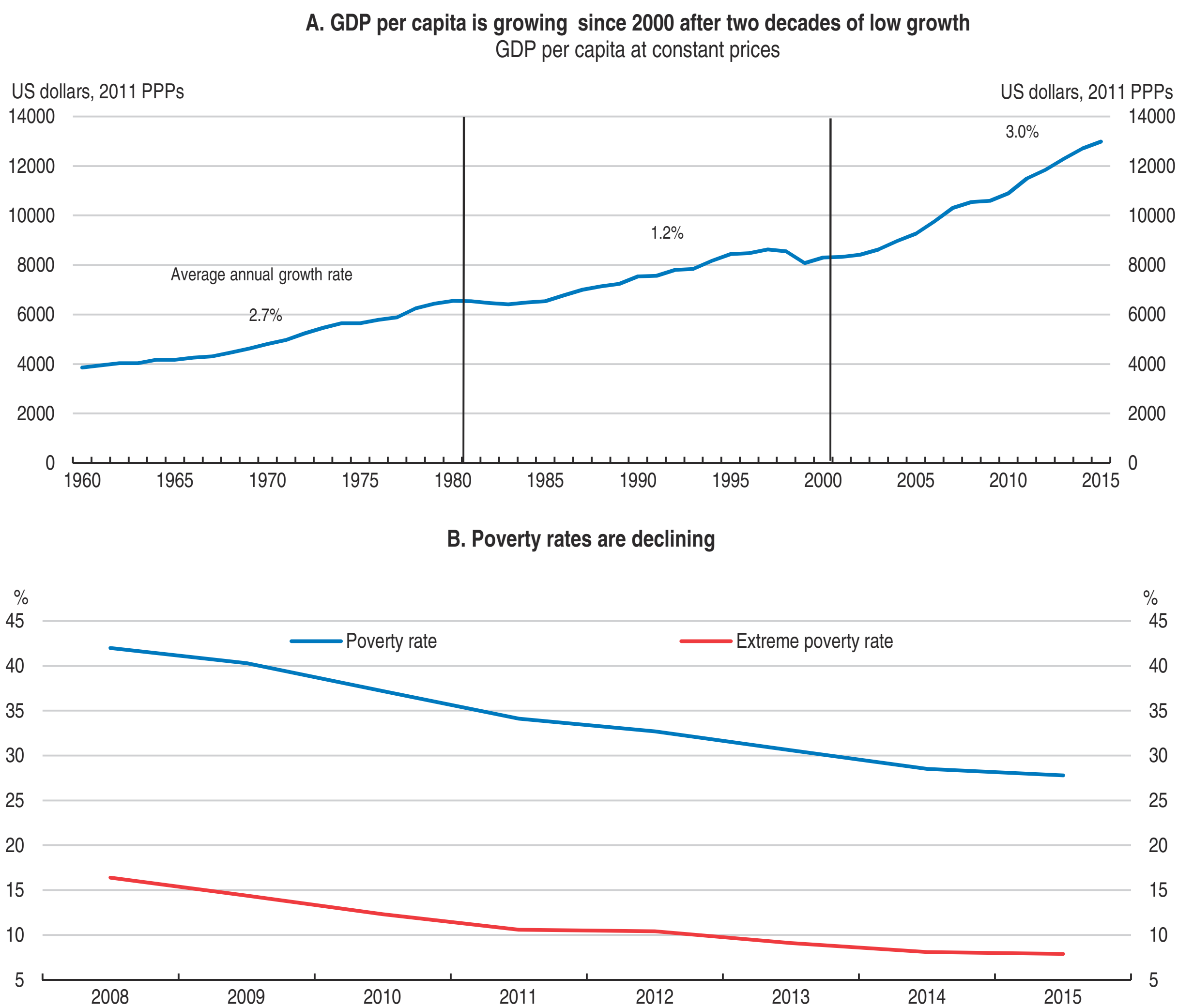
MAIN FINDINGS	KEY RECOMMENDATIONS
Further improve macroeconomic resiliency	
The financial system is sound but some vulnerabilities create risks	Approve the law awarding the financial superintendence regulatory powers over holding companies of financial conglomerates.
Infrastructure and social spending needs are likely to exceed those in the medium term fiscal framework.	Raise more revenue in the medium term.
Sustain strong economic growth	
Low skills are holding back productivity growth.	Provide more public support to skills training in regions lagging behind. Establish a national curriculum for school education and professionalise teachers' careers.
Poor infrastructure raises transportation costs.	Sustain the increase in public investment. Finance more infrastructure programmes on a regional basis. Implement the road infrastructure program (4G) and guarantee that Private-Public-Partnerships continue to have proper cost-benefit analysis.
Innovation performance is weak as a result of low investment in R&D and poor business sector-academia links.	Provide more grants and loans for R&D to enterprises. Fund R&D projects that bring industry and academia together.
Firms' competitiveness is hampered by regulatory burdens and slow judicial outcomes.	Remove regulations on public ownership and vertical integration in electricity, vertical integration and market structure in rail. Introduce a court or a division of a court dedicated solely to commercial cases and facilitate case management through electronic case management tools.
Low participation in global value chains limits the adoption of frontier technologies.	Make information on advance rulings on import conditions available more quickly and with higher visibility.
Make growth more inclusive	
High informality exacerbates inequalities by limiting access to public benefits.	Further reduce taxes and fees on wages (non-wage labour costs). Simplify procedures for company registration and the affiliation of workers to social security. Establish social dialogue to discuss differentiating the minimum wage by age and regions
Women do not have enough opportunities in the formal or informal labour market.	Ensure the provision of affordable, good-quality child care and affordable long-term care for elderly relatives or those with disabilities. Expand access to and make greater use of active labour-market programmes.
Education outcomes depend strongly on family socioeconomic backgrounds. Differences in rural-urban poverty rates remain high	Provide more public support to increase enrolment rates of disadvantaged children in less developed regions. Expand early childhood education.

Assessment and recommendations

- *The economy is adjusting well to the fall in global commodity prices*
- *Macroeconomic policies are broadly appropriate*
- *Reducing inequality by reigniting growth through structural reforms*

Since 2000, the quality of life of Colombians has improved markedly. Macroeconomic and social policies have sustained strong GDP growth and reduced poverty (Figure 1). Between 2002 and 2015 the poverty rate fell from 50% to 28%, and extreme poverty fell from 18% to 8%. In terms of wellbeing, life satisfaction is now above the OECD average, although incomes, education and life expectancy still fall short (Figure 2). Reforms have reduced informality and improved the business environment. The peace agreement will further boost economic growth and wellbeing over time.

Figure 1. **GDP per capita has improved**



Source: World Bank, World Development Indicators database and International Comparison Program database; DANE, Gran Encuesta Integrada de Hogares; Gallup database, World Development Indicators database, OECD PISA 2006 and 2012 and ILO database.

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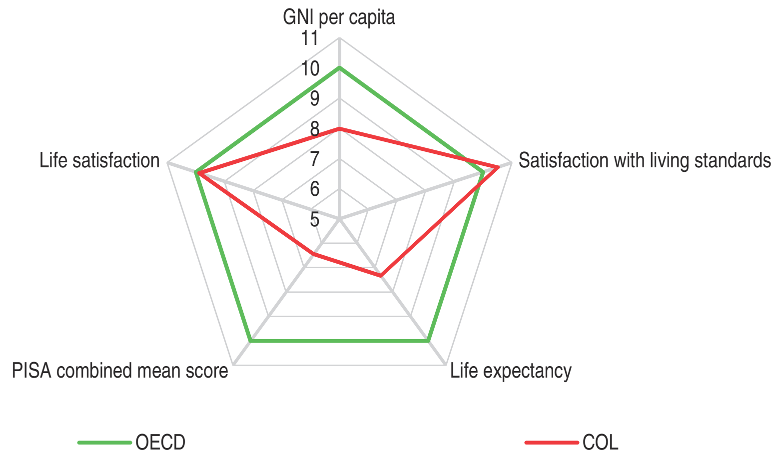
Figure 2. **Well-being has improved but remains low relative to OECD countries**



Note: The figure shows the difference between the values of the variable for the country with respect to the simple average of the OECD countries, normalised by the standard deviation. For the PISA combined mean score, data refer to the mean mathematics score in 2015 instead of 2014.
Source: Gallup database, World Development Indicators database, UNODC (United Nations Office for Drugs and Crime) database, OECD PISA 2015 results and ILO database.

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The sound macroeconomic framework has helped adjustment to the end of the commodity boom. Although Colombia's terms-of-trade fell sharply, growth remains above the regional average, as the widening budget deficit and public investment, supported incomes and private consumption. The large depreciation of the peso is aiding the rebalancing to non-commodity production. However, deterioration of the external and fiscal positions created vulnerabilities that are slowly being corrected with appropriate fiscal and monetary policies. Inflation is high but is coming down gradually as the effects of temporary shocks – such as the past depreciation and *El Niño* – fade away. Maintaining a sound macroeconomic policy framework and introducing more structural reforms would further reduce external and fiscal vulnerabilities and thereby promote economic stability.

However, low productivity, high income inequality and high informality weaken the well-being of many workers and their families. This calls for policies to raise incomes and to ensure the fruits of economic growth are more equally shared by Colombians.

The government is implementing a comprehensive tax reform to boost tax revenues, increase business competitiveness and make the tax system more progressive and efficient. By expanding revenue collection, the reform will help to meet medium-term fiscal targets and reduce vulnerability to external shocks, while at the same time promote productivity. It should be complemented with structural reforms to reduce inequality and reignite growth, such as enhancing investment in innovation, improving the quality of infrastructure and education, reducing skills mismatches, increasing competition and closing gender gaps in labour force participation.

Against this backdrop, the main messages of this *OECD Economic Survey of Colombia* are:

- A solid macroeconomic policy framework delivered sustained growth even as the global commodity boom came to an end.

- The 2016 tax reform can help address both high inequality and low productivity by increasing progressivity and reducing the tax burden on investment and dependence on oil revenues.
- Reforms to strengthen the business environment and the quality of education, reducing informality and increasing women's work opportunities would raise productivity and reduce income disparities.

The economy is adjusting well to the fall in global commodity prices

The economy grew by an average of 4.3% between 2009 and 2014, more than double the OECD average (Figure 3). This was driven by the 70% rise in terms-of-trade after the 2008 financial crisis as commodity prices boomed along with strong investment. However, the external environment has changed significantly over the last few years with the global economy being in a low-growth trap, trade weakening and commodity prices falling. The economy is currently adjusting to the most severe terms-of-trade shock in Latin America (Figure 3).

Growth has been resilient despite the external headwinds and the economy is adjusting better than other countries in the region due to the floating exchange rate regime (Figure 4.A). In 2015, growth slowed to 3.1%, from the 4.4% in 2014, driven by weakening investment, while private consumption remained strong on the back of robust credit growth and rise in the fiscal deficit (Figure 4.B). In 2016, growth slowed further as consumption and public investment responded to tighter monetary and fiscal policy. Consequently, unemployment rose slightly (Central Bank, 2016).

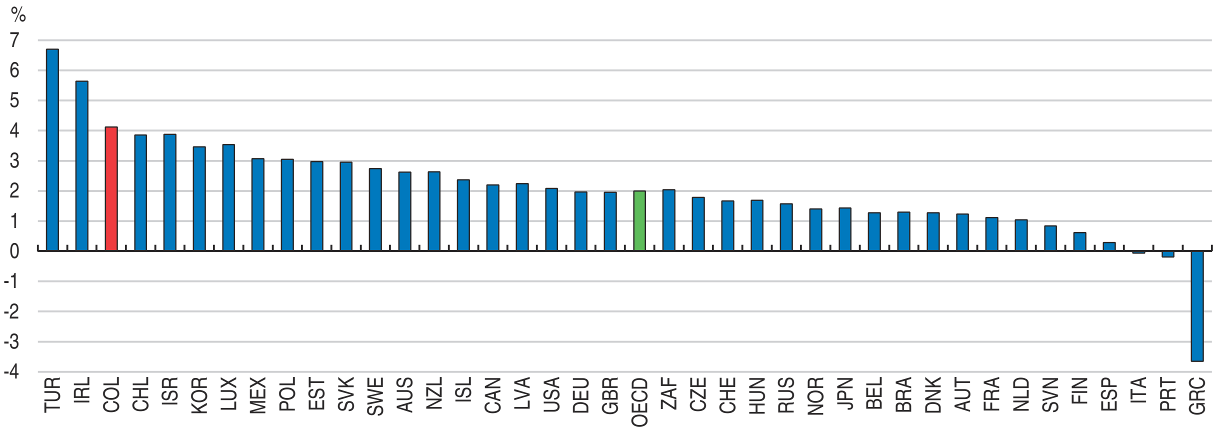
The peso depreciation put pressure on prices, *El Niño* (between the second half of 2015 and the first half of 2016) as well as the trucker's strike of June-July pushed up food prices. Indexation has also led to some second round effects, although these appear to have been contained. The rise in prices is having a greater effect on the poorest families which have less room to protect their incomes and assets. These shocks have been stronger and longer than similar episodes over recent decades and have kept inflation above the Central Bank's target of 2-4% since mid-2015 (Figure 5). However, inflation expectations have been reasonably stable, testifying to the credibility of the central bank and its inflation target, as well as its policy response. As the effect of these temporary shocks is fading away, inflation has started to come down fast and is expected to converge to the target at the end of 2017.

The current account deficit rose sharply in 2015 despite the large depreciation. Exports contracted mainly due to a fall in oil, its derivatives and coal, while imports fell by much less, as incomes continued to rise (Figure 6). The increase in non-traditional exports, such as tourism, has been held back by low growth in Colombia's main trading partners (especially the EU, US and China) and the climate-shock that affected the agricultural sector. For instance, tourism exports decreased by 4.2% in q3 2016 year-on-year in nominal terms, in particular to the United States and Spain by 7.5% and 18% respectively (DANE). Furthermore, weak domestic and external demand and market rigidities affect the speed of reallocation of labour and capital to more competitive sectors, and reduce potential for more inclusive growth by keeping resources in low paying jobs. This has a tendency to maintain income disparities as better quality formal jobs in these sectors are not being created (Cournede et al., 2016, Adalet Mc Gowan et al., 2017). The current account deficit narrowed during 2016 due to lower imports resulting from the deceleration of activity and the exchange rate depreciation. The deficit is largely financed by FDI. After falling in 2015, FDI recovered in early 2016 and at around 5% of GDP is above the average of LAC countries.

Figure 3. **Colombia has grown fast since the global financial crisis, but is facing external headwinds**

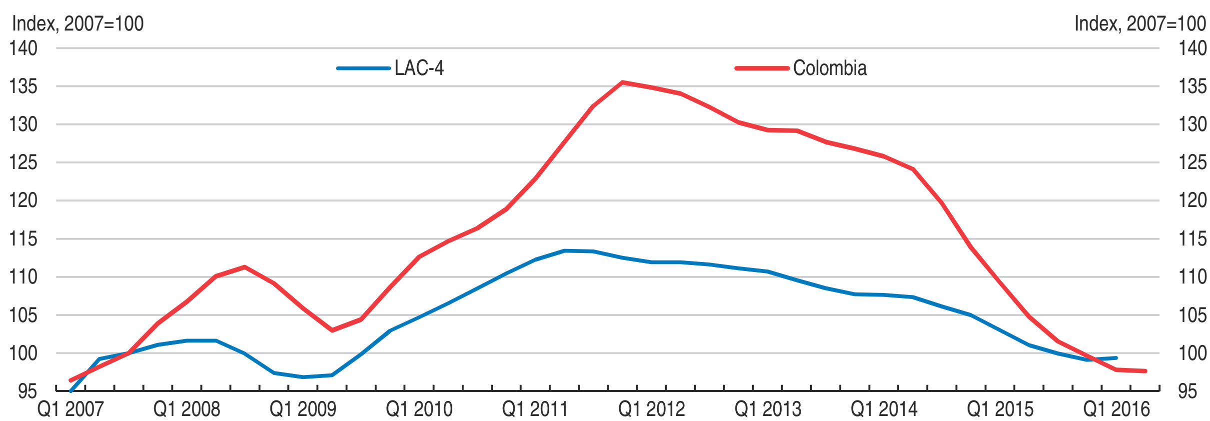
A. Growth in gross domestic product

Volume, percentage change at annual rate, 2009-16



B. The shock to the terms of trade is larger in Colombia than in other Latin American economies

Evolution of Terms of Trade for a selection of LATAM countries



Note: LAC-4 refers to the unweighted average of values for Argentina, Brazil, Chile and Mexico. Series calculated as a 4-quarter centred moving average.

Source: *OECD Productivity Statistics* (database), February 2016; *OECD Economics Department Database*.

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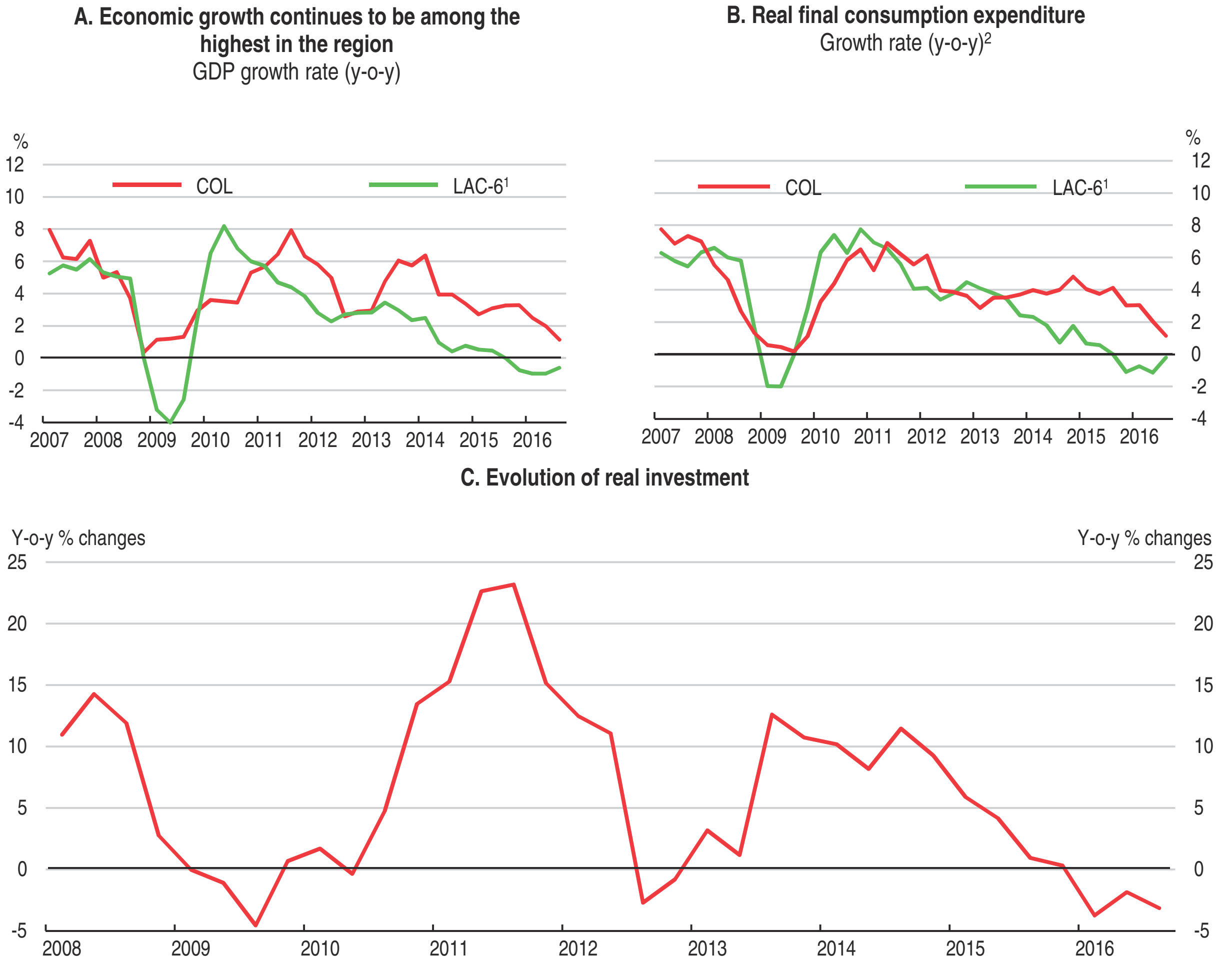
Consumption-related credit growth has remained stable, while commercial credit has slowed down since mid-2016. The pace of credit growth remains reasonable as it is in line with growth trends in the commercial-credit-to-private-investment ratio, and corporate and household leverage remains modest by international standards (Central Bank, November 2016). Real house prices have almost doubled since 2005, compared to an increase of around 10% in Chile and Mexico and stability in the OECD average, and should be monitored closely. However, this risk has somewhat diminished lately as real house price growth has started to decelerate. Household debt at 20% of GDP in 2016 remains low, of which a third is mortgages (Central Bank, 2016).

The legal and institutional framework for financial regulation and supervision by the *Unidad de Regulación Financiera* and *Superintendencia Financiera* is strong. However, the recent expansion of Colombian banks to other countries in Latin America might pose some

Figure 4. **Economic growth continues to be among the highest in the region**



1. LAC-6 refers to the following six Latin American economies: Argentina, Brazil, Chile, Colombia, Mexico and Peru. Growth rates for LAC-6 are computed as a weighted average of country growth rates of aggregates in volume, using country annual GDP levels expressed in 2011 constant PPPs as weights.
2. Calculated as a 3-months centered moving average.

Source: OECD, *Economic Department Database*, The World Bank, WDI database and Banco Central de Reserva del Perú; and OECD, *Economic Department Database*.

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financial vulnerability through financial spill-overs via Colombian subsidiaries and branches abroad, as in 2016 they represented around 31% of the Colombian banking system's assets. To mitigate and manage these financial risks, a bill to enhance regulatory and supervisory powers over financial conglomerates is expected to be approved by Congress in 2017. Specifically, it would aim to i) ensure that financial conglomerates and financial holding companies comply with prudential and risk management standards, guaranteeing stability and ensuring comprehensive supervision; ii) promote a comprehensive and coherent corporate governance framework for financial conglomerates; iii) ensure that the supervisor has timely access to comprehensive information on the structure of financial conglomerates and their activities and risks.

Risks from rising housing prices are mitigated by low loan-to-value ratios (51%) and small housing portfolio of banks (12%). Non-performing loans (NPLs) are low (Figure 7.A), especially compared to many European countries, and well provisioned, and financial

Table 1. **Macroeconomic indicators and projections**

Annual percentage change, volume (2005 prices)

	2013 Current prices (COP billion)	2014	2015	2016	2017	2018
Gross domestic product (GDP)	**710 497**	**4.4**	**3.1**	**2.0**	**2.3**	**3.0**
Private consumption[1]	432 164	4.3	3.2	2.2	1.9	2.6
Government consumption	123 769	4.8	4.9	1.8	1.1	1.7
Gross fixed capital formation	172 337	9.8	1.9	-3.6	2.5	5.1
Housing	33 986	1.9	-1.5	2.2	-4.1	3.0
Final domestic demand	728 270	5.7	3.2	0.7	1.9	3.0
Stockbuilding[2]	374	0.4	-0.2	-0.3	-0.1	0.0
Total domestic demand	728 644	6.1	3.0	0.4	1.8	3.0
Exports of goods and services	124 848	-1.5	1.2	-0.9	0.9	4.1
Imports of goods and services	142 995	7.9	1.4	-6.2	2.1	3.7
Net exports[2]	-18 147	-1.9	-0.1	1.3	-0.3	-0.1
Other indicators (growth rates, unless specified)						
Potential GDP	. .	3.9	3.7	3.3	3.0	2.9
Output gap[3]	. .	1.2	0.6	-0.7	-1.4	-1.3
Employment	. .	2.2	2.4	0.6	1.9	2.8
Unemployment rate	. .	9.1	8.9	9.2	9.1	9.0
GDP deflator	. .	2.1	2.5	5.9	5.0	2.9
Consumer price index[4]	. .	2.9	5.0	7.5	4.7	3.7
Core consumer prices[4]	. .	2.5	4.7	6.5	4.9	3.5
Trade balance[5]	. .	-5.5	-8.1	-6.6	-5.5	-5.4
Current account balance[5]	. .	-5.2	-6.4	-4.5	-3.5	-3.5
General government fiscal balance[5]	. .	-3.2	-3.2	-3.1	-2.8	-2.4
Three-month money market rate, average	. .	4.1	4.6	6.8	6.2	5.8
Ten-year government bond yield, average	. .	7.0	7.8	8.0	7.0	6.7

1. Including non-profit institutions serving households.
2. Contribution to changes in real GDP.
3. As a percentage of potential GDP.
4. Average annual growth rate.
5. As a percentage of GDP.

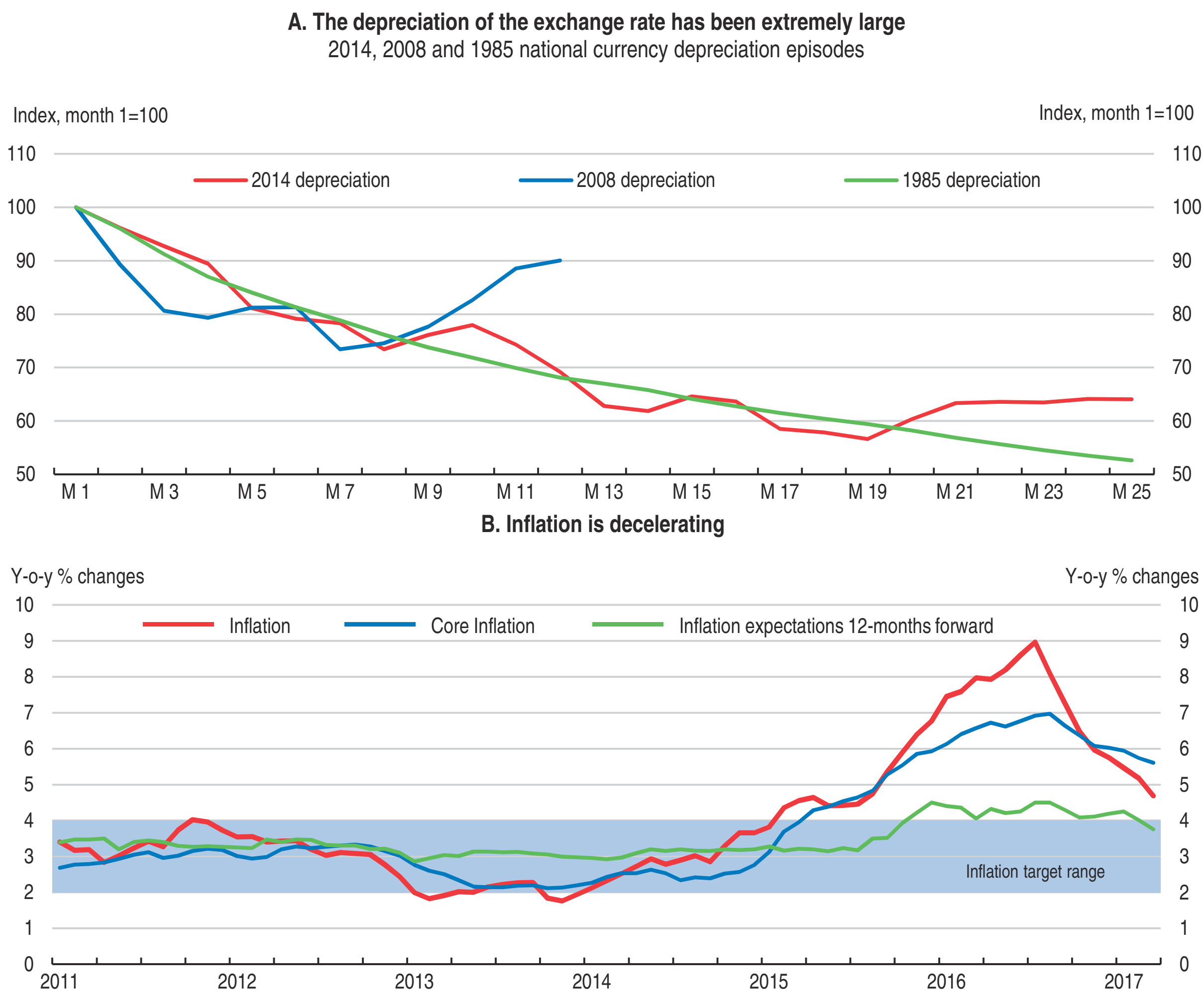
Source: *OECD Analytical Database.*

institutions are well capitalised. According to the *Superintendencia Financiera*, financial institutions have enough liquidity to meet their short term obligations. Banks have liquid assets of around 3 times their 30-day Net Liquidity Requirements. In 2015, Banks reported a return on equity (ROE) of 14.3% and a return on assets (ROA) of 3.5% (Figure 7.B), above their five-year averages and the OECD average. To further enhance supervision, the 2017 Financial Regulation Unit's (of the Ministry of Finance) agenda contemplates a review of the current capital requirements to assess how they converge to international standards like Basel III.

Currency risks also remain moderate and well supervised. The central bank regulates financial intermediaries' currency risk and monitors private non-financial sector currency mismatches, which remain low (Central Bank, 2016). Moreover, the exposure of banks to firms with high currency mismatches is low. Central government external debt, currently at 35% of total debt, is in line with existing Ministry of Finance guidelines.

Financial inclusion has been an important priority for the government for a number of years. Policies have mainly aimed at providing microcredit to the poor; spreading formal banking system usage; enhancing the use of electronic payments; and making financial services more affordable (Karpowicz, 2014). Despite steady improvements, financial

Figure 5. **The exchange rate depreciated sharply putting pressure on prices**



Note: In panel B, inflation expectations come from the survey Encuesta de expectativas analistas económicos (Banco de la República). Core inflation refers to all-items excluding basic food, public services and fuels.

Source: Banco de la República; *OECD Economics Department Database* and Banco de la República.

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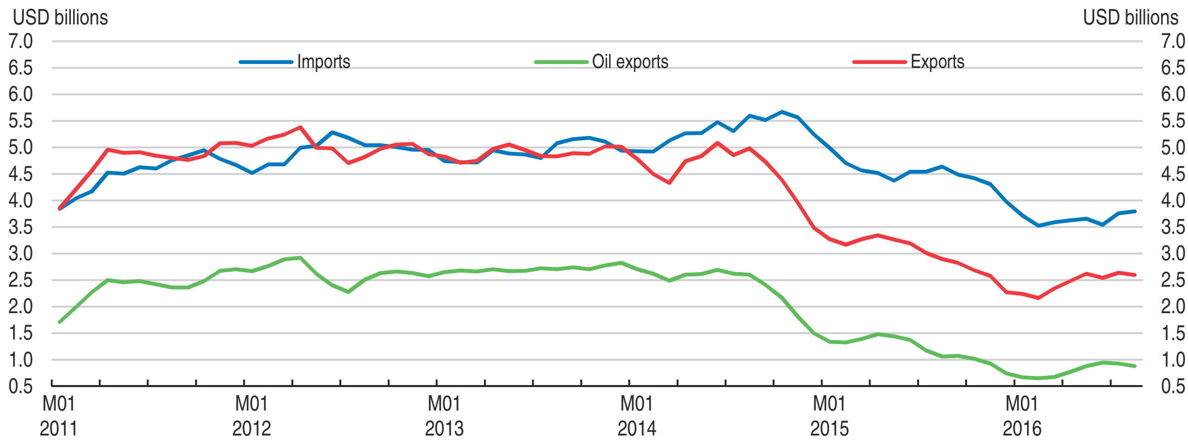
inclusion is still relatively low (Figure 8) contributing to income inequality (Park and Mercado, 2015; Allen et al., 2013). The use of financial services is low and costs are high. The National Financial Inclusion Strategy's goal is to promote access and use of financial services, in particular by informal workers. To further enhance inclusion, a 2014 law created a simplified license for becoming a financial institution for transaction and payment purposes only, aimed at increasing the number of players in the financial sector. The government is also promoting the use of alternatives guarantees (collateral) and creating a registry of electronic invoices to increase access to financial services and facilitate credit to SMEs. The Financial Superintendency (SFC) and *Banca de las Oportunidades* have developed several financial inclusion indicators for institutions supervised by the SFC, by *Superintendencia de la Economía Solidaria* and microcredit NGOs. According to the latest data 76.3% of Colombian adults had at least one financial product in 2015 (Financial Inclusion Report 2015). Expanding financial education would also help financial inclusion by helping users make better decisions.

Figure 6. **The value of exports has decreased in 2015**



1. Series are calculated as a 3-months centered moving average. For 2015-16 data are preliminary.
Source: National Administrative Department of Statistics (DANE).

StatLink http://dx.doi.org/10.1787/888933483361

Figure 7. **The financial system is sound**

Note: Series calculated as a 3-months centered moving average.
Source: IMF, *Financial Soundness Indicators*.

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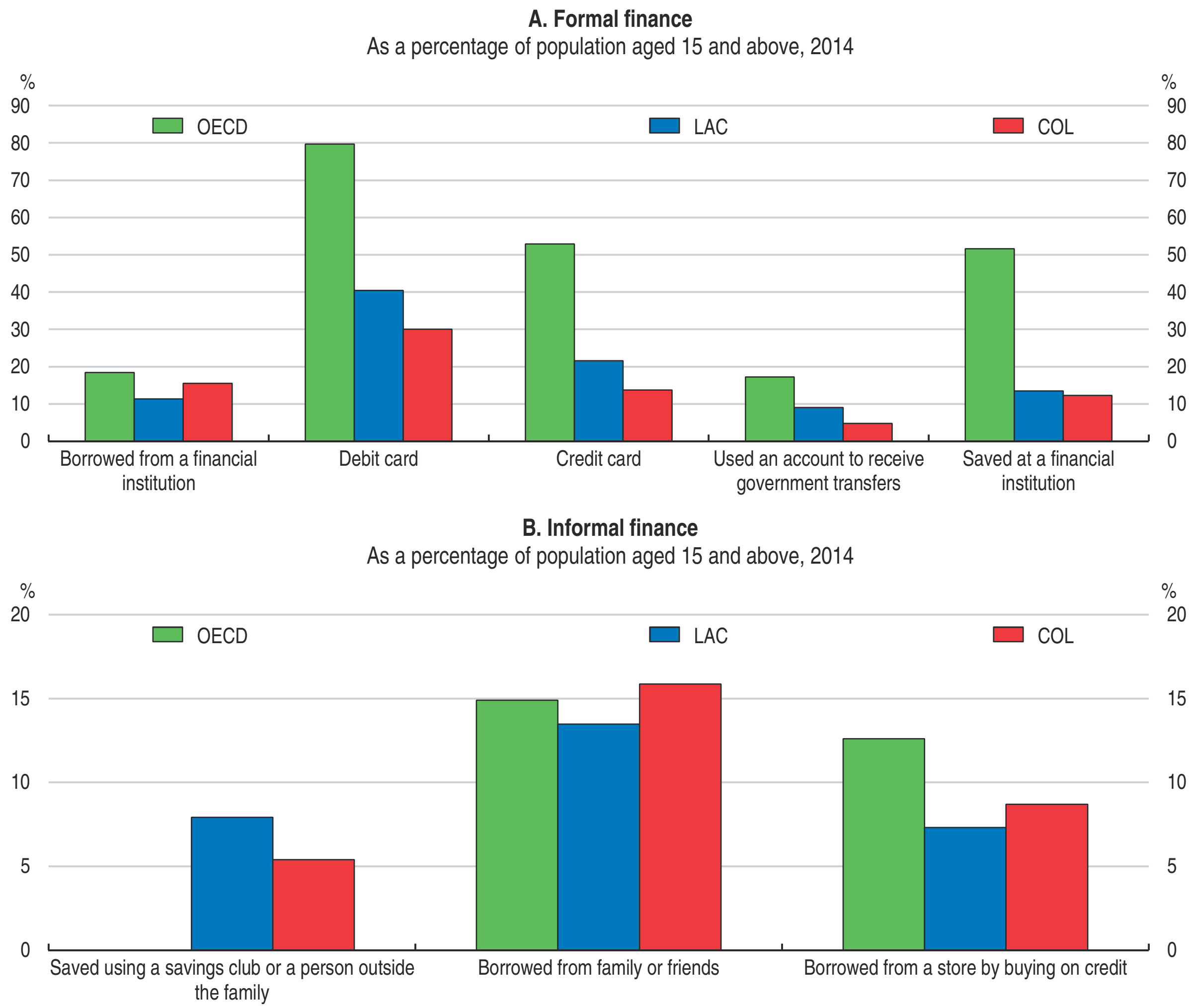
Figure 8. **Financial inclusion is low**



Note: OECD aggregate excludes Hungary, Iceland, Latvia, Mexico and Turkey. LAC refers to 23 countries in Latin America and the Caribbean (Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Trinidad and Tobago, Uruguay and Venezuela).
Source: Global Findex (Global Financial Inclusion Database).

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Short term outlook

Growth is expected to strengthen to 2.2% in 2017 and 3.0% in 2018, driven by stronger investment and a recovery in agricultural production following the end of *El Niño* (Table 1). However, growth will remain below potential in 2017 due in part to the planned further fiscal adjustment. Investment is projected to bounce back as fourth generation (4G) infrastructure projects move into the construction phase. Furthermore, confidence and investment are likely to increase following the peace deal with the FARC. In the medium term, potential growth is expected to be boosted by demographics, the peace deal and the implementation of reforms. Annual inflation in 2017 will be affected by the VAT increase in the 2016 tax reform and, is projected by the OECD to be 4.7%, and converge towards the target range at the end of 2018.

However, external risks have grown significantly in the last two years. Global growth is undermined by the weak upturn in advanced economies, and many emerging market economies – particularly China – have lost momentum. Colombia is particularly exposed to swings in global financial market sentiment because of its relatively high current account deficit and increasing reliance on portfolio flows. However, the current account deficit is coming down and is expected to close at around 3.5% of GDP in 2017, thereby reducing vulnerability in the event of a reversal of capital flows to emerging market economies.

Although vulnerabilities are mitigated by the Colombia's ample foreign exchange reserves and contingent credit lines with the IMF, the external environment remains challenging (Box 1). For instance, weak imports from trading partners – notably the United States and South America – could slow the expected pick-up in exports. Also, uncertainties related to U.S. monetary policy normalisation or adverse developments in China and Brazil could increase global financial volatility with significant spill-over effects for Colombia. Further downward pressures on oil prices could delay reaching the structural fiscal deficit target and erode market confidence. A further external risk for Colombia is the significant worsening of the economic and social crisis in Venezuela which could trigger large inflows of migrants, lowering growth. Finally, intense weather variations may cause severe economic effects. The government created the "*Fondo de Adaptación*" to address their impact.

On the upside, the historic peace agreement with FARC, ending more than half a century of internal conflict, should yield major social and economic dividends. In particular, peace could bring more than expected investments in sectors such as agriculture, mining, oil, infrastructure and energy. However, a successful transition to peace will be a long-term challenge (Box 2). It is important that inclusiveness is at the centre of the process to ensure that benefits reach the whole population. Stronger growth in partner countries along with better terms of trade can boost incomes and exports.

Box 1. **Vulnerabilities that are difficult to quantify**

Vulnerability	Possible outcome
Sharper-than-expected global growth slowdown	Collapse of external demand that further suppresses commodity prices could lead to a recession in Colombia.
Sudden stop in capital inflows	Increase in risk sentiment leading to further depreciation of the peso, capital outflows, and increases in the Government's CDS spread and bond yields.
Intensified weather variability and storm activity	Depending on the scale of the natural disaster, the fall in output from agriculture and other productive sectors could be regional or national. Infrastructure would likely be damaged, and it could delay the implementation of the 4G-PPPs projects.

Box 2. **The expected economic impact of the peace agreement**

The peace agreement is expected to generate a positive economic dividend. On the one hand, the disappearance of FARC as an armed group would enhance potential economic growth through, among others, a reduction in the destruction of physical and human capital, increased confidence and social cohesion, while also avoiding the diversion of productive expenditure to military spending related to the conflict. On the other hand, honoring the Peace Agreement requires investments, and reallocation of expenditure to more productive sectors and regions where capital is scarce, generating significant economic returns.

Box 2. **The expected economic impact of the peace agreement** *(cont.)*

According to preliminary calculations of Colombia's Ministry of Finance, the above factors would indeed result in an overall dividend on economic growth. Moreover, the study shows that the Peace Agreement would generate a regional convergence process, reversing the divergence observed in the last 15 years. Estimations show that the most violent regions (most of which are also the poorest) would have a greater dividend than the average effect at the national level.

Finally, estimations indicate that the most benefited economic sectors would be agriculture, buildings and civil works.

The implementation of the peace agreement is still a challenge. The government has to regain control of the territories that were controlled by the FARC for more than 50 years. In the final agreement, central government will implement policies in consultation with the local government, communities and associations on different topics such as land, development program, local fiscal policy and the strategy of substitution of illicit crops (Junguito et al., 2017). A cornerstone of the peace deal is the land reform. In 2011 the government passed the Victims and Land Restitution Law, a vast land titling and redistribution law. However it calls for 2 million ha of land to be returned to its proper owners which is far short of the 4 million to 6.8 million ha thought to have been abandoned or illegally occupied. An inclusive land policy in Colombia, while politically complex, is necessary to stabilise the country and to promote rural development (OECD, 2015a). Finally, the Government is also negotiating with the *Ejército de Liberación Nacional* group and aims at concluding an agreement soon.

Source: Ministry of Finance and Public Credit and OECD Secretariat.

Macroeconomic policies are broadly appropriate

Monetary policy

The monetary policy framework is robust. The 1991 Constitutional Reform and the Law 31 of 1992 established the Central Bank's autonomy and gave it a clear mandate to preserve price stability. Its board of directors is composed by seven members: five members, appointed for four years and renewable for up to two additional terms; the Minister of Finance; and the General Manager of the Central Bank, who is appointed by the board. The overlapping terms for board members provides stability and a degree of independence by limiting the scope for a government to change the composition of the board, as it can appoint only two board members at the end of its tenure. The Central Bank has operated a successful inflation targeting regime since 1999, with an inflation target range of 2-4%. This greater independence and commitment to price stability led to low and stable inflation until 2015.

Over the last year the Central Bank has been concerned that the significant uptick in inflation could de-anchor inflation expectations. To contain this risk, and to stem the widening current account deficit, the Central Bank increased interest rates from 4.5% in September 2015 to 7.75% in July 2016, which slowed credit and consumption growth. In the last months of 2016 inflation started to decline, as food prices are falling with the end of *El Nino* and imported inflation is easing with the stabilisation of the exchange rate. As a consequence the Central Bank decreased interest rates three times since December 2016 to 6.5%. Growth of nominal wages are generating pressures on inflation. Inflation is projected to continue to fall in 2017, which will provide room for gradual policy easing as inflation and inflation expectations fall towards the 3% target.

Fiscal policy

The sharp and most likely durable fall in oil revenues from about 2.6% of GDP to 0% between 2014 and 2016 has deteriorated the fiscal position (Figure 9 and Table 2). The headline deficit has increased to 4% of GDP in 2016. Together with the depreciation of the peso – 34% of the Central Government debt is denominated in foreign currency – this has increased public debt sharply from 36% of GDP in 2014 to 41% of GDP in 2015 (Figure 9.B).

Table 2. **Central Government budget balance**

Percentage of GDP

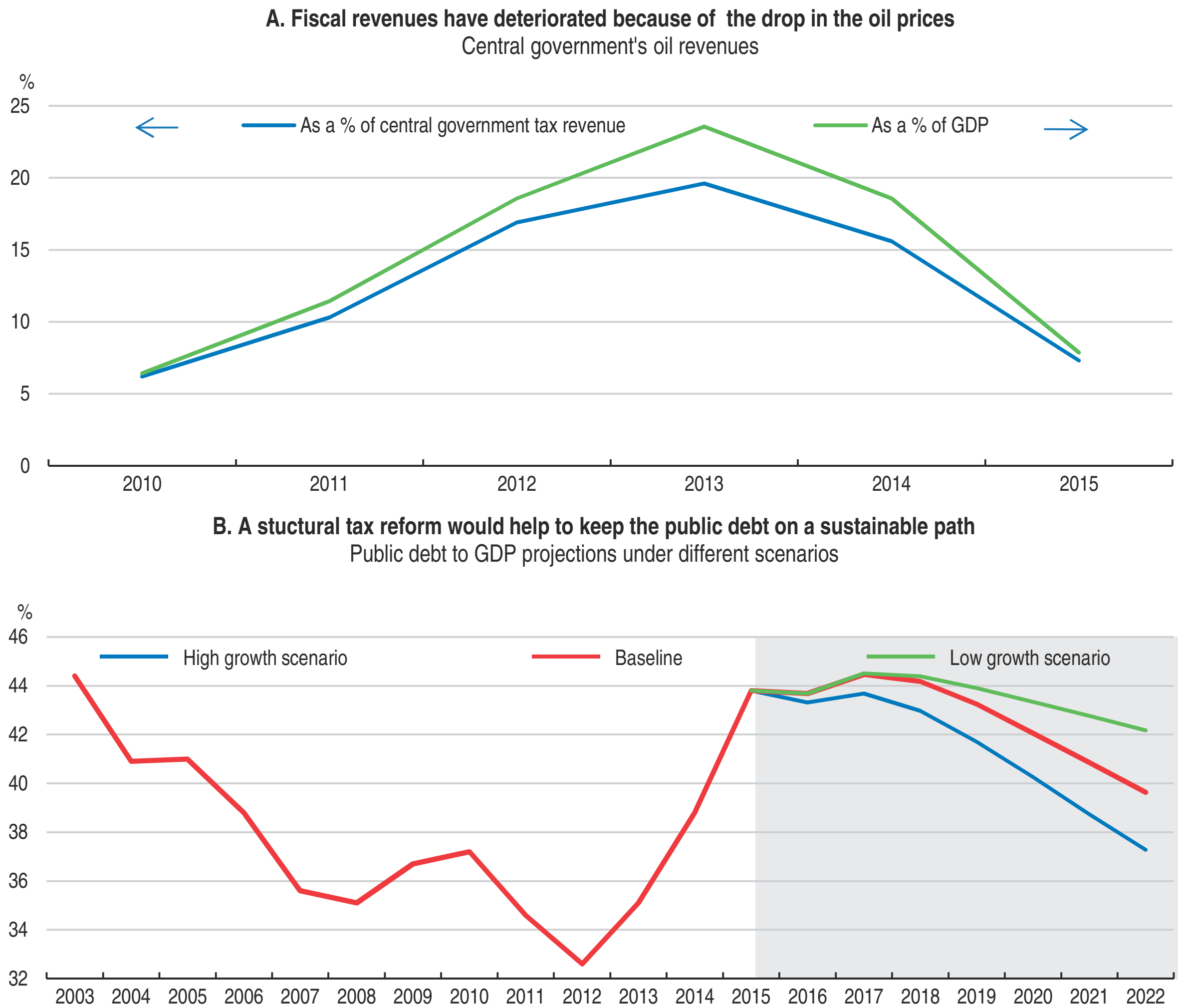
	2014	2015	2016
Total revenues	**16.7**	**16.1**	**15.0**
Oil revenues	2.6	1.1	0.1
Non-oil tax revenues	13.1	14.0	13.7
Other revenues	0.9	1.1	1.2
Total expenditures	**19.1**	**19.2**	**19.0**
Investment	3.0	3.1	2.1
Interest	2.2	2.6	3.0
Public spending	13.9	13.5	13.9
Headline fiscal deficit	**2.4**	**3.0**	**4.0**
Structural fiscal deficit (fiscal rule)	**2.3**	**2.2**	**2.1**
Primary balance	**0.7**	**0.6**	**0.9**

Source: Ministerio de Hacienda y Crédito Público.

Fiscal policy at the central government level is guided by a fiscal rule to safeguard fiscal and debt sustainability by limiting the structural fiscal deficit. The fiscal rule adopted in 2011, targets gradual consolidation towards a structural deficit of 1% for the central government by 2022. An independent committee provides the Government with paths for both potential GDP growth and long term prices of commodities. To comply with the rule, and adjust to the permanent shock in commodity revenues, expenditures were cut by around 0.9% of GDP in 2015, with a further adjustment of 0.5% of GDP in 2016 reflecting cuts in public investment, higher non-oil revenues and borrowing (Table 2), in line with the Intelligent Austerity policy. At the sub-national level, legislation establishing strict limits on expenditure and debt were enacted between 1997 and 2003. Complying with these rules enhances fiscal discipline and credibility. However, productivity and inclusive growth over time would benefit more from reducing current spending and raising revenue, rather than cutting public investment needed to reduce large infrastructure gaps and improve the quality of education.

Persistently low oil prices will continue to put pressure on government revenues and narrow the space for more spending. In the medium term, however, expenditures will have to increase to satisfy large social needs. The weakening of public finances together with large external imbalances raises macroeconomic stability risks. For the first time in two decades, the fiscal and current account deficits deteriorated simultaneously in 2015. However both deficits are expected to come down in 2017. In the wake of the comprehensive tax reform of 2016, Standard and Poor's confirmed a BBB rating in early 2017. Furthermore, a swift implementation of the administration economic plan, Colombia Repunta, envisaging an increase in spending to improve infrastructure and relocation of displaced people, together with fiscal incentives to boost private sector investment, would further support growth.

Figure 9. **Fiscal revenues and gross public debt**



Source: Banco de la República (2015) and Ministerio de Hacienda y Crédito Público (2016); IMF, *World Economic Outlook Database* (April 2016); Ministry of Finance and Public Credit Colombia (2016); and OECD Secretariat estimates.

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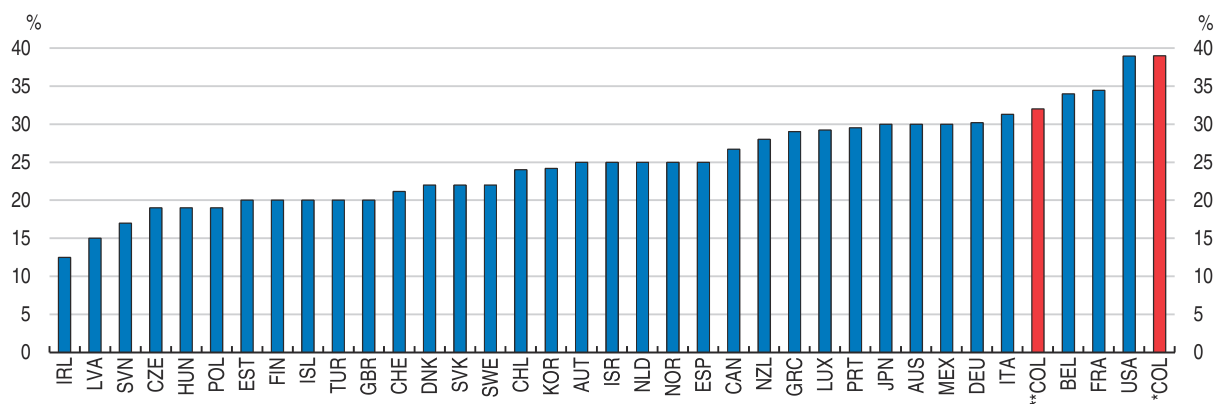
The 2016 tax reform is expected to bring new sources of revenue, which will increase non-oil revenues by an estimated 3 percentage points of GDP by 2022. The higher revenues are estimated to help stabilise public debt around current levels under alternative growth scenarios, and put the public debt/GDP ratio on a declining path over time (Figure 9.B). However, infrastructure and social spending needs are likely to exceed those in the medium term fiscal framework, in which case more revenue may need to be raised in over time.

A tax reform would boost competitiveness and enhance inclusiveness

High corporate taxes (Figure 10) and a complicated tax code pose significant constraints for growth, as discussed in the 2015 *OECD Economic Survey of Colombia*. Empirical evidence suggests that reducing statutory corporate income tax rates raises productivity (Schwellnus and Arnold, 2008; Vartia, 2008). The 2015 *Economic Survey* recommended a comprehensive tax reform to raise tax revenue and make the tax system less distortive and more progressive (Table 3). Colombia needs to increase the redistribution of income through the tax and transfer system. Little redistribution is currently taking place compared to OECD and many Latin American countries after considering taxes and transfers (Figure 11). The tax reform which was passed by Congress in December 2016 is a welcome step in the right direction (Box 3). Some key recommendations by the OECD were not retained, e.g. removing the VAT on fixed assets, expanding the personal income tax base and lowering more the relatively high corporate income tax (Figure 10). However, VAT on fixed assets is fully deductible from corporate income taxes and caps were imposed on personal income tax deductions for high-income individuals.

Figure 10. **Statutory corporate income tax rates are above OECD averages**

Tax rates as of 2016



Note: * COL refers to 2017 and ** COL refers to 2019.
Source: *OECD Tax Database.*

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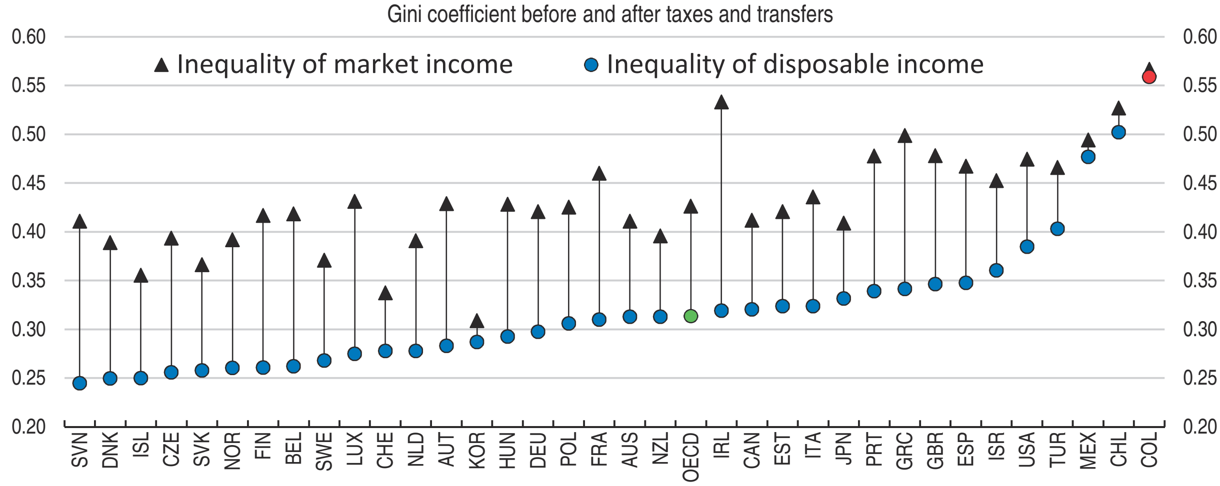
Figure 11. **The tax system does not distribute enough**

Gini coefficient before and after taxes and transfers



Source: *OECD Income Distribution Database* and OECD (2016a).

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Box 3. **The December 2016 tax reform**

Following previous reforms in 2012 and 2014, Congress approved a broad structural tax reform in December 2016 that incorporated several OECD recommendations (Table 3). The most welcome changes include:

- The integration of the CREE (a special corporate tax) and the CREE surtax within the Corporate Income Tax (CIT);
- Bringing the statutory CIT rate closer to the OECD average;
- Not prolonging the business wealth tax;
- The reform of the VAT, and in particular the increase in the standard VAT rate;
- The reform of the tax treatment of non-profit organisations;
- The introduction of a dividend tax at the shareholder level;
- The introduction of a carbon tax and the tax on plastic bags;
- Substantially improving tax administration and penalties for tax evasion.

Table 3. **Past OECD recommendations on monetary and fiscal policy**

Recommendations	Actions taken since the 2015 *Survey*
Maintain the strong macroeconomic framework	Colombia has maintained a strong policy framework that is helping adjustment to the severe terms of trade shock since 2014.
Implement the gradual fiscal consolidation path in line with the central government's fiscal rule by raising more tax revenues.	Colombia adopted a fiscal rule and medium-term fiscal framework in 2011, which targets a gradual consolidation towards a structural deficit of 1% for the central government in 2022, and has met the targets every year so far.
Undertake a comprehensive reform of the tax system to raise fairness, growth and revenues	The Congress approved a broad structural tax reform in December 2016.
Reduce tax evasion by strengthening the tax administration and by increasing penalties.	The December 2016 tax reform introduces penalties for tax evasion.
Reduce the tax burden on investment by gradually lowering the corporate income tax rate, phasing out the net wealth tax on firms and eliminating VAT on investment.	The December 2016 tax reform lowers corporate income tax gradually. VAT on investment remains.
Make the personal income tax more progressive by taxing dividends and eliminating regressive exemptions.	The December 2016 tax reform introduced a dividend tax and limited deductions improving progressivity.
Unify the corporate income tax with the CREE surtax in the medium term.	Done in the December 2016 tax reform.

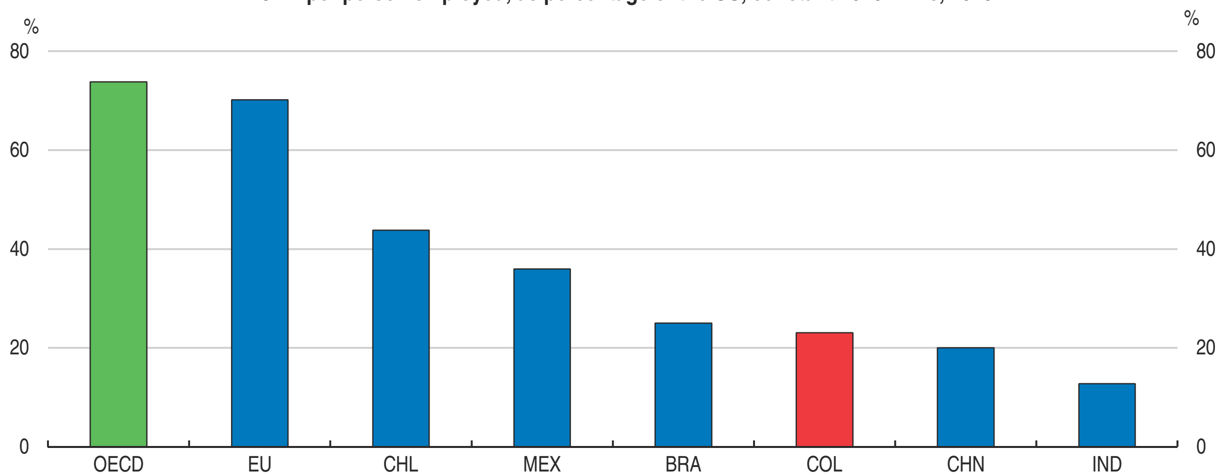
Reducing inequality by reigniting growth through structural reforms

Productivity in Colombia is low (Figure 12). The 4.1% average annual GDP growth between 2000 and 2015 was driven mainly by the accumulation of physical capital largely to the mining sector (2.3%) and the combined effect of population growth, employment and human capital accumulation (1.4%) while total factor productivity made a small negative contribution (-0.1%). Measurement of productivity is complicated by the substantial changes in commodity prices.

Although the economy has grown strongly for some time, income inequality remains high (Figure 13.A). Regional inequality in GDP per capita is also higher than in most of the OECD and other large EMEs (Figure 13.B). High levels of inequality present major social, economic and political concerns: they can impede upward social mobility by diminishing opportunities for the disadvantaged groups (e.g. the poorest, women, children and

Figure 12. **Productivity is low**

GDP per person employed, as percentage of the US, constant 2010 PPPs, 2015



Source: OECD, *Productivity Statistics Database*.

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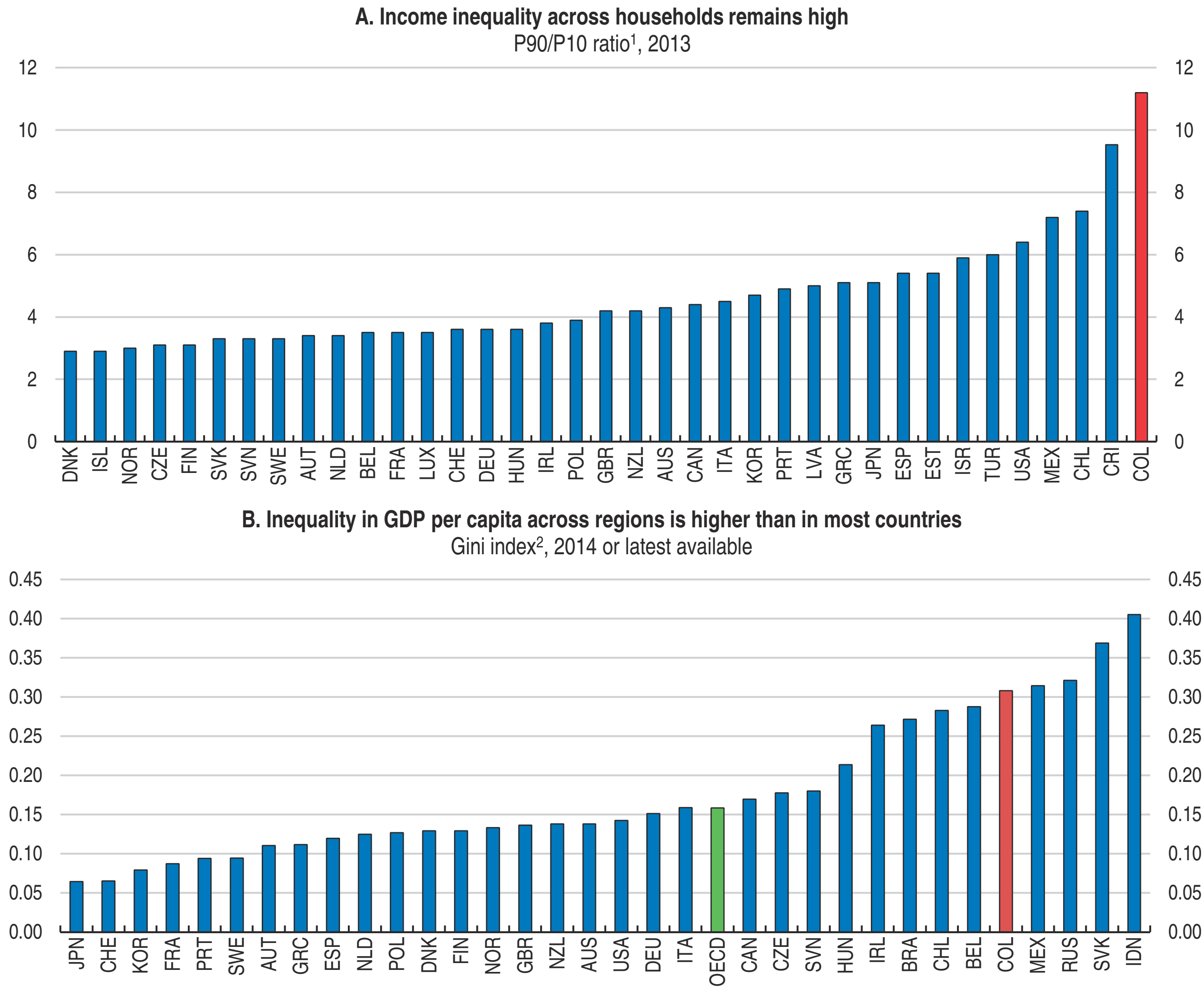
indigenous communities) and reduce economic performance (OECD, 2008, OECD, 2011, Ferreira et al., 2014). High inequality also raises political challenges as it damages social cohesion. Finally, it can raise protectionist and anti-globalisation sentiment which in turn affect trade and growth. Local and 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.

Higher productivity would support higher growth; stronger growth would then help to raise more revenues, which in turn will help sustain increases in social spending and address distributional concerns. Reducing inequalities requires social and redistributive policies and opportunities for social mobility. Of particular importance are targeted transfers from the budget; the education system; access to health and other social benefits and female labour market participation. Better policies in these areas can in turn have a positive impact on employment and productivity, for example by reducing informality, generating a virtuous circle.

The low level of aggregate productivity growth hides large differences across firms, sectors and regions. While micro-level productivity heterogeneity is common across OECD countries (OECD, 2015b), in Colombia the dispersion is particularly high (Brown et al., 2013). Although firms at the Colombian frontier are far from the global frontier, some firms are highly productive even at the "global" level (Brown et al., 2013).

The divergence in productivity could be attributed to variations in technologies, processes, human capital and managerial skills. More significantly, this indicates strong disparities in the allocation of factors of production, pervasive informality and firms' limited ability to grow and increase in competitiveness. The Productive Development Policy recognises the importance of innovation as engine of growth and competitiveness. It aims to improve Colombian firm's productivity mainly through strategies of knowledge and technology transfer and innovation and entrepreneurship. It also gives a mandate to organize the governance on STI across different government agencies (CONPES, 2016).

Figure 13. **Inequality in GDP across households and regions is high**



1. For Australia, Finland, Hungary, Israel, Korea, Mexico, Netherlands, United States, Colombia and Costa Rica, data refer to 2014. For Japan and New Zealand, data refer to 2012. The P90/P10 ratio is the ratio of income of the 10% of people with highest income to that of the poorest 10%.
2. Gini indices are caculated on the basis of GDP per capita in constant real prices, constant PPP, across regions defined at a Territorial Level 2. For OECD, data refer to the unweighted average of 29 member countries. For Indonesia and Norway, data refer to 2012. For Japan, New Zealand and Switzerland, data refer to 2013. For Australia, Canada, Chile, Colombia, and United States, data refer to 2015.

Source: OECD (2016), *OECD Employment Outlook 2016*; and *OECD Regional Database*.

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Ending of the armed conflict should open a path towards productivity growth and inclusiveness

Violence and war have significantly affected productivity growth in the past and has had a significant impact on wellbeing and economic performance (Sanchez Galindo and Restrepo, 2009). Enrolment rates in primary and secondary education have been lower in the regions most affected by internal conflict and that conflict caused serious damage to the health of the population (Sanchez and Diaz, 2005). In the municipalities covered by the conflict, in 2015, the enrolment rate of school-age students (between 5 and 16 years old) was 80% compared to 87% for municipalities not in conflict. For students aged 5-14 years, the rate was slightly higher at 83% for the municipalities with internal conflict and 89% in other municipalities. The High Council for Post-Conflict prioritised 187 municipalities distributed in 20 departments for enhanced education (Ministry of Education).

The armed conflict has also destroyed infrastructure, encouraged school dropouts and forced displacement of people from their homes. It has also reduced productivity by lowering institutional quality, negatively impacting property rights and damaging social cohesion (Santamaria, Rojas and Hernandez, 2013). In addition, the growth of illicit crops and the high homicide rate has been estimated to have been associated with a permanent decrease in the growth of GDP per capita by 0.3 percentage points (Cardenas, 2007). Overall, estimates from the National Planning Department (NPD) show that the end of the armed conflict will boost GDP growth by an additional 1.1 to 1.9 percentage points per year, explained in part by an increase of 5.5 percentage points in investment as confidence recovers and policies to facilitate relocation proceed. The impact will be higher in regions directly affected by the internal conflict, the agricultural sector, industry and the construction sector.

Providing children with basic skills necessary to reach their full potential helps both productivity and equality

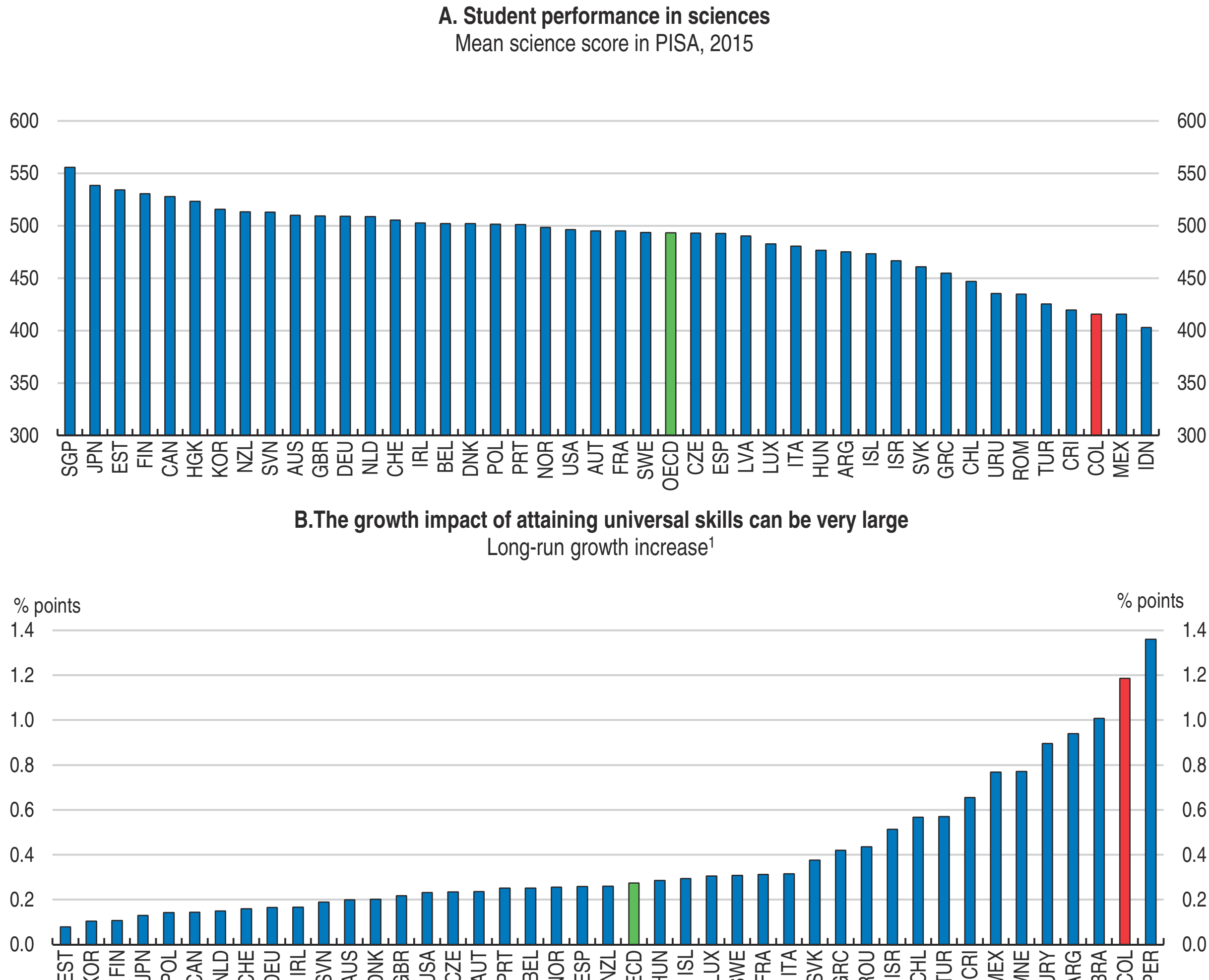
Education and skills development play a key role in making growth more inclusive and raising productivity. The inability of individuals from poor socio-economic backgrounds to access quality education (thus developing their human capital) causes a perpetuation of income inequality, lowering economic growth (Causa and Johansson, 2010). Over the past two decades, the Colombian educational system has undergone a fundamental transformation. Ambitious policies, such as the provision of free public schooling and major investments in infrastructure and education resources have permitted a considerable increase of enrolment rates in primary, secondary and tertiary education (OECD, 2016a).

The education system's performance has improved in recent years as shown by the new PISA results. For instance, Colombia's mean performance in science has increased by 28 score points since 2006, the second largest improvement among the 52 education systems with comparable data. However, the average student in Colombia still has a PISA score much lower than the OECD and EU average, which contributes to low productivity from lack of necessary skills to succeed in the labour market (Figure 14.A). For example, 30% of companies identify difficulties in finding skilled workers as the main obstacle to productivity growth (WEF, 2015).

More than 60% of students enrolled in secondary education do not have the basic skills necessary to participate in the formal labour market (less than "Level 2" skills) (OECD, 2015c). Ensuring universal access to secondary education by 2030 even at the current level of quality would yield economic gains: it could increase Colombia's annual economic growth by 0.3 percentage points (OECD, 2015c). However, improving the quality of schools so that current students attain basic skills by 2030 – assuming that all students who score above "Level 2" skills remain at their current level – would have a much stronger impact on the economy leading to an annual economic growth of 1.2 percentage points (Figure 14.B). Achieving universal basic skills for all would also reduce inequality (OECD, 2014b).

To reach universal basic skills Colombia needs to improve the quality of education at every level, starting in pre-primary. Increased investment in Early Childhood Education can reduce high school dropout rates, improve student performance and reduce gaps in learning achievement (Heckman, 2006; OECD, 2011). Empirical evidence shows that participation in

Figure 14. **A high share of students do not attain basic skills**



Note: For Argentina, data refer to Ciudad Autónoma de Buenos Aires.

1. "Long-run growth increase" refers to increase in annual growth rate (in percentage points) once the whole labour force has reached higher level of educational achievement.

Source: OECD, *PISA 2015 Database*; and OECD (2015), *Universal Basic Skills: What Countries Stand to Gain*, OECD Publishing.

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quality early childhood education is associated with stronger reading performance at age 15, especially for children from families with disadvantaged socio-economic backgrounds (OECD, 2013). To ensure universal educational access from early childhood, the government redesigned the programme *Familias en Acción* (now called *Más Familias en Acción*), to include an economic incentive for families who had children studying at kindergarten.

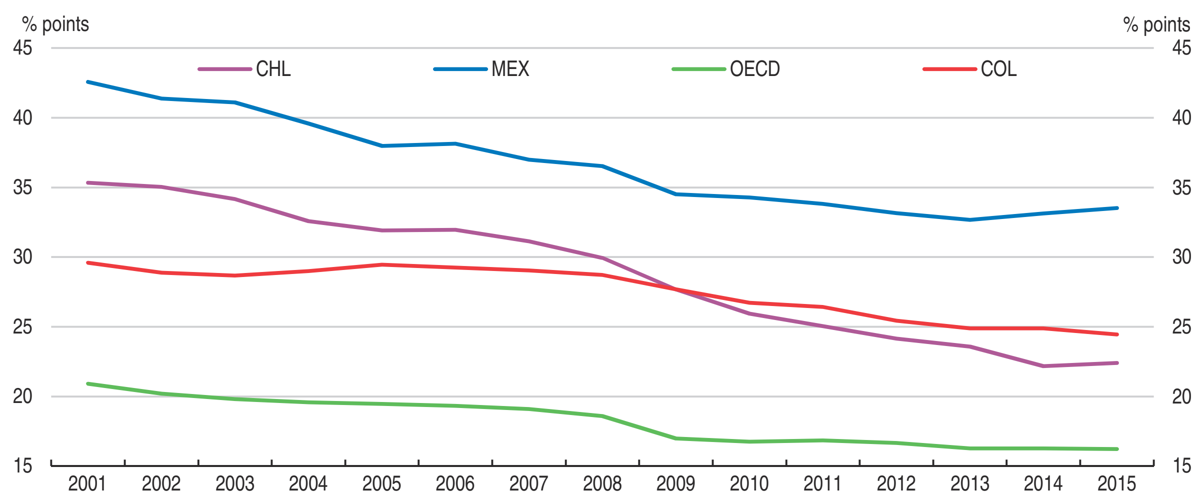
Increased public support should be provided to the regions that are lagging behind in order to raise the quality of primary education. Regions receiving more public support per student have better test outcomes (Olaberria and Heras Recuero, 2017). A national curriculum framework for school education should also be established, which would help set high and equal expectations for all children and provide guidance to teachers on what students should be learning at each stage. This should be complemented with the development of professional standards; improved teacher training and professional development.

Secondary education drop-out rates are amongst the highest in Latin America (IDB, 2013). To reduce them, teaching and learning should be reoriented towards core skills and real-life applications, and stronger guidance should be provided to students, teachers and schools on what knowledge, skills and values are needed to be successful in the labour market. Colombia should also strengthen and harmonise the assessment of skills acquired in vocational courses and involve the productive sector in this process. Tertiary and labour-market information systems should be strengthened and made more accessible to help students make better choices. It is essential also to improve post-secondary vocational education and training to support young people's transition into the formal economy.

Creating more opportunities for women

Empirical evidence shows that increasing women employment rate can have a significant impact on productivity and economic growth and contribute to reducing income inequality (OECD, 2012). Colombia has made significant progress in providing more opportunities for women to develop their careers: female employment rate, measured for women aged 15-64, increased from 46% in 2001 to 56% in 2015 nearly reaching the OECD average of 59% reducing the gender gap by more than 5%. However, the gender gap in employment remains well above the OECD average as men's employment rates are higher in Colombia than in the OECD (especially in the informal sector) as social safety nets are less developed (Figure 15).

Figure 15. **Gender gaps in employment are declining but persist in Colombia**



1. Gender gaps in employment are measured as male minus female employment to population ratios.
Source: OECD Labour Force Statistics Database.

StatLink http://dx.doi.org/10.1787/888933483455

Although education gaps have narrowed in recent years and women are relatively well-educated compared to men and even more likely to have a tertiary degree in Colombia, significant gender gaps exist in formal employment, unemployment, wages and job quality. Gender inequalities start early in life, and can compound with age. Colombia's gender gap in the share of young people not in employment, education, or training (so-called "NEETs") is higher than in OECD countries. Gender gaps also exist in the *quality* of jobs such as average earnings, earnings inequality, labour market security and quality of the working environment (2016b) (see more in Chapter 2).

The gender gaps partly reflect childbearing at a young age (OECD, 2016b). Also unpaid time spent on caregiving and housework – tasks overwhelmingly carried out by women across OECD countries – remains a significant obstacle to women's labour force participation throughout the life cycle (Miranda, 2011; Ferrant et al., 2014). Moreover, as in other emerging economies, and to a lesser extent in many OECD countries, women often take care of older or disabled relatives preventing them from taking a full-time job. Colombia has also an unmet need for childcare, as 21% of mothers whose children are not enrolled in formal childcare report that they could use it (Frey et al., 2017). The government is undertaking significant efforts to create more opportunities for women. For instance, it has created a special unit on gender issues in the Office of the Presidency (*Consejeria presidencial para la equidad de la mujer*) and introduced a programme – *Equipares* – which provides a quality label for companies (like an ISO certification or an ecolabel) if they meet certain good gender practices. The program includes e.g. training in attitudes, enhancing opportunities and developing skills. The government is also offering tax incentives for companies that hire women, in particular for victims of violence and/or over 40 years old. Information campaign that aim at increasing awareness of the importance of gender equality in work are also welcome.

However, additional efforts are required to close or reduce the gender gaps. Colombia should increase investment in active labour-market policies to reduce the gender gap in labour market participation. For example, the unemployment rate among women at 12% is much higher than for men at 7% pointing to lack of jobs for women. Thus, active labour market policies have a larger economic impact if targeted at women and this holds in particular for education and training opportunities that strengthen the skills of the female labour force (Bergemann and Van den Berg, 2008). Special emphasis on training especially young women in the NEET category would be important to enhance inclusiveness. Expanding early childhood care further, which is being done by the government, would also help mothers to take jobs and have the additional benefit of helping social mobility later in life for the children. The availability and the cost of childcare should be set at a level that makes it worthwhile for women to take on full-time work and workplace culture should not penalise women for interrupting their careers to have children (OECD, 2012).

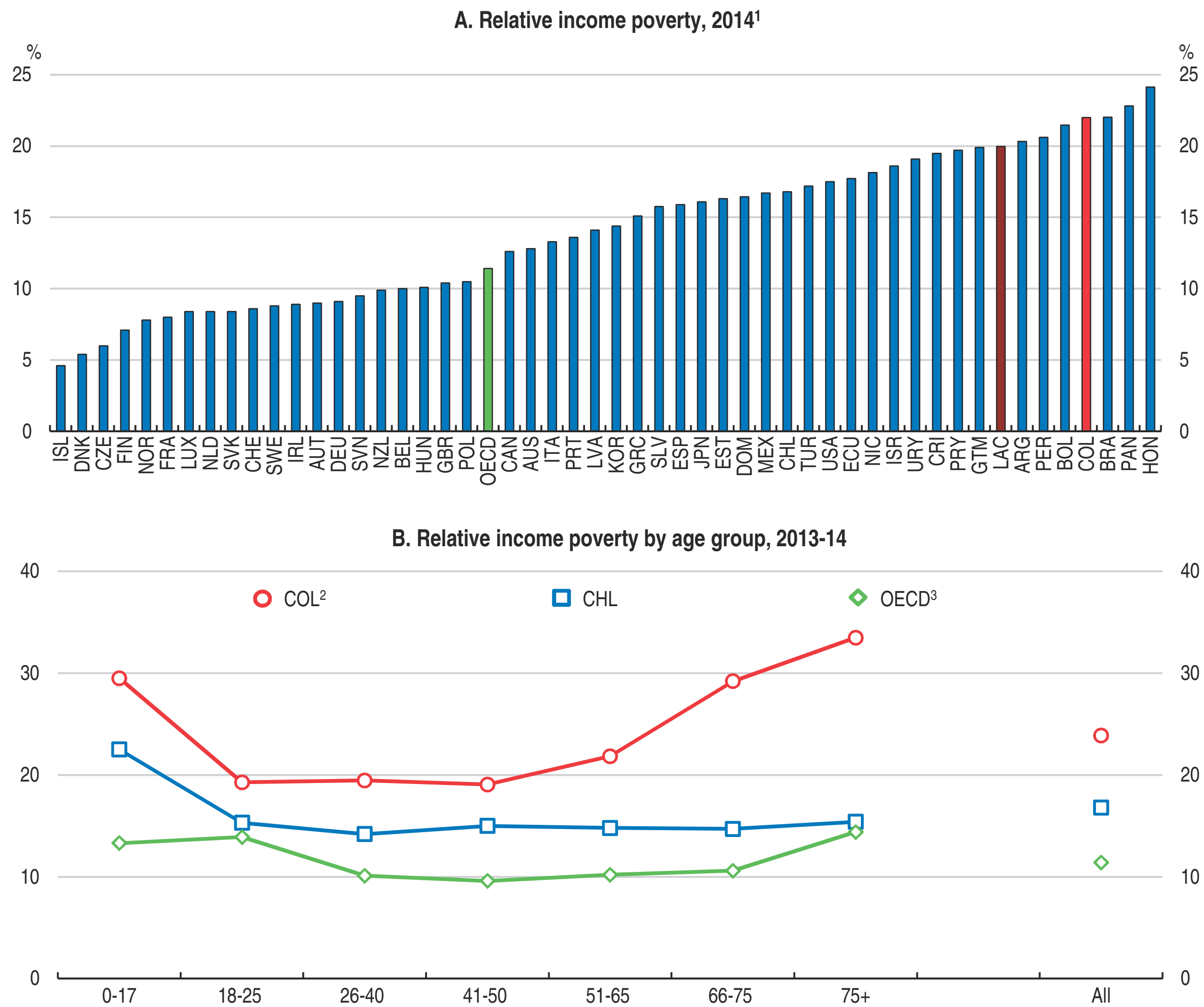
Making the social system more inclusive

In the last decade, the combination of strong economic growth and policies targeted to the most vulnerable has helped to reduce absolute poverty. However, relative poverty rates are still higher than the OECD average and other Latin American countries (Figure 16.A). Moreover, relative poverty rates among children and the elderly are around 30%, about one-fifth higher than the population average and much higher than the OECD average (Figure 16.B). Elderly poverty largely reflects the lack of a comprehensive pension coverage, which leaves many elderly without any income (see OECD 2015d). Child poverty is a reflection of large overall income disparities and still weak social transfer systems despite several new programmes introduced (see below).

Social policy has redistributed too little and social spending is considerably lower than the OECD average (Figure 17). In 2013, public social expenditure in Colombia was 13.6% of GDP compared to 21% in the OECD on average. Social spending in Colombia has subsequently increased to 14.4% of GDP in 2015.

Mas Familias en Acción has increased school enrolment but the impact on education achievement was smaller due to little improvements in the quality of education. Spending could be increased not only on the amount of cash benefits but particularly on the

Figure 16. **Poverty remains high, especially amongst children and the elderly**



1. Relative poverty rates after taxes and transfers (threshold of 50% of the median income). LAC average does not include Chile and Mexico.
2. For Colombia, data refer to 2011.
3. Average of 33 OECD member countries.

Source: OECD (2016a).

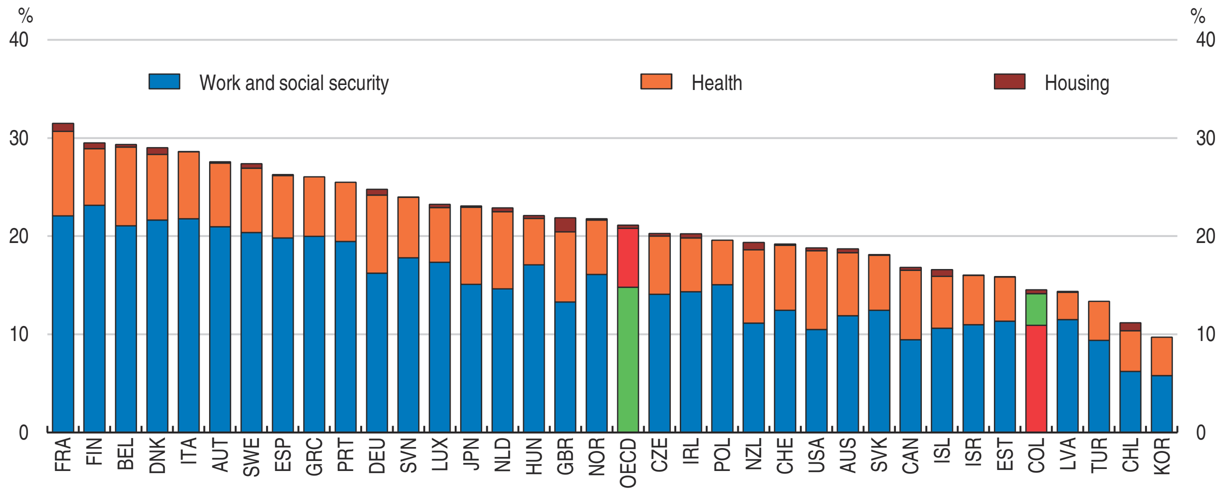
StatLink http://dx.doi.org/10.1787/888933483469

elements that could reinforce the achievement of long-term objectives. Furthermore, co-ordination between different programmes, agencies and levels of government could be enhanced to increase the efficiency and effectiveness of programmes (OECD, 2016b).

Many programmes for the poor and the vulnerable such as *Red Unidos*, *Mas Familias en Acción* and *Jóvenes en Acción* are well targeted and achieve positive outcomes, but more resources are needed to raise their impact (OECD, 2016b). *Red Unidos* has two main types of interventions: the provision of family and community support through social workers and preferential access to social programmes and services. As such it does not provide any cash or in-kind benefits, but focuses on ensuring that families access the social programmes and services that are available. *Más Familias en Acción* is a conditional cash transfer to families with children identified as vulnerable with two components. The first is a per family payment, for those with children aged under 7 years old, subject to children's

Figure 17. **Public social spending as a percentage of GDP by main components**

2013 or latest available data



Note: For Colombia, social spending components are based on classification used by Colombian Ministry of Finance; in the case of the health categroy, data include drinking water supply and environmental sanitation spending. For OECD countries, the SOCX social protection branches are classified as follows: old-age, survivors, incapacity, active labour market programmes, unemployment, family and other social policy areas (Work and social security), health (Health), housing (Housing). For Australia, Canada, Korea and New Zealand, data refer to 2014. For Chile, Colombia and Israel, data refer to 2015.

Source: *OECD Social Expenditure Database* (SOCX), Ministerio de Hacienda y Crédito Público (2016).

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attendance to health controls. The second is a per child (aged 5 to 18 years old) allocation for those enrolled and regularly attending school. *Jóvenes en Acción* aims to ease transition from secondary-education to labour market by promoting enrolment to post-secondary education (OECD, 2016b).

Unequal social security coverage and access to public services are other important dimensions of inequality. Only formal workers earning at least the minimum wage are covered by the pension system. The *Beneficios Económicos Periódicos* (BEPS) system introduced to expand coverage to informal workers has not yet yielded significant results. Coverage of the old-age minimum income support (*Colombia Mayor*) has been extended to reach 62% of the 2.4 million potential beneficiaries. An in-depth reform of the pension system is required, as discussed in the 2015 *Economic Survey of Colombia* (Table 4). In addition, eligibility for BEPS and minimum income support should be expanded to guarantee old-age income as the relative poverty rate among the elderly is quite high (Figure 16B).

Regarding health insurance, the coverage is universal but access to health services and health outcomes varies significantly between socio-economic groups and across regions. Maternal, neonatal and infant mortality rates tend to be higher in rural areas and for specific population groups. This suggests that the access and the use of primary and secondary care are higher in urban areas. Given the remoteness of many areas in Colombia, factors such as the poor availability of health centres and health professionals, deficient transportation and high transportation costs make it extremely challenging to ensure an adequate standard of care quality in remote locations (OECD, 2015e).

Since the introduction of the *Sistema General de Seguridad Social en Salud* in 1993, additional resources have targeted rural, remote and indigenous populations, aimed at compensating both for greater health care needs as well as the increased costs of delivering

Table 4. **Past OECD recommendations to make growth more inclusive**

Main recommendations	Actions taken since the 2015 *Survey*
Thoroughly reform the pension system to reduce old-age poverty and inequality.	No thorough action taken.
Expand eligibility of the *Beneficios Económicos Periódicos* programme.	In September 2016, new incentives were introduced among the affiliates in order to increase the number of savers. Part of the revenue of the single tax for SMEs (*monotributo)*, created in the 2016 tax reform, will go to the BEPS account of the beneficiary
Increase coverage and benefit levels of the minimum public income-support programme (Colombia Mayor).	The government is working to implement this recommendation soon. During 2016, an impact assessment was carried out on the program, which includes recommendations regarding coverage and level of benefit.
Further reform labour markets to reduce informality and create more quality jobs.	In 2016 Colombia made paying taxes less costly for companies by reducing the payroll tax rate and introducing exemptions for health care contributions paid by employers. The single tax for SMEs should also help formalisation.

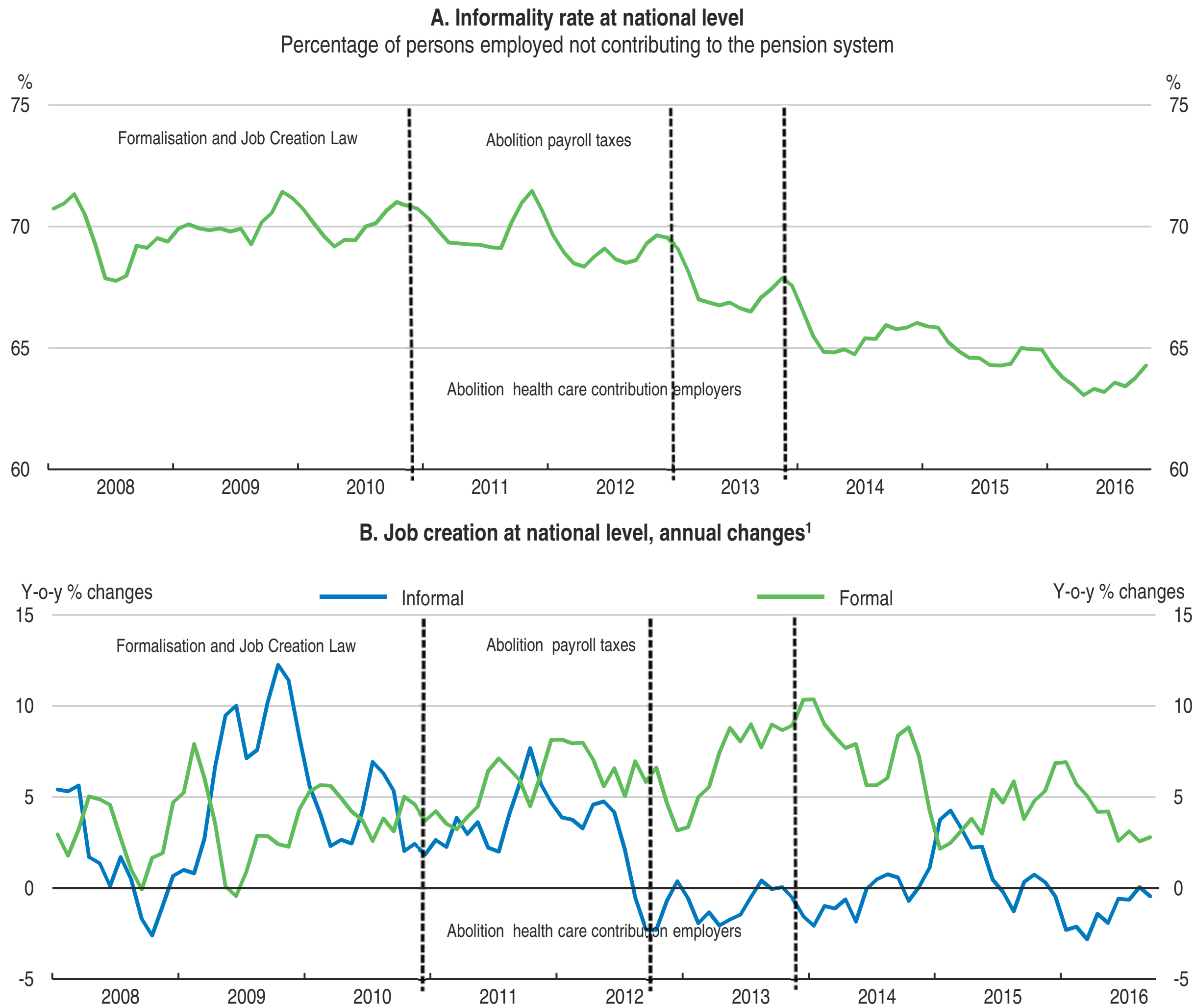
services in areas of limited accessibility. Other efforts to provide a better service in rural areas have included translating health information into local dialects and using telemedicine (OECD, 2015e). Colombia is also investing in an expanding range of options to use new information technology and communication (ITC) platforms. The National Development Plan 2014-2018 mentions as a priority the need to build sub-national administrative capacity as a means to reduce regional disparities in access to services. It includes policies that improve comprehensive risk management by incentivising resolution capacity for primary services through new payment mechanisms; human talent and skills, and available infrastructure and equipment so as to open the door to specialised services. In addition, it provides framework for management strategies for local authorities in the health activities under their responsibility. However, continued improvements in the delivery and the financing model is needed in rural and remote areas to achieve levels of access and quality to healthcare that are comparable to more advanced urban areas.

Tackling informality to improve productivity and equality

Informality has important implications for productivity, economic growth, and inequality of income (OECD, 2009; Loayza et al., 2009 and Dougherty and Escobar, 2013). The Colombian authorities have promoted labour formalisation over the past decade. The two most important initiatives were the Formalisation and Job Creation Law of 2010 and the tax reform of 2012, which reduced non-wage labour costs by eliminating some labour taxes (OECD, 2015d). While the effects of the former seem limited, formal job creation increased after the adoption of the latter (Figure 18). Despite these improvements, some social insurance programmes, such as the family compensation funds (*Cajas de Compensación Familiar*), still limits employment formalisation by raising non-wage labour costs (OECD, 2015d). The universal health care system may also discourage formalisation because workers in the formal sector can benefit from a non-contributory scheme with almost equal generosity as the contributory system for formal sector workers (OECD, 2016b).

The 2012 tax reform lowered social-security contributions and thereby reduced informality, which has declined from 72% to 65% (Figure 18), but which remains high. Those working in the informal sector face higher risks of falling into poverty and have limited access to finance and public benefits (especially, pension and unemployment). Youth, female, low-skilled workers and those displaced by political violence are the most

Figure 18. **Evolution in formal and informal job creation**



1. Formal job creation is defined as the year-to-year change in the number of workers (including employees and self-employed) contributing to the pension system, while informal job creation is defined as the year-to-year change in the number of workers not contributing to the pension.

Source: OECD calculation based on GEIH data sourced from DANE.

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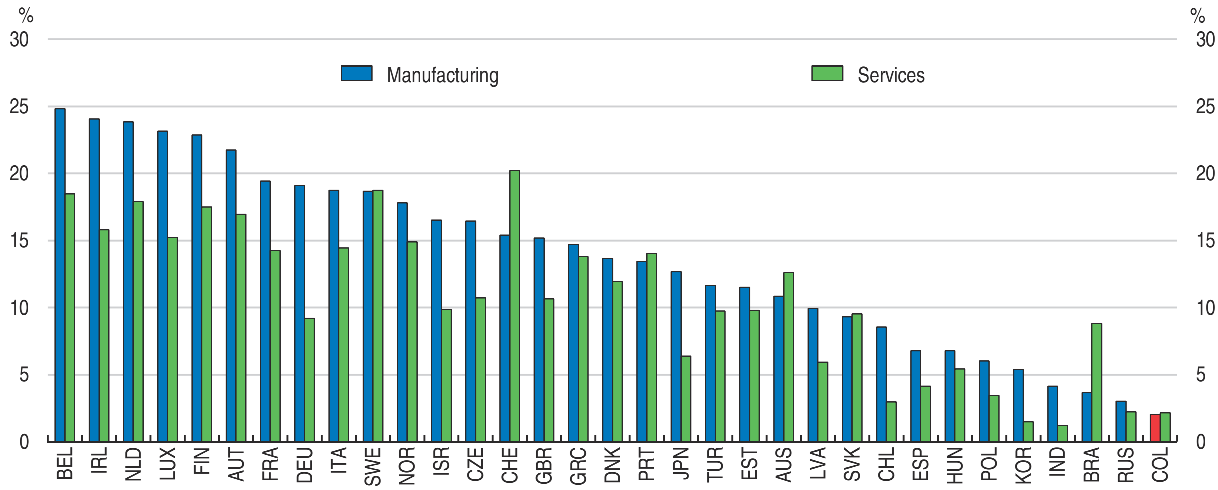
likely to work informally (Bernal, 2009, Ibáñez and Moya, 2009a and 2009b). The earnings gap between formal and informal workers is large in part because informality is particularly high among low-skilled workers and those working in traditional low-productivity sectors. This pattern of informality, especially in poorer regions, partly reflects the high level of the minimum wage. In Colombia the national minimum wage is 86% of the median wage, which is well above the OECD average. However, almost half of the total workforce (formal and informal) earns less than the minimum wage. Furthermore, informality is higher than the national average in those regions where the minimum wage is above the average wage (OECD, 2013).

To reduce high informality rates, focus should be placed on further reducing the non-wage labour burden on wages; simplifying the complex procedures for the registration of companies and the affiliation of workers to social security. The creation of a one-stop shop to deal with licenses to open and register a new business will help. Past OECD surveys have

Figure 19. **Very few firms introduce new products to the market**

Percentage of firms introducing new products to the market by sector, 2010-12



Note: International comparability may be limited due to differences in innovation survey methodologies and country-specific response patterns. European countries follow harmonised survey guidelines with the Community Innovation Survey. Please see *www.oecd.org/sti/inno-stats.htm* and chapter notes for more details.

Source: *OECD Science, Technology and Industry Scoreboard 2015: Innovation for growth and society*, OECD Publishing, Paris.

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recommended differentiating the minimum wage by age and regions and slowing the rate of increase to inflation to increase the gap with average wages (Table 5). This could help reduce inequalities, promote better job creation, increase productivity and inclusive growth. At the minimum, establishing social dialogue to discuss differentiating the minimum wage by age and regions should be considered.

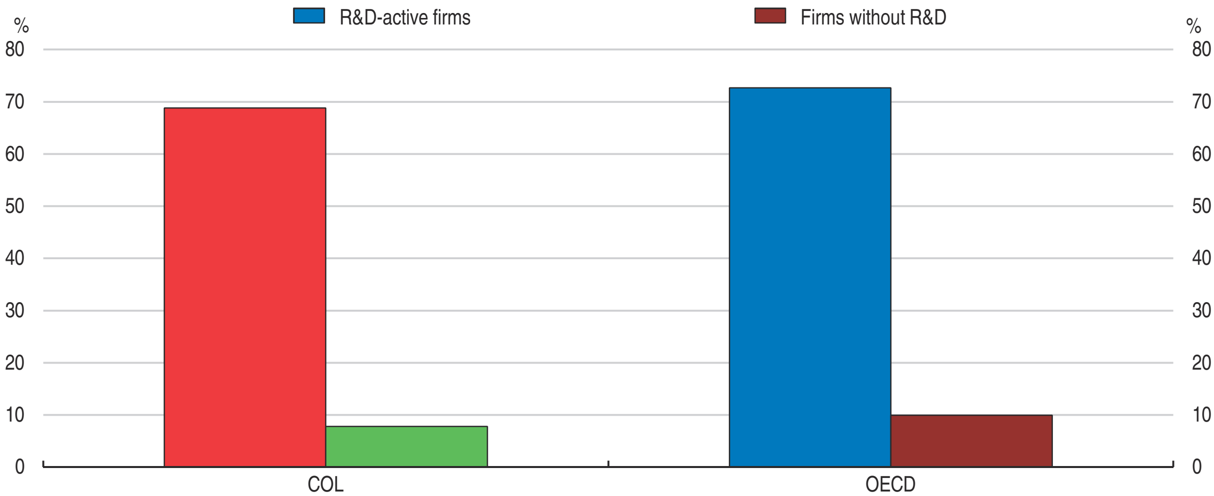
Encouraging investment in innovation to help firms catch up with the global frontier

The improvements in the educational system should be complemented with better innovation policies to generate knowledge-based capital, which makes a key contribution to productivity and competitiveness. Productivity enhancements are shaped by firms' ability to innovate or adopt new innovations made by other firms. However, Colombia's innovation system is still modest and lacks a strong business core. R&D expenditure is low at 0.2% of GDP, compared to 2.4% in the OECD (OECD, 2015f). Colombian firms engage little in innovation, as only a small portion of manufacturing firms introduce new products (Figure 19). Only 30% of total R&D is performed by the business sector, compared with 70% on average for OECD countries.

Framework conditions for innovation have improved significantly, though there remains scope for improvement. The government is following different strategies to promote innovation and R&D. For instance, *voluntary innovation pacts* are signed by companies that include innovation as part of their business strategy. *Innovation systems* provides specialised training to develop innovation capabilities; *innovation alliances* (managed by the Department of Science, Technology and Innovation – *Colciencias* – and the chamber of commerce) promotes the culture of innovation across companies in clusters. Further effort is needed to encourage more firms to invest in R&D: evidence shows that Colombian firms that invest in R&D generate more product innovations (Figure 20) and that investing more on innovation

Figure 20. **Innovation increases with R&D engagement in firms**

Percentage of product innovation firms by R&D status, 2010-12



Note: For Colombia, data refer to the simple average of the estimates for manufacturing in 2011-12 and for services in 2012-13. For the OECD, data refer to the simple average of 28 member countries.

Source: DANE, Survey of Development and Technological Innovation in the Manufacturing Sector 2011-12 and from the Survey of Development and Technological Innovation in the Service Sector 2012-13 and OECD, based on Eurostat Community Innovation Survey (CIS-2012) and national data sources, June 2015.

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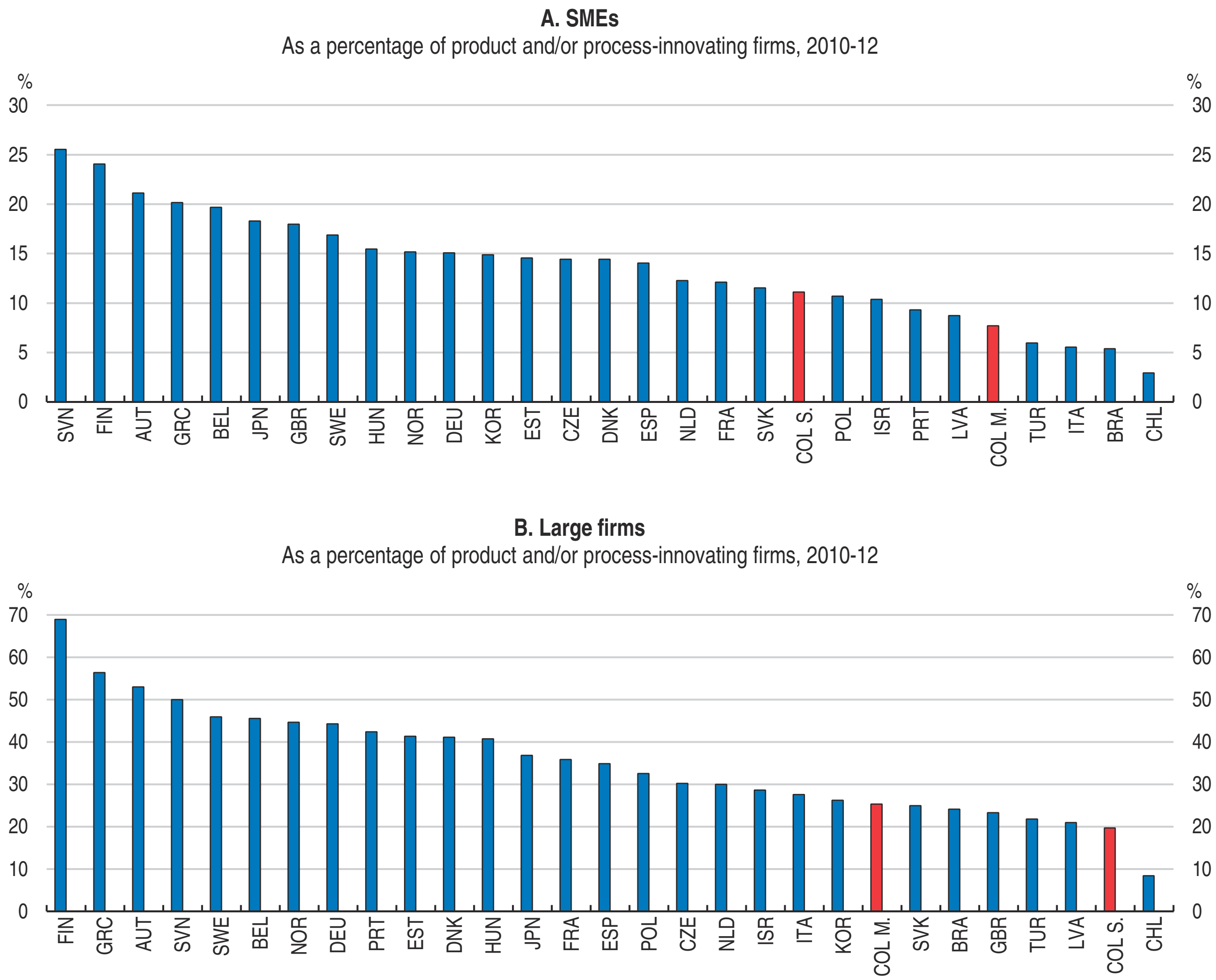
increases catch-up with frontier firms (Brown et al., 2013). Reducing the high costs of patent application and providing more support by removing constraints on public funding of R&D in enterprises can foster innovation by helping companies to incorporate state-of-the-art technologies (OECD, 2014a).

In 2011 *Colciencias* started to provide grants directly to private firms to strengthen their innovation capacity through knowledge management, strategic innovation management, rethinking business models and other innovation-related practices via the Innovation Management Support Programme. However, the primary support is to build companies' capacities rather than support specific innovation projects. Colombia's main public investment in STI is made through fiscal benefits. Two of the most important changes have been introduced in 2015. The "typologies document" which defines the criteria for the evaluation of projects to access the benefits have been modified. The criteria are now different for science projects and for technological development and innovation projects, making the benefits more accessible for businesses. The other important feature of this policy is determined by the recognition of "highly innovative business" that allows leader innovative companies to access the fiscal benefit automatically. Colombia should learn from the good practices of many European countries, where providing grants and loans to firms for R&D is a common mechanism.

Efforts aimed at increasing the efficiency and effectiveness of innovation require improvements in knowledge diffusion channels. That is why it is important to increase collaboration between businesses, education and research institutions which is currently not the case in Colombia (Figure 21). Linking business and scientific research institutions can help demonstrate the importance of research, crossing several disciplines in new technology development and identifying needs for relevant applied sciences (OECD, 2015f). The *Colombia Científica* programme has recently been designed (by the Ministry of Education, Ministry of

Figure 21. **Firms collaborating on innovation with higher education or research institutions is low**



Note: For Colombia, data on manufacturing (COL M.) and services (COL S.) are collected for separate reference periods and refer to 2011-12 and 2012-13.
Source: OECD, based on Eurostat Community Innovation Survey (CIS-2012) and national data sources, June 2015.

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Trade, Industry and Tourism, *Colciencias* and Icetex) to improve the quality of the higher education institutions through the support of scientific ecosystems, where academia and industry meet to solve social and productive problems by building R&D and innovation capabilities in a region. It also provides a Passport to Science which offers scholarships abroad for master and PhD in the top 500 universities of Shanghai Ranking. It is expected that this effort will increase research capacity, mainly in institutions with low quality indicators.

Sustaining the increase in public investment to close infrastructure gaps and regional disparities

Regional disparities are exacerbated by the lack of efficient infrastructure. The revenue sharing system between the central and subnational governments does little to change these inequalities, as fiscal equalisation has not been a priority. Resource-rich departments perform better than others in terms of growth: the 2011-12 reform of the General System of Royalties, which was implemented to reduce these inequalities has significantly increased the allocation of resources towards poor regions compared to the old system (Bonet and Urrego, 2014). The 2016 tax reform also created temporary tax incentives for companies that invest in the regions most affected by the internal conflict.

Infrastructure gaps also restrain productivity growth and export performance. Quality of roads and railroads is relatively low, limiting connectivity between the production and consumption areas, as well as limiting the capacity to link production to ports and airports for export (Figure 23). Furthermore, the infrastructure gap has a strong territorial dimension: many regions – in particular rural – lack access to transport infrastructure and local public services such as education, housing or welfare services. This explains why productivity levels and export performance differ significantly across regions and sectors. The gap also contributes to inequalities by limiting opportunities to acquire skills, and create jobs and to wellbeing by depriving access to public services such as health and welfare services. Empirical evidence for Colombia shows that the trade impact of reduced transportation costs achieved by improving the conditions of all the roads can be very large: At the national level, a reduction of 1% in domestic transport costs could increase annual exports by 5.9% in the mining sector, 7.8% in the manufacturing sector and 7.9% in agriculture (IDB, 2013).

Because of its geography, Colombia must spend more per kilometre of transport infrastructure than other countries to maintain and build similar levels of density of its road network. Public investment has increased significantly in recent years from 2.4% of GDP in 2000 to 3.7% in 2014. However public investment efforts need to be sustained and amplified in order to respond to huge infrastructure gaps and territorial disparities, as the level of investment per capita remains lower than in all OECD countries (OECD, 2016c).

Since such costly investments cannot be undertaken by the public sector alone, public and private partnerships (PPPs) should be introduced to improve transport connectivity across the country. The government has launched a new generation of infrastructure PPPs (fourth generation or 4G) on road concessions (Box 4). Over the next eight years, the new 4G programme is expected to deliver 5 892 km of roads in three waves via PPPs, requiring an investment of USD 10.7 billion (Bell and Schipani, 2015). The target is to reduce travel times by 30 % and transport costs by 20%. Most PPPs are for large projects financed by the central government, but subnational governments can also contract PPPs.

Box 4. **The 4th Generation Infrastructure Program (4G)**

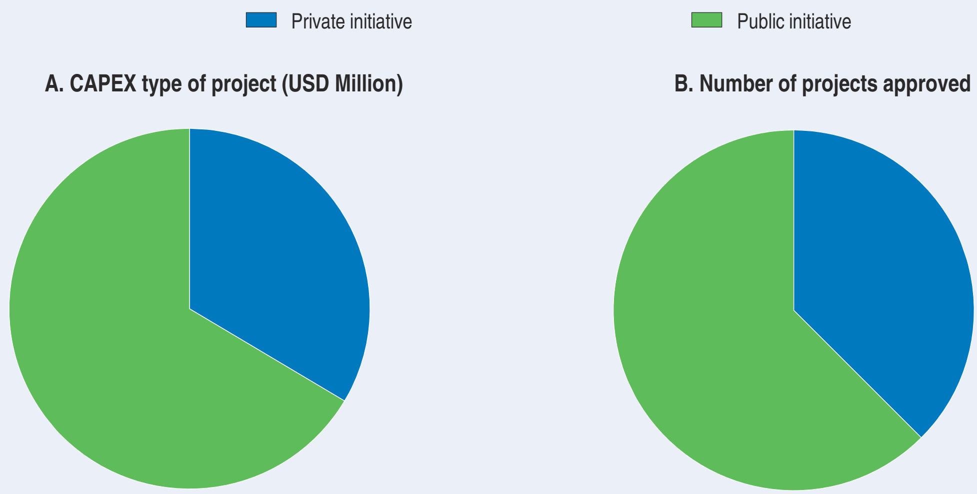
With aggregate capital expenditures of USD 15 billion, the 4G concession program is the most ambitious infrastructure development initiative in Colombia's history (Figure 22). As of December 2016, 32 projects through PPP schemes have been approved and 21 of them have already received financing. 20 of the 32 projects are public initiatives, meaning that the project has been proposed, designed and funded by the Government, while the other 12 are private, which have been proposed by a private party and don't require governmental funds.

Thanks to the regulatory changes made since 2012, all the 4G projects have completed a rigorous and comprehensive analysis process involving different governmental entities. The National Infrastructure Agency starts the evaluation at an early stage and leads the financial and legal structuring, while the National Planning Department runs the value for money assessments to determine if it is appropriate to use the PPP mechanism instead of a traditional public procurement. On the other hand, the Ministry of Finance approves the financial terms and the risk allocation in the agreement and decides if a provision is necessary to mitigate the probable impact of a risk allocated to the public sector. For public

Box 4. **The 4th Generation Infrastructure Program (4G)** *(cont.)*

initiatives, once this process is completed, the National Council of Fiscal Policy approves the government funds required by the project.

Figure 22. **Expenditure and projects under the 4G program**



Source: Colombian's authorities.

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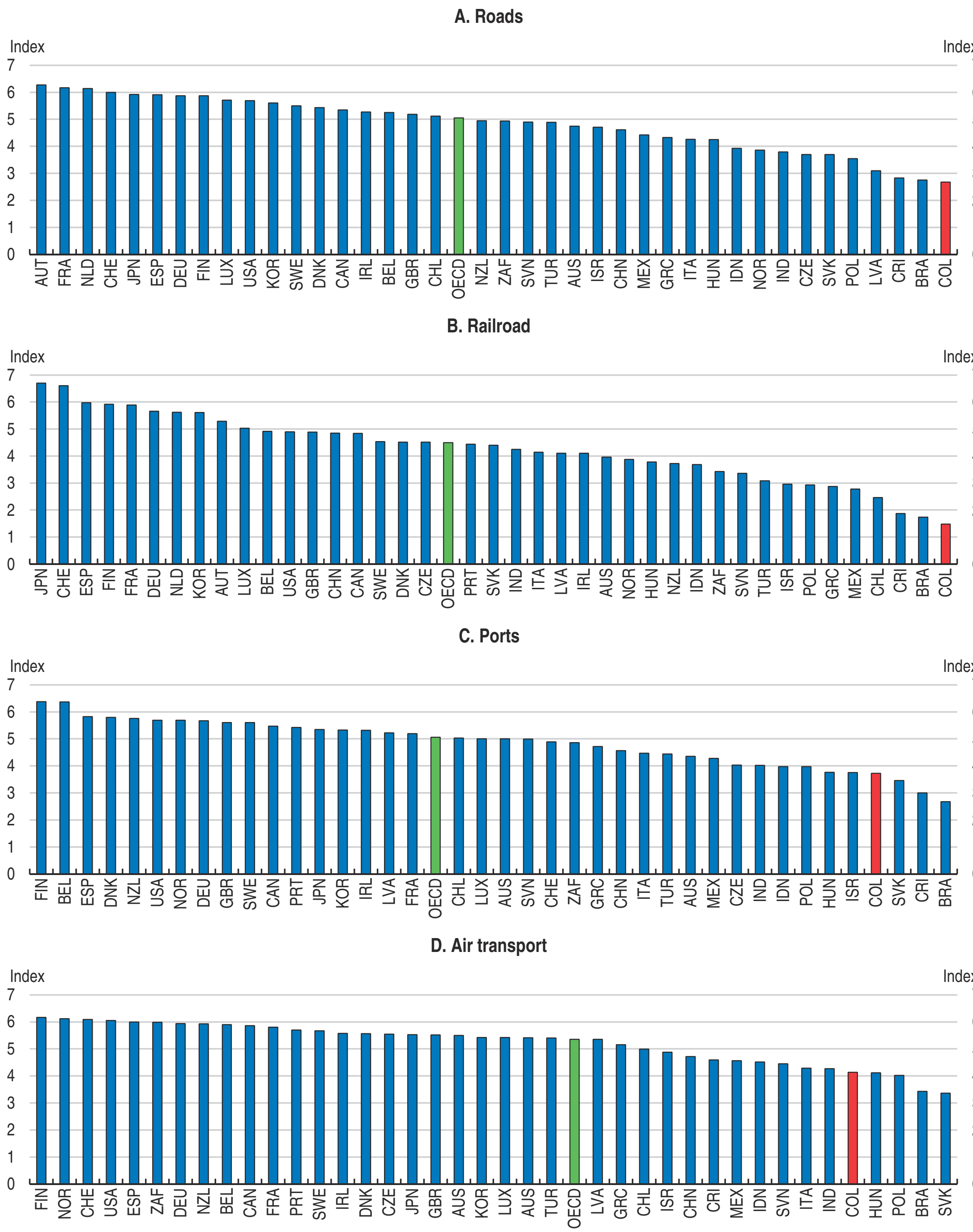
Apart from the magnitude, some major improvements differentiate this program over the three previous generations of concessions. First, government funds are disbursed only once the infrastructure is functional and comply with the quality indicators defined in the agreement, aligning the incentives for a swift completion of the construction phase and a strict compliance with the operation and maintenance criteria. Second, construction and financing risks are transferred to the concessionaires, preventing moral hazard from the financial sector since only sound projects with qualified contractors will obtain financing. Third, the technical standards have been upgraded reducing time and costs of transportation, thereby boosting country's productivity.

Colombia also has a mechanism for contingency management: The National Contingency Fund. Whenever a risk is allocated to the public sector in a concession/PPP agreement, a risk valuation is conducted by the Ministry of Finance to assess the probable impact of the contingency. Different methodologies such as Montecarlo Simulations, Chi Square or Bootstrapping are used depending on the type of risk and a provision to the Fund is made if the analysis reveals that the project could be vulnerable. The Fund serves as a countercyclical buffer that reduces the fiscal impact in the future and as a liquidity facility that prevents delays in the execution of the projects. The government should continue monitoring the potential fiscal risks closely, and ensure that the financing (including future liabilities) are transparently accounted for.

Source: Ministry of Finance and Public Credit.

Colombia also needs to improve rural infrastructure to increase productivity in the agricultural sector. The latest figures show that agriculture contributes nearly 5% to national GDP and 9.6% to its exports, while it still absorbs nearly a fifth of the workforce (17.5%). Progress in agriculture has been closely associated with rural infrastructure (Lozano-Espitia and Ramirez-Villegas, 2016). Deficiencies in physical infrastructure reduce factor productivity, crop yields, weaken market competitiveness and limit spatial and temporal integration (Fan, 2004; Pinstrup-Andersen and Shimokawa, 2006). Better infrastructure would also enhance inclusive growth by providing more job opportunities for the many rural poor or improve their access to public services.

Figure 23. **Infrastructure is of lower quality than in OECD countries**



Note: Index scale 1-7, from lowest to highest quality.
Source: World Economic Forum (2015).

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Box 5. **Greening growth challenges**

The energy intensity of output in Colombia is around half the OECD average and has been falling faster. Hydrocarbon extraction has almost doubled since 2000, but almost all coal and two thirds of oil production is exported. Renewables, mainly hydroelectricity, provide around a quarter of total energy supply but the share has fallen as the economy has grown and energy demand expanded.

Low energy intensity and the contribution of renewables result in low CO_2 emission per GDP. As a result, it also has significantly lower CO_2 emissions per capita than average. Other greenhouse gases (GHG), mainly from agriculture, contribute as much as CO_2 to total GHG emissions, a larger contribution than for most countries. National estimates for absorption of CO_2 by forests suggest that, at the moment, Colombia is a net absorber of GHG (Colombia, 2015) (Figure 24).

Air quality is very poor in two principal cities – Bogotá and Medellin –, as well as in some local areas near open pit mining operations. Colombia also has unusual but significant air pollution problems from other sources; for example it is the world's largest mercury polluter per capita, associated with gold mining (OECD, 2014c).

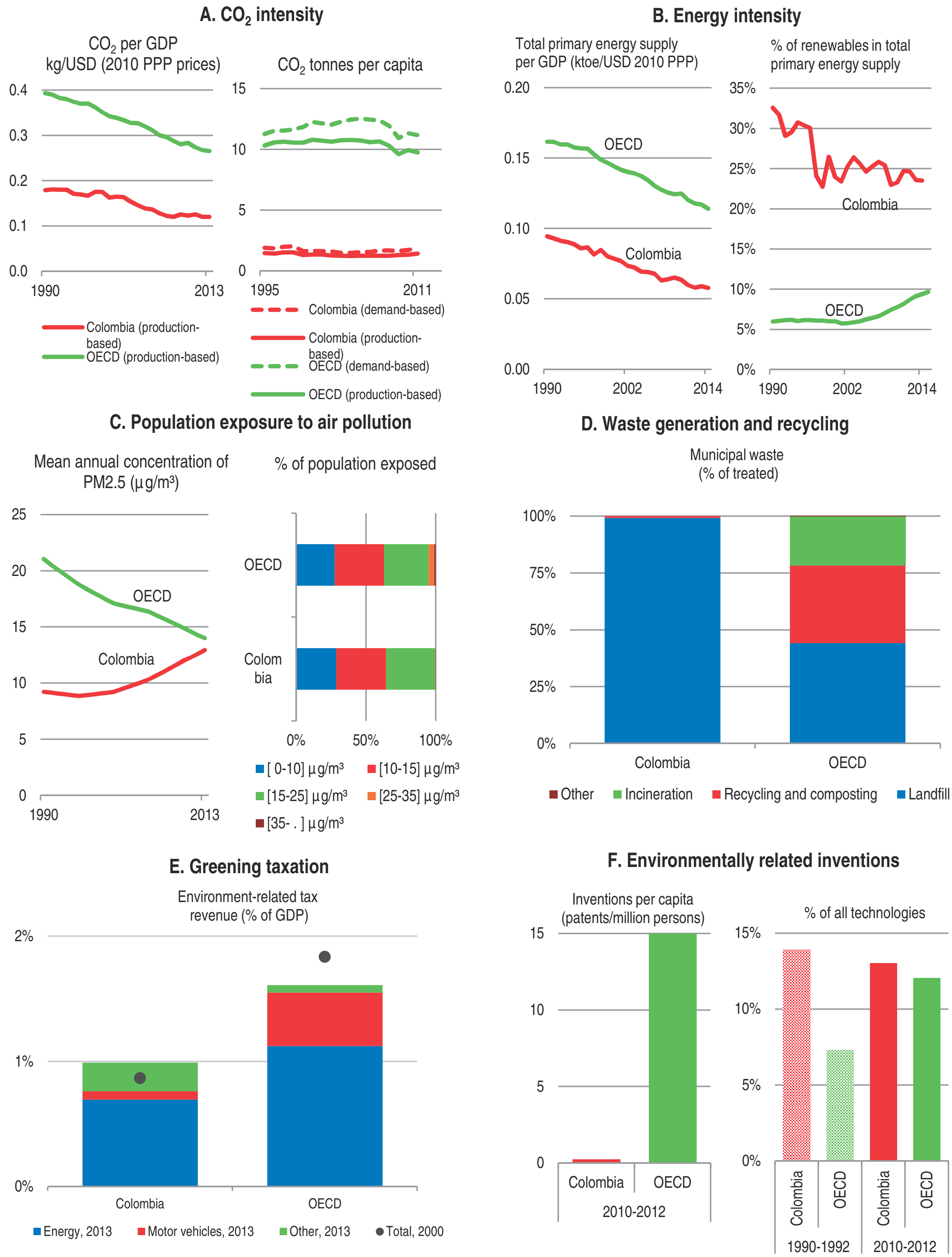
Access to clean drinking water and sanitation has been improving but is very far from universal, especially in rural areas. Between 1990 and 2010, the under-5 child mortality rate due to diarrhea fell by more than 75%, but it remains one of the major causes of child mortality. Even where wastewater is collected, less than half of it was treated in 2010. (OECD, 2014).

Hazardous waste poses much more of a problem than in most OECD countries: OECD (2014) reports that more than 50% of small mining companies fail to report waste generation, and illegal mining is responsible for large releases of hazardous chemicals to the environment. Significant numbers of contaminated sites exist, and clean-up is slow even where the source is known. Revenue from environmental taxes has increased slightly since 2000 but remains low. Taxes on road fuel are the main source of environmental tax revenues, as is the case in most OECD countries, but they are levied at low rates. Road fuel taxes have fallen, as a proportion of the total fuel price, from over a quarter in 2000 to less than one tenth (for diesel) and one fifth (petrol) in 2012.

Finally, large regional disparities suggest that the different investment priorities need to be articulated in coherent territorial strategies. Colombia should move from a project based approach to a more strategic, regional approach to investment through articulated programmes. The General System of Royalties is intended to encourage regional projects, but in practice royalty-funded projects are dispersed into thousands of smaller projects, which means that large scale infrastructure projects with higher social returns are not prioritised. In October 2015, only 5% of the projects approved had a regional dimension (DNP, 2016). The current Development Plan aims to strengthen the "Contrato Plan", which is the intergovernmental co-ordination tool that Colombia has developed and implemented to co-ordinate investments and development programming across levels of government. It aims at achieving commonly-defined objectives more effectively and efficiently. The DNP wishes to expand the use of these tools to cover the entire country eventually, notably with next-generation plans called "Contrato Paz" that would be applied in those regions most affected by the armed conflict.

Greater coordination between jurisdictions is also critical as many development and investment issues go beyond current administrative boundaries. However, the lack of

Figure 24. **Green growth indicators for Colombia**



Source: OECD (2016), *OECD Environment Statistics Database* (Green Growth Indicators, Patents: Technology Development, Municipal Waste); *OECD National Accounts Database*; IEA (2016), *IEA World Energy Statistics and Balances Database*; *IEA Energy Prices and Taxes Database*; OECD calculations based on data from M. Brauer et al. (2016), "Ambient Air Pollution Exposure Estimation for the Global Burden of Disease 2013". Environmental Science & Technology 50 (1), pp. 79-88.

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financial incentives to support cross-jurisdictional cooperation is a significant obstacle. France and Italy, for example, have put in place specific financial incentives, such as higher central government transfers, to promote inter-jurisdictional cooperation. The government might consider providing financial incentives to support collaboration across municipalities and departments, for example, through matching grant or co-financing projects between the national government and subnational governments' entities.

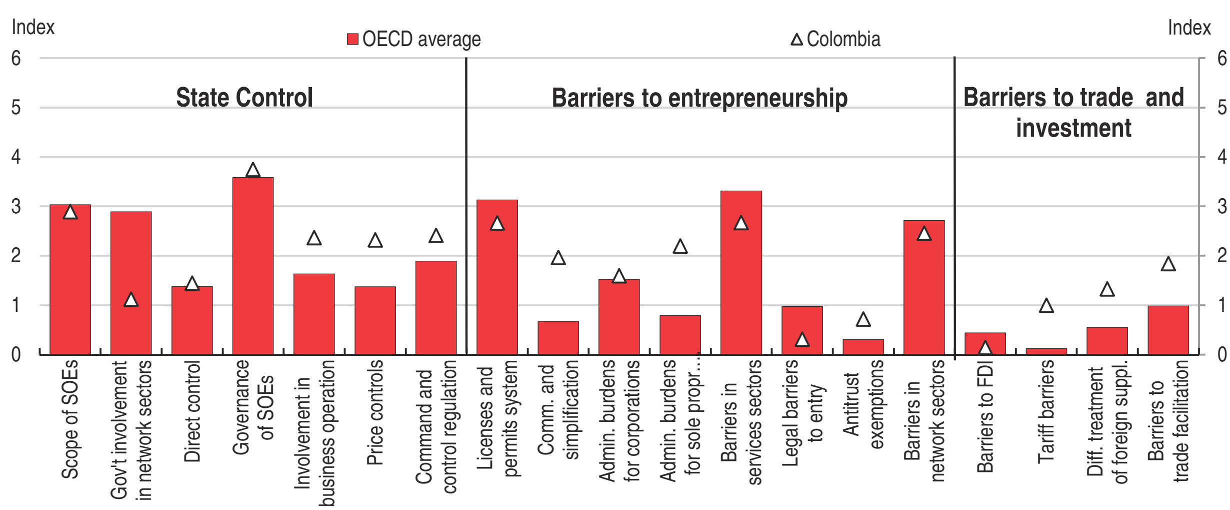
Colombia should also do more to promote green growth (Box 5). Wellbeing would benefit from policies dealing with air quality in large cities or better access to clean water. The December 2016 tax reform contains welcome measures to deal with environmental challenges, such a carbon tax, fee on plastic bags and new fuel taxes.

Addressing regulatory barriers and strengthening competition

Over the last decade Colombia has significantly improved its regulatory environment by simplifying the process to start a business, paying taxes, protecting investors and resolving insolvency, as well as reducing entry costs and barriers to entrepreneurs. Colombia is now around the OECD average in about half of the dimensions of product market regulation. However, product market restrictiveness remains above the OECD member average in some important areas such as the state's involvement in business operations, regulatory procedures in some sectors and competition in some network sectors (such as gas) (Figure 25). Simulations based on countries with similar levels of restrictiveness (i.e. Chile) suggest that aligning product market regulation with OECD best practices could boost GDP by ¼ to ½ % annually within five years (OECD, 2015g).

Figure 25. **Business regulation remains restrictive in multiple areas**

Product market restrictiveness, 2013



Note: Index scale 0-6, from least to most stringent. More information is available at *www.oecd.org/eco/pmr*.
Source: OECD, *Product Market Regulation Database*.

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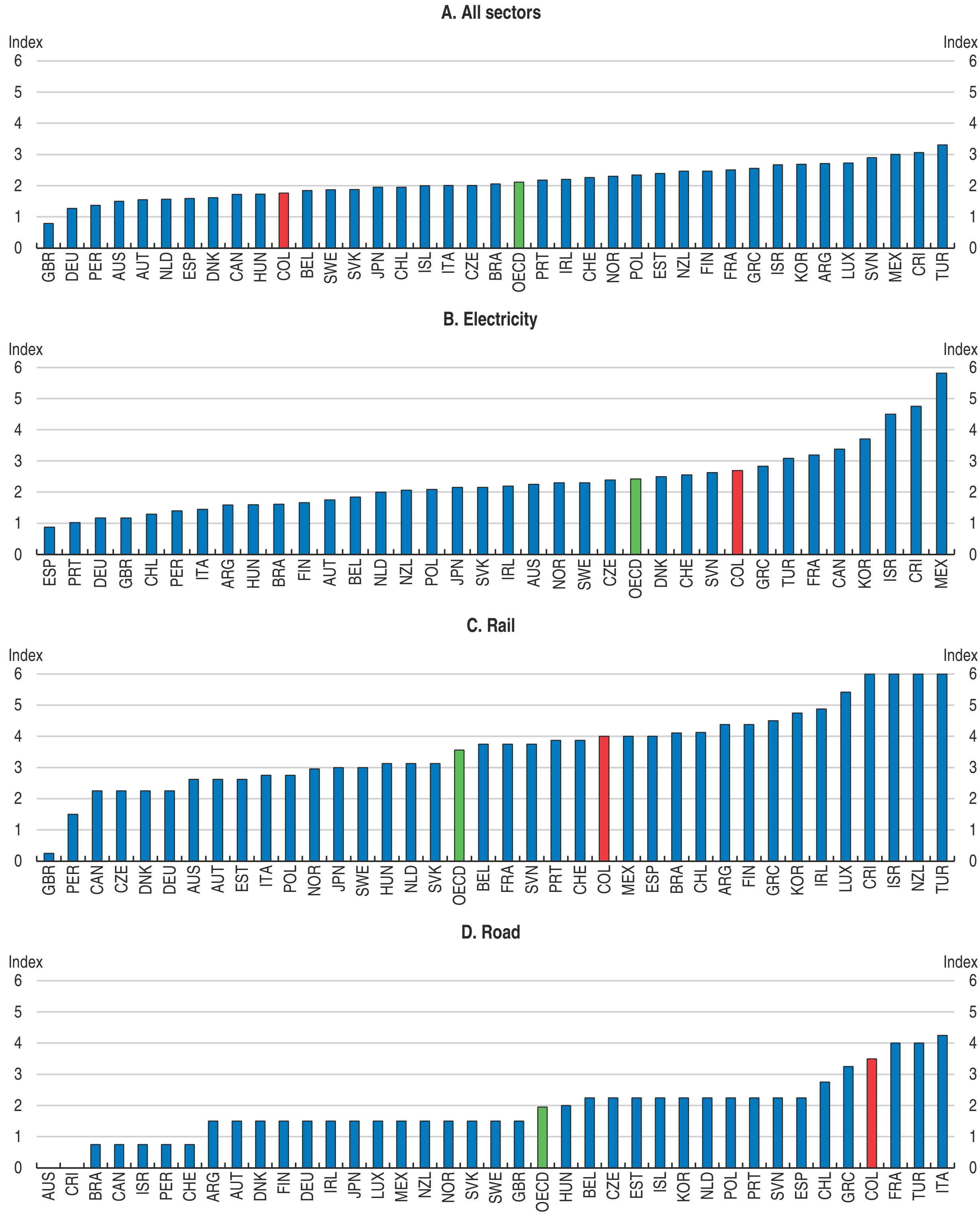
In addition to the lack of infrastructure discussed above, the market structure of the transport industry can be a key determinant in freight costs (Hummels, Lugovskyy, and Skiba, 2009). Regulation in roads and rail remains very stringent. In the rail sector a unique operator is in charge of infrastructure and provision of services, while in the road sector prices are controlled and barriers restrict entry (Figure 26). According to the Ministry of

Figure 26. **Regulation remains restrictive in the electricity, roads and rails sectors**



Note: Index scale 0-6, from least to most restrictive. Data refer to 2013.
Source: OECD (2015), *Product Market Regulation Database*.

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Transportation, the cargo fleet is old and operates at only 50% capacity (in weight) which suggests an excess of supply over demand. The lack of dynamism and high costs in the sector are influenced by excessive regulation. A truck scrapping scheme requires that to import and sell a new truck, the seller needs to scrap one old truck. This has created a market for old vehicles raising transport prices. Furthermore, freight charges have been set by the government according to average truck costs, a practice that tends to penalise the most efficient units. These two regulations should be reviewed.

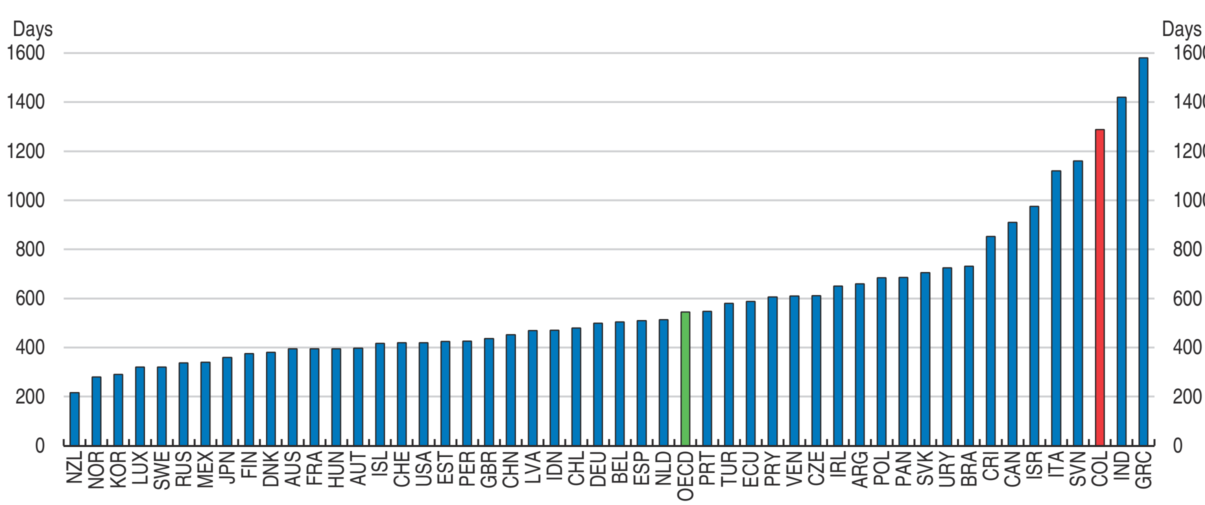
Improving contract enforcement and the efficiency of judicial system

A stronger, more efficient judicial system and rule of law will help reduce corruption and informality, facilitating reallocation of resources towards the most productive firms. This would also promote more inclusive growth if more jobs are created in the formal sector. Colombia ranked 83rd out of 175 countries in 2015 in the Transparency International's corruption perception index – down from 94 in 2012-14. Colombia has taken measures to combat corruption, for example it is party to the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. It has signed and ratified the Inter-American Convention Against Corruption and the United Nations Convention Against Corruption (UNCAC). Other measures include introduction of e-government in general and for public procurement in particular.

In the last few years Colombia has improved in the Doing Business Ranking and ranks well especially in getting credit, protecting minority investors or resolving insolvency. However the costs of doing business in Colombia are pushed up by the difficulties in enforcing contracts through the judicial system (World Bank 2017). Companies regularly rely on the court system to enforce contracts or settle disputes. Lengthy and cumbersome procedures of dealing with courts can substantially add to firms' costs and reduce their productivity. Enforcing a standard debt contract takes much more time than in OECD and EMEs (Figure 27): higher enforcement costs hamper firm productivity, and this effect becomes particularly pronounced for young firms (Arnold and Flach, 2015).

Figure 27. **The court system is slow to resolve commercial disputes**

Time required to enforce a contract, 2015-16



Source: World Bank, Doing Business Database, 2017.

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Strengthening contract enforcement ensuring sufficiently quick decisions to make contract enforcement easier would improve productivity. Colombia should enhance the efficiency of the judicial system, which is also critical for more inclusive growth, to enforce contracts by introducing a court or division of a court dedicated solely to hearing commercial cases, and make case management easier by introducing electronic case management tools. Welcome reforms are already being undertaken to better train judges, increase resources to municipal courts and evaluate judicial personnel (OECD 2012).

Facilitating integration into global value chains

Recent OECD analysis suggests that integration into global value chains (GVCs) can be an important element in raising productivity (Andrews et al., 2015). Colombian participation in GVC is lower than in other EMEs (Figure 28.A) but there are opportunities to develop it. While the relatively large size of the Colombian domestic markets is contributing to low participation rates, this level of integration also suggests that the policy stance is less conducive to GVC participation. The country's role in GVCs is mainly to supply primary inputs via downstream linkages, which reflects the large share of commodities in exports. Colombia participates little in sectors typically associated with dynamic GVCs like motor vehicles, electronics, and services offshoring. While tariffs are low, high non-tariff barriers (Figure 28) and other costs of exporting/importing discussed above, such as transport and logistics, and restrictive practices in many service sectors affect integration into GVCs. Many firms face large costs of quality certification because there are few internationally certified laboratories that can certify the quality of their goods. This is an important barrier to participate in GVCs and exporting to countries with high quality standards such as North America and Europe (Central Bank, 2014).

Facilitating GVC participation requires reducing the various fragmentation-related costs of production. Some of these costs accrue at the border (e.g. non-tariff barriers, costs related to customs inefficiencies) but many will accumulate long before reaching the border (e.g. costs related to infrastructure, quality of logistics services and regulatory burdens). Colombia should thus aim to reduce export costs which are high because of poor infrastructure quality (Figure 28.B). Improving infrastructure for trade and logistics, and dealing with other behind-the-border issues present a significant opportunity to boost trade.

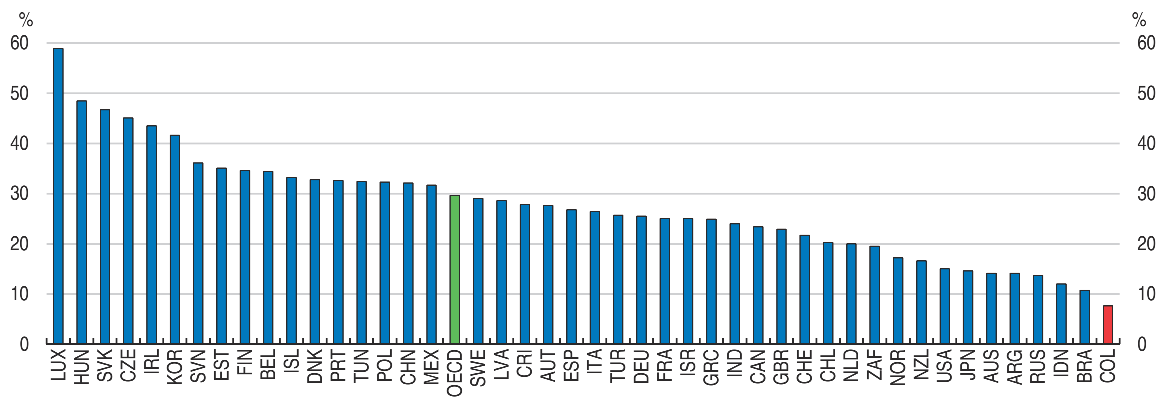
Colombia is also implementing a National Logistics Policy (CONPES, 2008), which aims at redesign and institutional strengthening, regulation update, improving the quality of national logistics services, incorporating the use of technologies, among others. Also, the country is working in the National Logistics Plan, which seeks to reduce logistics costs. Two strategic infrastructure upgrade programs are being implemented in 2017. The first is the 4G highways program which seeks to modernize the national road corridors. The second is the port expansion plan, which aims to improve port infrastructure and access channels to ports and optimize the areas of inspection of goods for trade facilitation. The border crossings are being optimized with Ecuador (Rumichaca and San Miguel) and Venezuela (Cúcuta, Tienditas, Simon Bolivar and Francisco de Paula Santander).

Colombia is a best performer in information availability, involvement of the trade community, simplification and harmonisation of documents and internal border agency cooperation (OECD, 2015e). It matches or exceeds the average performance of upper middle income countries in all Trade Facilitation Index (TFI) areas. Performance has improved between 2013 and 2015 in the areas of involvement of the trade community, automation and external border agency cooperation. Performance with advance rulings, appeal procedures,

Figure 28. **Participation in GVCs is very low**

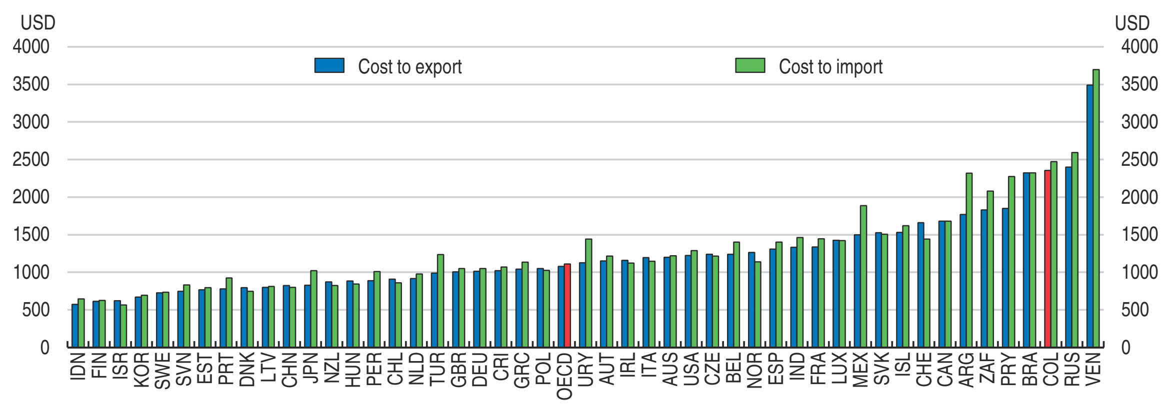
A. Backward participation in GVCs is very low

Foreign value-added as a percentage of gross exports, 2011



B. Costs of exporting and importing a container are very high

USD per container, 2014



Source: Trade in Value Added (TiVA) Database, OECD (2015); World Bank (2015), Doing Business 2015 data.

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Table 5. **Past OECD recommendations to boost growth**

Main recommendations	Actions taken since the 2015 *Survey*
Adapt legislation to improve the business environment, foster competition, and make the judiciary process more efficient to enhance the rule of law.	In 2015 important legislative reforms were adopted to strengthen competition policy: 1) amendments to the leniency program; 2) a clarification of many aspects of the merger control regime; 3) guidelines to strengthen competition policy for trade association and collaboration agreements. In terms of improving regulation, enforcing contracts was made easier in 2014 by simplifying and speeding up the proceedings for commercial disputes; transferring property was simplified in 2015 by eliminating the need for a provisional registration.
Create incentives to improve co-ordination of infrastructure projects across subnational governments within the National Development Plan.	The 2014-2018 National Development Plan has a strong territorial dimension with sophisticated mechanisms to monitor progress in "closing gaps" across regions, and with some incentives to improve coordination across regions. More binding public investment commitments (Contratos Paz) between national and sub-national administrations have been signed.
Keep minimum wage growth close to inflation to increase the gap with average wage. In the medium term, differentiate the minimum wage by age.	No action taken in differentiating by age.
Build more capacity at the sub-national government level to improve infrastructure planning and execution.	Some projects are being carried out in coordination with local authorities to consolidate the national road network through greater connectivity between the production and consumption centers with the main cities, port and border areas of the country with shorter travel times and operation cost

fees and charges, automation, the streamlining of procedures, external border agency cooperation and governance and impartiality continue to be below best practice (OECD, 2015e). Therefore, Colombia should improve trade facilitation by cutting costs with reforms in the underperformance areas mentioned above, increasing speed and improving the availability of information on advance rulings to reduce uncertainty.

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Thematic chapters

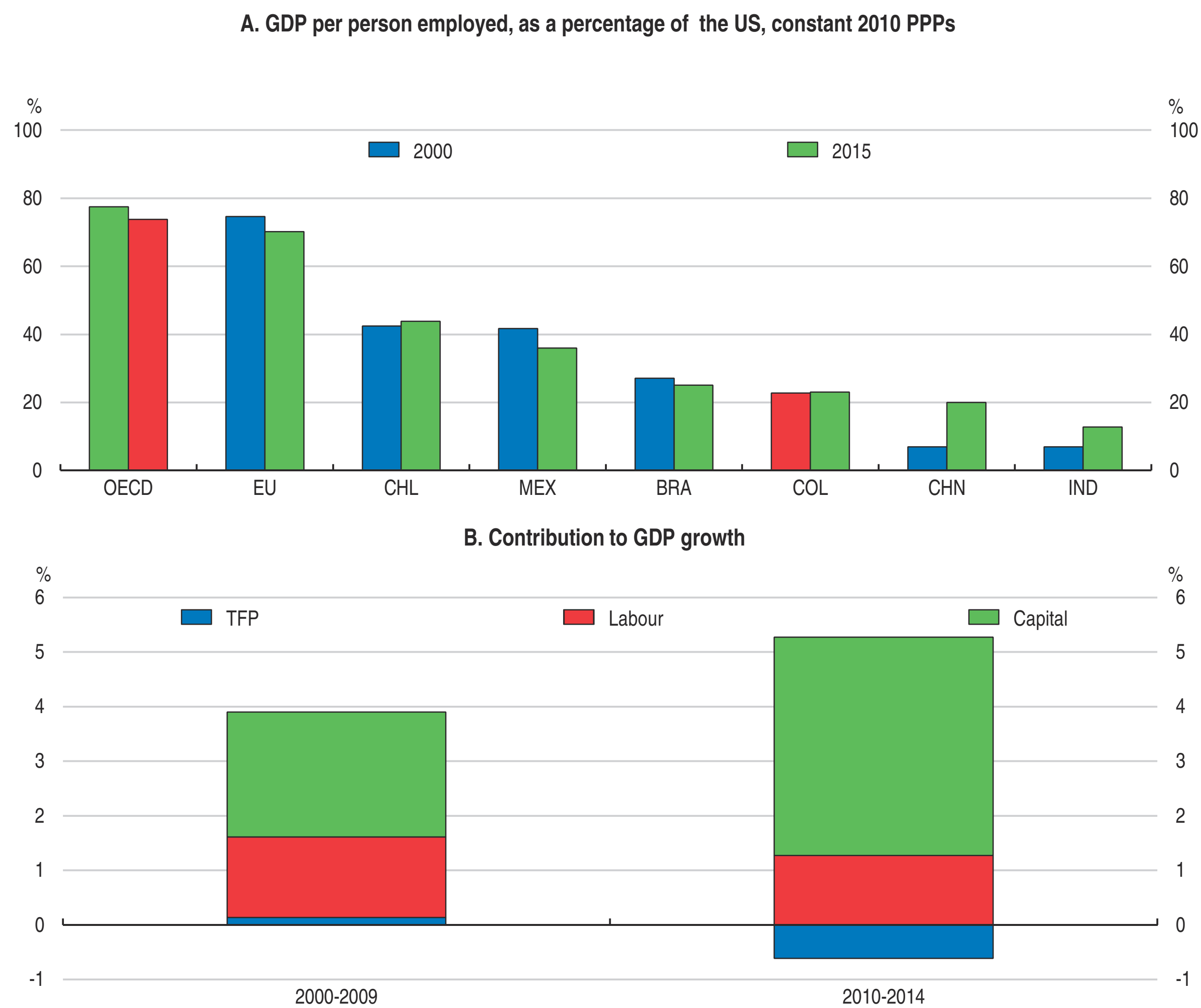
Chapter 1

Reigniting growth through productivity-enhancing reforms

Over the past decade sound macroeconomic policies and an improved business environment have helped generate relatively strong GDP growth. Investments in infrastructure are improving connectivity and trade integration has been facilitated by lower tariffs. Simplification in opening of businesses, getting construction permits, registering property and payment of taxes improved the ease of doing business. Nevertheless, labour productivity remains low with large differences between firms and regions, and the contribution of technological progress to growth has been negative in recent years. Low productivity growth reflects poor educational and managerial quality, still large infrastructure gaps, low investment in innovation and R&D and stringent regulations in some sectors. To raise productivity growth Colombia should focus on some key areas. First, reverse the drop in public investment and reduce high transport and logistics costs. Second, intensify trade links and participation in GVCs, by further improving trade facilitation, to encourage firms to adopt the best technologies and know how. Third, create better incentives for firms to invest on R&D, and strengthen the links between the business sector and research institutions to foster innovation. Fourth, increase competition and reduce regulation in specific sectors to promote investment and facilitate the allocation of resources towards most productive firms. And fifth, upgrade the quality of education to develop better skills and professional management to enhance the creation and diffusion of new technologies. In 2016, the government established the National Policy for Productive Development to address the impediments to increased productivity.

Growth has been strong, driven largely by the commodity boom, while productivity growth has been low (Figure 1.1.A). The economy grew by an average of 4.3% between 2000 and 2015, significantly more than the OECD average of 1.7% (see the A&R). Strong macroeconomic policies and structural reforms contributed to this performance; for example, simplification in opening of businesses, getting construction permits, registering property and payment of taxes improved the ease of doing business. However, most of the strong growth was explained by the remarkable rise in commodity prices that attracted

Figure 1.1. **Productivity is low**



Note: For OECD and China, data refer to 2014.

Source: OECD, *Productivity Statistics Database*, February 2016 and OECD calculations based on the STAN database.

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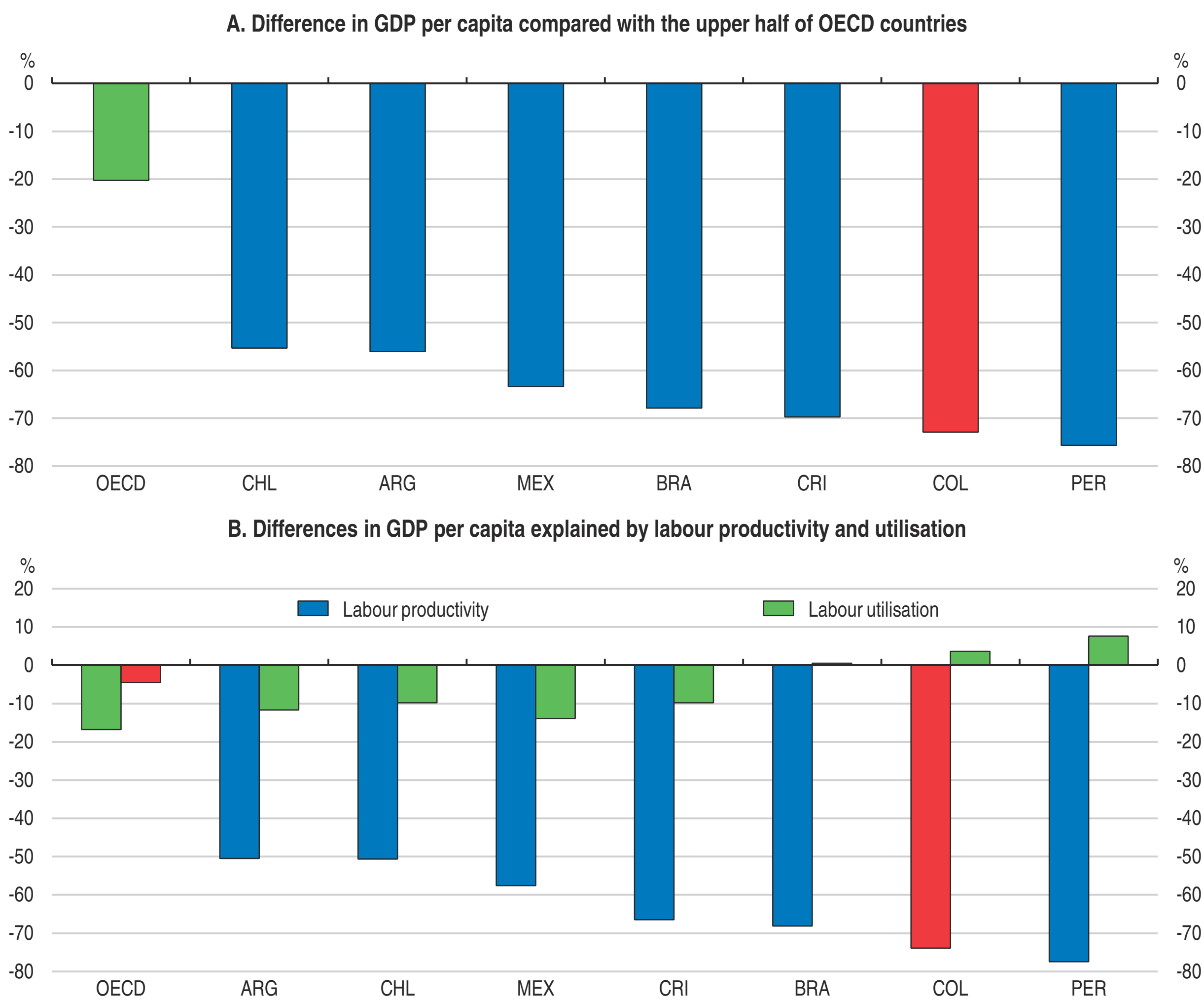
capital to mining, while the resulting appreciation of the exchange rate made other tradable sectors less attractive. Indeed, growth between 2000 and 2015 was driven mainly by the accumulation of physical capital (2.5 percentage points); the combined effect of population growth, employment and human capital accumulation was much less (1.7 percentage points). Total factor productivity growth, on the other hand, had a small negative contribution to GDP growth, more pronounced in the last 5 years.

Now that the boom in commodity prices has lost steam, activity has slowed down. This is particularly worrisome as, despite progress, poverty and inequality remain high relative to the OECD average. Colombia needs to reignite growth and make it broader and more inclusive to continue making social progress (see Chapter 2). The best way to reignite growth is with productivity enhancing reforms, as productivity is the ultimate engine of growth in the long run. Four-fifths of the income gap between Colombia and OECD countries is explained by differences in labour productivity (Figure 1.2). Furthermore, productivity in Colombia is very heterogeneous, even within narrowly defined sectors, with a few very

Figure 1.2. **Income gaps with OECD countries remain large because of low labour productivity 2014**



Source: OECD, *Economic Outlook 99 Database*.

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productive firms and many firms of extremely low productivity. This suggests there is room to catch up faster.

This chapter discusses how to raise productivity in Colombia. It presents aggregate trends in productivity and its key drivers based on recent OECD work (OECD, 2015a). It takes an inclusive approach to productivity growth, hoping to enable all people and firms to raise their productive potential to yield improved aggregate productivity as well as more equitable share of the proceeds. After identifying the key factors constraining productivity growth in Colombia (infrastructure gaps, business environment, informality in labour markets, skills, innovation, global value chains and institutional settings), it makes relevant recommendations to raise productivity.

Trends in productivity across sectors, firms and regions

Recent OECD research shows that to uncover productivity weaknesses and their causes, it is important to look at total factor productivity, but also at productivity indicators at the industry and firm level, as aggregate productivity is shaped by structural factors that operate at the industry or firm level (Albrizio and Nicoletti, 2016; Box 1.1). These indicators include,

Box 1.1. **Key structural indicators for productivity diagnosis**

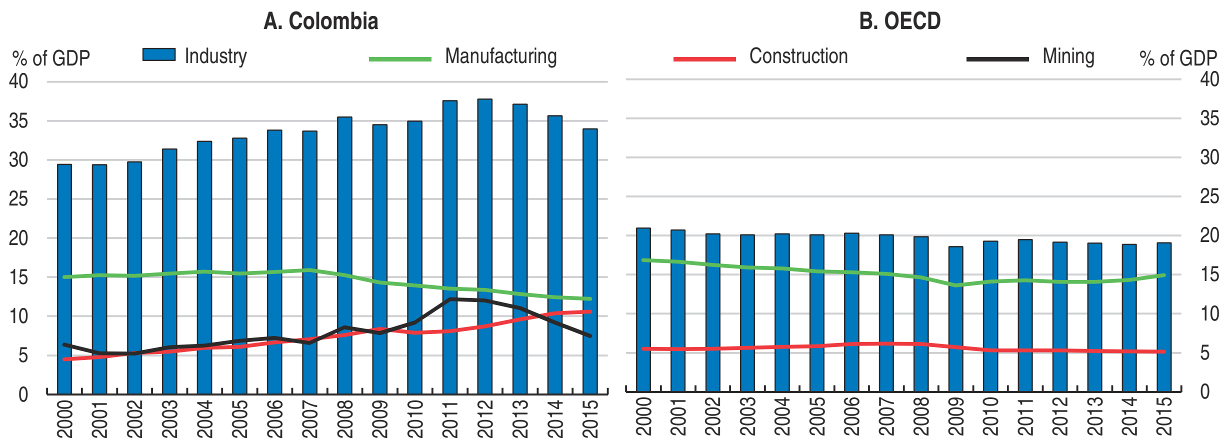
Category	Sub-category	Indicators for Colombia
Aggregate trends	Labour productivity	Growth of labour productivity has been relatively low, in particular in the manufacturing sector.
	Capital deepening	Investment has increased during the last decade and is above the LAC6 average, but still below the average for emerging markets.
	Investment (KBC, ICT)	Infrastructure gaps are large but are expected to improve with the implementation of the 4G infrastructure projects. The share of investment in intellectual property products is lower than in all OECD countries (just 2% of GFKF).
Framework conditions	Business environment	Financial market development (credit/GDP, non-bank financing) is far below OECD average; informality is high and widespread, trial lengths are long with high costs of judiciary procedures, the complexity of administrative procedures is high.
	Productivity-enhancing institutions	Colombia has a "Competiveness Council" that responds directly to the President; it lacks an independent governance and solid research capacity. On the other hand, it has strong linkages to policy-making mechanism with the government (Eslava et al., 2014).
	Firm-level channels	
	Overall innovation	Indicators for Colombia
a) Knowledge creation and innovation	R&D, Digital technologies and other KBC investment	Private investment in R&D is very low relative to OECD countries, but also compared to other Latin American economies,
	Skills	Despite the improvement achieved in recent years, Colombia performs relatively poorly in PISA scores, suggesting that the quality of skills is weak especially in primary and secondary education.
b) Knowledge innovation and diffusion	Productivity distributions and gaps	Productivity dispersion across firms is higher in Colombia than in most Latin American economies (above 200 per cent)
	Innovation diffusion	International cooperation on inventions (patenting) is relatively low; Colombia patents relatively little in relation to countries at similar level of development.
	Business dynamics	Participation in GVCs is low.
c) Efficiency of reallocation	Labour and capital allocation	High hiring and firing costs affect the efficient reallocation of workers towards the most productive firms.
	Matching jobs to skills	Business surveys such as Manpower, suggest that the level of skill-mismatch is relatively high (see also Lora, 2015).

Source: Albrizio and Nicoletti (2016).

among other things, the degree of heterogeneity in productivity performance across regions, sectors and firms, including proximity to global or national frontier, and industry composition, as cross-country differences in observed labour productivity developments partly reflect differences in industry structure.

In 2015, the value added of the industrial sector in Colombia was 34% of GDP, the highest among the 6 largest economies in Latin America and significantly higher than the OECD average of 24% (WDI, 2016). However, this high share is mainly explained by the *Mining* and *Construction* sectors as the importance of *Manufacturing* has been declining and is lower than the OECD average (Figure 1.3). The large mining sector also dominates exports (more than 40% of total exports in 2015 was oil and its derivatives, DANE) and industrial production, and has attracted much of investment over the last decade. The boom in mining generated a strong real appreciation of the currency, making it harder for other tradable goods, like parts of agriculture and particularly manufactures, to compete. It also attracted resources into non-tradables such as housing and construction.

Figure 1.3. **Value added of industry is relatively high, sustained by increases in construction and mining**



Source: *OECD National Accounts Database* and DANE.

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Firm-level evidence shows that, in Colombia, productivity is correlated with size, age, regional location and participation in GVCs (Camacho and Conover, 2010; Eslava and Haltiwanger, 2012). Most manufacturing businesses are small and medium size that tend to have low productivity, often due to informality that reduces incentives to grow. Medium sized manufacturing plants account for 48% of total manufacturing establishments, generating 15% of employment. Large and very large ones are 32% of establishments and 83% of employment; small plants, 21% of total, only contribute to 1.8% of employment (Brown et al., 2015). There are significant differences in firm productivity across regions; for instance, manufacturing firms in Santander and Casanare are around 500 per cent more productive than firms in Nariño or Quindio.

Similarly, there are large differences in productivity between industrial sectors and firms within sectors. Firm-level productivity in the manufacturing sector remains far from the global productivity frontier. The average firm is only 5.5 % as productive as the global productivity frontier (defined as the top 25% of firms in the United States) – (Brown et al., 2015).

There is a large dispersion in productivity growth among firms in manufacturing, which usually indicates inefficient allocation of factors of production among firms. While heterogeneity of firm level productivity is common around the world, the dispersion in Colombia is much higher than in OECD countries and especially the United States. In Colombia, firms in the 90th percentile of the productivity distribution are more than 500% more productive than those in the 10th percentile in contrast with 200 % in the U.S. (Busso et al., 2012). This is also the highest level of dispersion in all Latin American countries for which data is available. Such disparities mean that some firms are able to produce much more given the same inputs, within the same sector.

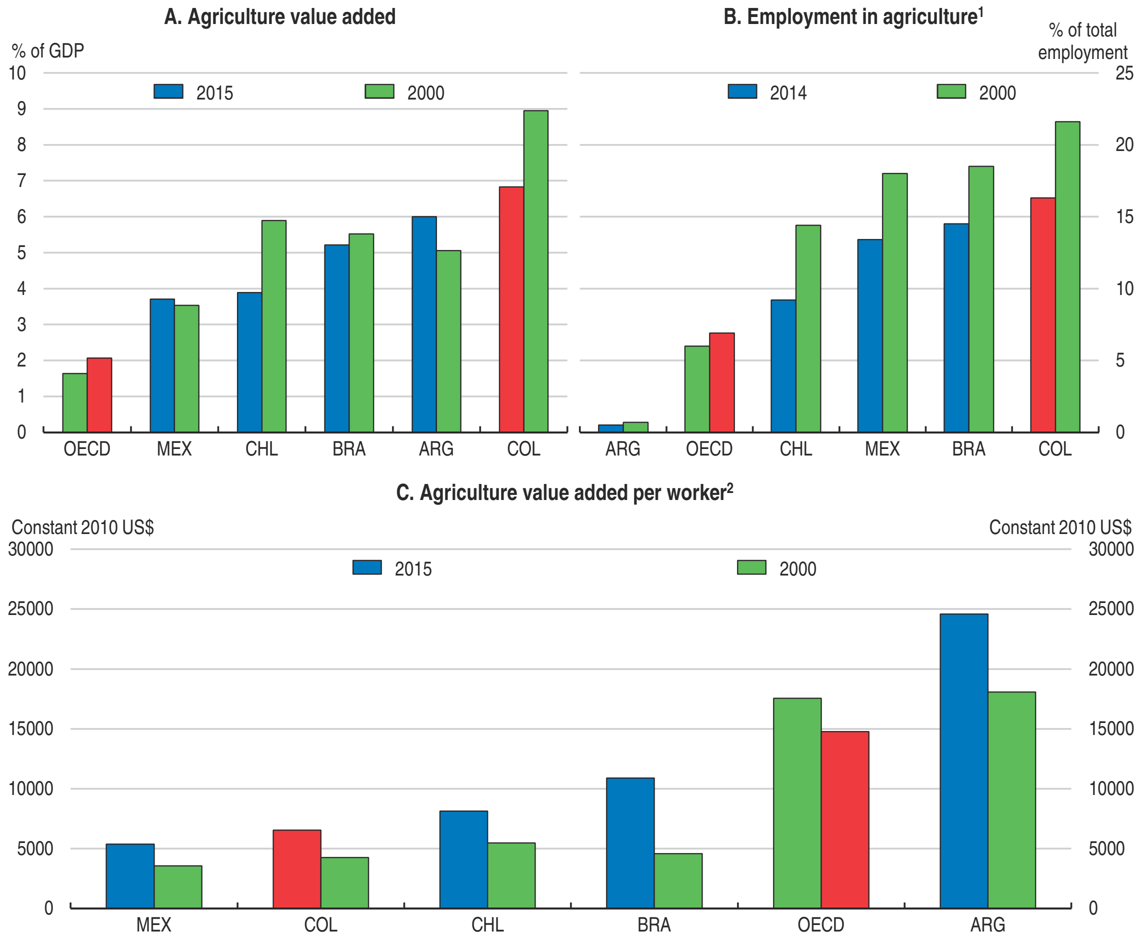
Colombia's low performance of manufacturing companies reflects in part high costs and poor incentive structures (DNP, 2016). Costs beyond the influence of firms make it harder for them to compete with external competitors both on domestic and export markets, limiting their ability to exploit scale economies. For example, lack of adequate public infrastructure is a result of regulatory gaps, such as investment requirements; low and inefficient public investment in transport, telecommunications and education. However, some of the regulation issues have been addressed, for example in transportation infrastructure. Skills shortages, high informality and corruption may also have a negative effect on firms' growth and investment. Distorted incentives, including low competitive pressures, mean that firms will not exploit the full potential of internal productivity improvements. They can also impede the functioning of market mechanisms that reallocate resources towards the most productive firms, including new entrants. Low productivity also reflects the economy's concentration on few sectors of low sophistication and little value added (DNP, 2016).

The high dispersion in productivity shows potential for productivity catch-up to raise aggregate productivity. Raising the currently limited trade integration into global value chains can foster the adoption of frontier technologies and new business models, reducing the large productivity gaps. Global trends that have shaped industrial production have largely bypassed Colombia's industry. These include a growing fragmentation and optimisation of value chains, which have allowed companies to focus on their core capabilities, and increased integration into international trade. Intermediate inputs have come to represent a large share of world trade flows as part of the emergence of global value chains. While many countries nowadays use significant amounts of imported goods to produce exports, almost 90% of the value added of Colombia's exports is domestically produced (see below).

Productivity is also low in agriculture (Figure 1.4.C). The agricultural sector continues to be of key importance in terms of GDP and employment (Figure 1.4, Panels A and B). Its share in value added (in GDP) is almost 7%, which is four times higher than the OECD average (1.6%), and higher than in the large Latin American countries. Similarly, employment in agriculture is above 16% of total compared to 6% in the OECD.

Productivity growth in agriculture has been undermined by a variety of factors (OECD, 2015c). The high cost of transport due to poor internal basic infrastructure connecting producing regions to consumption centres and ports raise trading costs. Agricultural policy has been heavily based on subsidies and price smoothing mechanisms, with less attention to productivity enhancing investments (such as infrastructure and R&D). Finally, as compensation for the unequal distribution of land, current legislation regarding land tenure and ownership does not favour the creation of new large-scale production plots. Combined, this factor led to the poor agriculture outcomes observed in the last decade.

Figure 1.4. **Productivity per worker in the agricultural sector is relatively low**



1. For Brazil, Chile and Mexico, data refer to 2013.
2. For OECD, data refer to 2014 instead of 2015.

Source: World Bank, World Development Indicators database.

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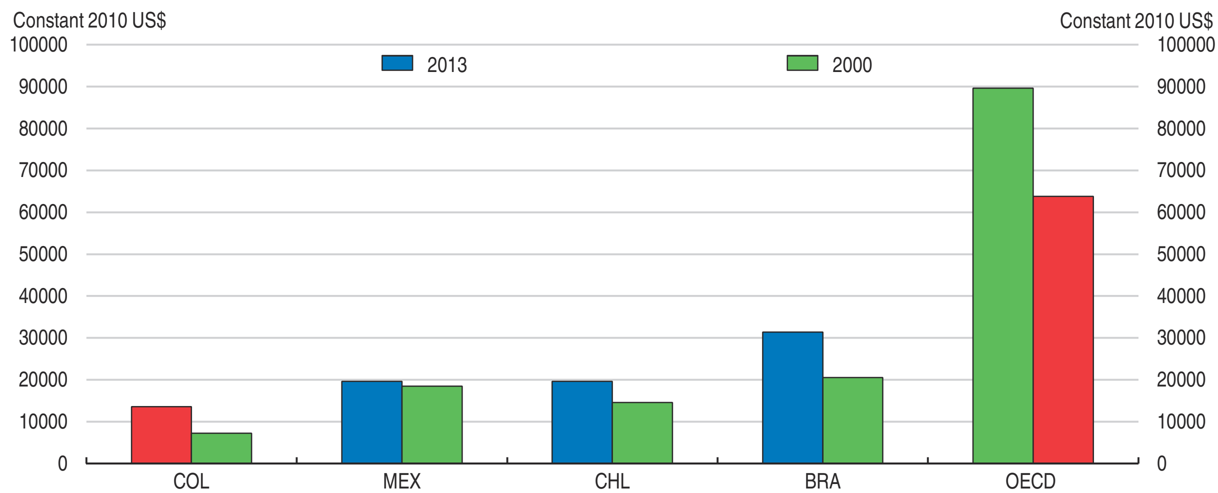
The service sector plays a major role in the Colombian economy, as it explains a high share of the gross domestic product and employment. Nearly 60% of the GDP and 70% of the workforce are in the service sector (DANE). Furthermore, firms in the service sector innovate more than their manufacturing counterparts (Gallego et al., 2015): The share of innovators in the service sector is almost 14% larger than in manufacturing, and the share of non-technological innovators is about three times as large in the service industry. However, productivity growth in services remains well below OECD and large Latin American countries (Figure 1.5).

Given its importance in the economy, to reignite economic growth and improve the foundations for the future performance of the economy, the services sector will need to do better. Cross-country evidence from OECD suggest that low productivity in services could be related to high informality, which affects job prospects for low-skilled workers, impediments that prevent services firms from seizing the benefits of ICT, stringent employment protection legislation that affects the capacity of the economy to create and reallocate employment, poor education and training policies that prevent workers to rapidly adopt requirements for new skills, and regulatory policies.

Figure 1.5. **Productivity per worker in the service sector has increased but remains low**



1. For Brazil, Chile and Mexico, data refer to 2013.
2. For OECD, data refer to 2014 instead of 2015.
Source: World Bank, World Development Indicators database.

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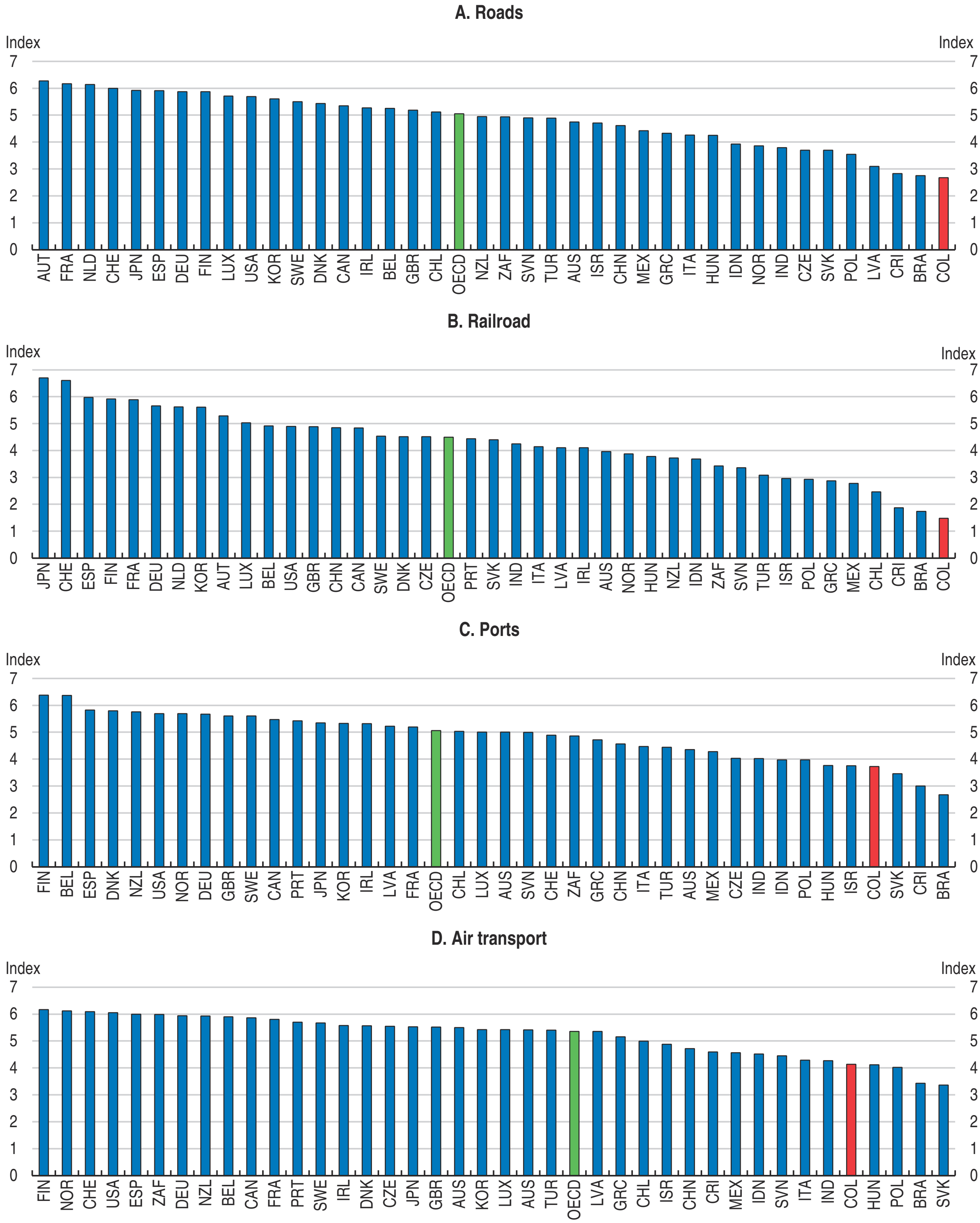
More and better public investment can boost productivity growth by reducing gaps in infrastructure

Despite significant improvements over recent years, the transport and logistics infrastructure, which is the backbone of domestic commerce and international trade, remains less developed than in OECD or other Latin American countries (Figure 1.6). Road density coverage and percentage of paved roads is relatively low. Also connectivity between the most important agricultural production, consumption, and export areas, and ports and airports is limited. High domestic transportation costs related to the country's difficult geography and internal conflict act as a significant barrier to improvements in competitiveness, and particularly penalise the regions that are far from adequate port or airport facilities.

The differences in labour productivity across regions are influenced by high costs of domestic transportation. This affects the ability of firms in these regions to compete in domestic and international markets, which tends to raise productivity. Exporting and exposure to international competition allows firms to benefit from international technologies and best practices. The low connectivity is reflected in export performance, which varies markedly from region to region. For example, just four departments – Antioquia, Bogotá, Cundinamarca, and Valle del Cauca –, account for approximately half of the country's exports (DANE). The high concentration of exporting activity in the main metropolises suggests that Colombia's integration into world markets has not produced a significant dispersion of production away from the large centres and particularly towards the non-coastal regions. Exporters in the south-eastern part of the country face various obstacles, including very low road density. All of these factors limit connectivity for exporters in remote regions (Fedesarrollo, 2013).

Reducing transport costs by improving or investing in new roads can have large benefits. The trade impact of reduced transportation costs from better conditions on all roads can be important (IDB, 2013). At the national level, a reduction of 1% in domestic

Figure 1.6. **Infrastructure is of lower quality than in OECD countries**



Note: Index scale 1-7, from lowest to highest quality. For OECD, data refer to the simple average of values for all OECD countries.
Source: World Economic Forum, the Global Competitiveness Index Historical Dataset, 2005-2014.

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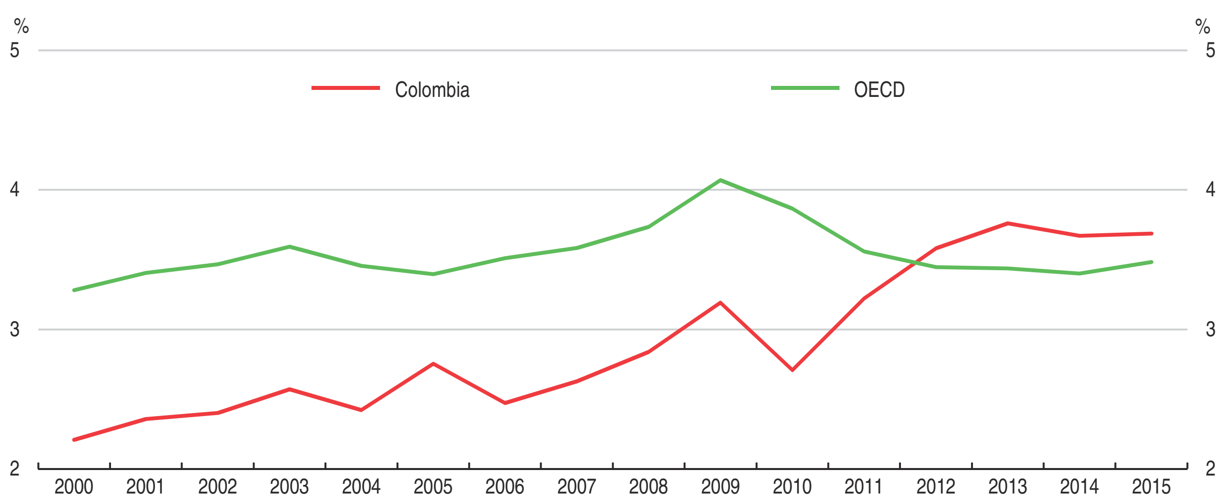
transport costs (*ad valorem*) could increase annual exports by 7.8% in the manufacturing sector and 7.9% in agriculture. Therefore, fostering trade, and in particular improving the chances of less developed regions to benefit from international trade, is highly dependent on the quality of transport-related infrastructure.

Improving non-road rural infrastructure is also key to increasing productivity in agriculture (Lozano-Espitia and Ramirez-Villegas, 2016). Deficiencies in physical infrastructure such as irrigation not only reduce factor productivity and crop yields, but also weaken market competitiveness and limit their spatial and temporal integration (Fan, Zhang and Rao, 2004; Pinstrup-Andersen and Shimokawa, 2006). The irrigation system coverage was 8% which is low compared to other countries in the region (Chile, 44%; Peru 40%; Brazil 18% and Argentina 15%). There are also great discrepancies within regions. The majority of municipalities do not have access to irrigation districts, simply because there are none available and only a very small number (178 out of 1 122) has access to this type of infrastructure in restricted circumstances.

Recent research shows that the impact of improving the irrigation and drainage systems on crop yields in Colombia can be very large (Lozano-Espitia and Ramirez-Villegas, 2016). The larger impact is on the rice yield (oscillates between 1.7 and 3.5 tons per hectare and year), which could be associated with the higher humidity requirements for its production cycle from irrigation systems.

To reduce these large infrastructure gaps, Colombia needs to sustain and amplify its public investment effort. Public investment in relation to GDP has increased over the last decade and since 2012 is above the OECD average (Figure 1.7). This is welcome. However, the level of investment per capita remains lower than the OECD average (OECD, 2016a). Given the large investment needs to catch up with leading countries public investment should be raised and the cut in 2016 reversed (see A&R). Higher spending is also necessitated by Colombia's geography. Mountainous terrain makes building new roads and maintaining existing ones much more expensive than in countries with flatter topography. As a result, they spend more per kilometre of transport infrastructure than other countries to maintain and build similar levels of density of its road network.

Figure 1.7. **Public investment has increased above OECD average**



Source: OECD Economics Department Database.

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Since the needed investments can hardly be undertaken by the public sector alone, public and private partnerships (PPPs) can improve transport connectivity across the country. The government has launched a new generation of public-private infrastructure programmes (fourth generation or 4G) on road concessions. Over the next eight years, the new 4G programme is expected to deliver 5 892 km of roads in three waves via public-private partnerships. With aggregate capital expenditures of USD 15 billion, the 4G concession program is the most ambitious infrastructure development initiative in Colombia's history. As of December 2016, 32 projects through PPP schemes have been approved and 21 of them have already reached financial close. 20 projects are public initiatives, meaning that the project has been proposed, designed and funded by the Government, while the other 12 are private initiatives, which have been proposed by a private party and don't require governmental funds. Thanks to the regulatory changes made since 2012, all the 4G projects have completed a rigorous and comprehensive analysis process involving different governmental entities (see Box 4 in the Assessment and Recommendations). The target is to reduce travel times by 30 % and transport costs by 20% by 2020. Most PPPs are for large projects financed by the central government, but subnational governments can also contract PPPs. In April 2016, the government held its first concession as a part of its highway plan. Colombian pension funds also have played a stronger role in recent years in financing infrastructure investment. In addition to the 4G program, the government has also invested in revived river and rail transport and improved telecom infrastructure and access to internet.

A recent OECD study on public investment in Colombia (Box 1.2) makes recommendations on how to use more effectively existing resources and catch up to OECD

Box 1.2. **How to make the most of public investment in Colombia**

A recent OECD study on public investment in Colombia (OECD, 2016a) provides a diagnosis of the strengths and challenges of the Colombian system and makes recommendations for how it could be further improved by using more effectively existing resources and catch up to OECD countries in infrastructure development. The main recommendations of the report are the following:

Enhance subnational revenues to finance investment through: continuing efforts to update and modernize the cadastral and land registries to improve the municipal property tax performance; streamlining the portfolio of taxes levied by departments and municipalities and promoting shared taxation between the central and subnational governments; and reducing the number of earmarked taxes.

Strengthen the effective use of local development plans as strategic planning tools. Sub-national governments should have more adequate time schedule to design territorial development plans, allowing better diagnosis and priorities setting, and better articulation between the national, departmental and municipal levels. The government should intensify the effort to increase technical assistance to subnational governments for the design of territorial development plans and land use plans and enhance local capacity.

Support the preparation of integrated investment programmes/projects, including financial plans.

Ensure continuity and stability in the rules to strengthen subnational capacities. Consider developing a comprehensive assessment (both quantitatively and qualitatively) of employees to get a clearer picture of the needs and gaps of territorial entities.

Source: OECD, (2016a).

countries in infrastructure development. The study emphasises that the different investment priorities need to be articulated in coherent territorial strategies. Colombia has strongly enhanced the territorial approach to its national investment in the 2014-18 National Development Plan. At the subnational level, major efforts have also been made to improve the preparation of the territorial development plans for 2016-20.

Overall, the large differences across regions suggest that the different investment priorities need to be articulated even more in coherent territorial strategies. Colombia should move from a project based approach to a more strategic and regional approach to investment, through articulated programmes rather than just individual projects. Royalties are supposed to encourage regional projects, but in practice projects funded by royalties are split into thousands of small projects. This fragmentation means that large scale infrastructure projects with higher social returns are not prioritised. In October 2015, only 5% of the projects approved had a regional dimension (DNP, 2016a).

Greater horizontal cooperation is also required. Coordination between jurisdictions is a recurrent concern, as for many development and investment issues the relevant scale goes beyond administrative boundaries. The lack of financial incentives to support cross-jurisdictional cooperation is a significant obstacle. The General Royalties System, which was restructured in 2012 (OECD, 2014) has been a major achievement to help reduce regional and social disparities. Royalties are supposed to encourage regional-scale projects, but because of the high number of collegiate bodies of administration connected with the royalty payments, projects financed by royalties are split into thousands of projects (OECD, 2014). More coordination tools among departments, such as the creation of the Central Region (RAPE), which unites the departments of Cundinamarca, Boyacá, Meta, Tolima and the Capital District of Bogotá D.C could be implemented. The experience of France and Italy, which have put in place specific financial incentives (e.g. higher central government transfers for inter-municipal projects) to promote inter-jurisdictional cooperation, might be of interest to Colombia. The government might consider providing financial incentives to support horizontal associative schemes across municipalities and departments, for example, through matching grant or co-financing projects between the national government and subnational governments' entities.

Further improve the business framework for investment and productivity growth

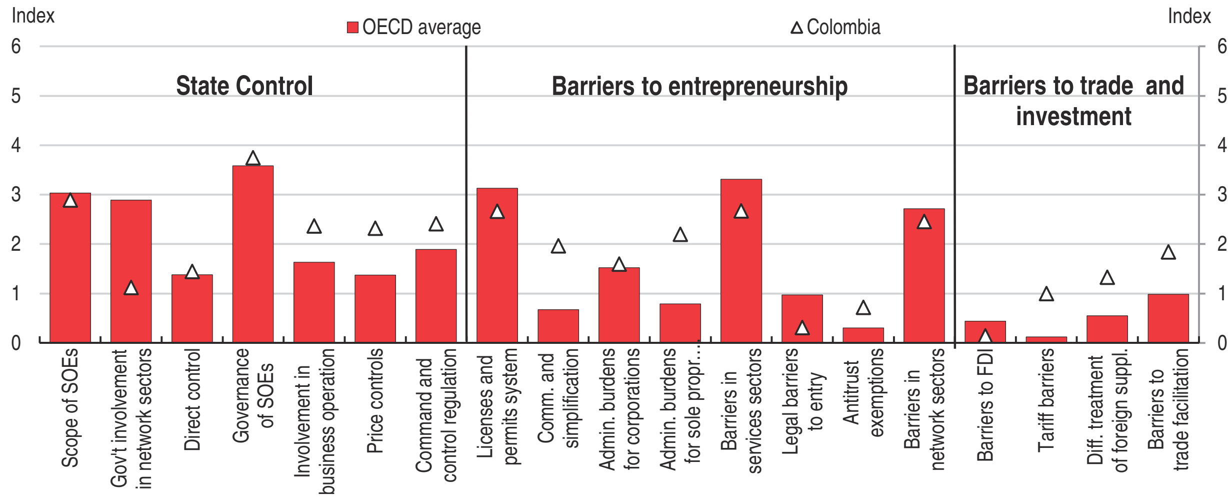
Investment as share of GDP has increased during the last 15 years, but remains below the average of other emerging economies. Most of the recent increase in investment is also explained by the investment boom in oil. To raise investment to levels of other fast growing emerging economies Colombia needs to continue developing a sound policy framework for private investment. To ensure that investment contributes to productivity, reducing regulation, strengthening competition, deepening trade integration and simplifying the tax system are particularly important. An increasing number of binding public investment commitments (*Contratos Paz*) between national and sub-national administrations have been signed.

Product market regulations

Colombia ranks around the OECD average in some dimensions of product market regulation, but many key sectors face restrictions (Figure 1.8). Over the last decade Colombia significantly improved its regulatory environment by simplifying the process to start a business, paying taxes, protecting investors and resolving insolvency, as well as reducing

Figure 1.8. **Business regulation remains restrictive in some areas**

Product market restrictiveness, 2013



Note: Index scale 0-6, from least to most stringent. More information is available at *www.oecd.org/eco/pmr*.
Source: OECD, *Product Market Regulation Database*.

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entry costs and barriers to entrepreneurs. In the restrictive areas, the state's involvement in business operations can be further aligned with best practice. Regulatory procedures in some sectors remain complex, which includes licensing requirements. Competition in some network sectors such as gas is hampered by still high entry barriers. Aligning product market regulation with OECD best practice could boost GDP (OECD, 2015b).

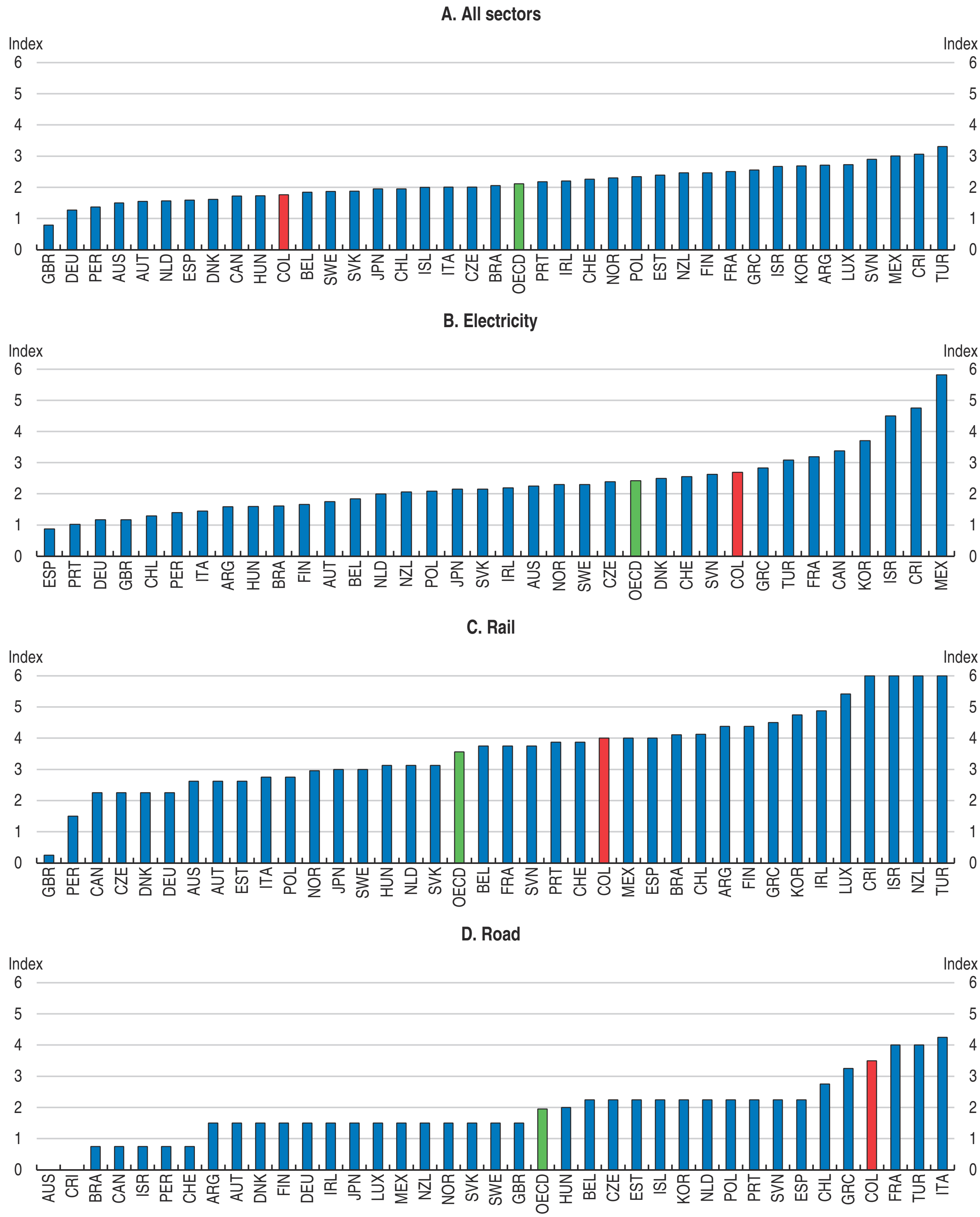
The government is determined to continue enhancing the investment framework, simplifying procedures and removing unnecessary administrative burdens to investors in the National Development Plan. The National Policy of Productive Development also aims to raise the quality and pertinence of human capital, to increase the degree of both innovation and technology adoption by firms and to improve the quality of managerial skills (DNP, 2016). Colombia's investment promotion agency, ProColombia, is in charge of promoting non-traditional exports, international tourism and foreign investment in Colombia. They are undertaking studies on barriers to investment, and are putting in place procedures to identify and remove unnecessary barriers to investment.

Competition policy

Colombia has made great strides toward OECD standards in competition policy. On product market regulation (PMR) indicators, Colombia compares well in areas of pro-competition network sector regulation, limited state economic activity, and general openness to trade (Figure 1.9). Colombia's extent of state control is comparable to the OECD's, consistent with the government's policy of encouraging growth through enabling private initiative. However, as discussed below, barriers to competition are hindering well-functioning markets in important sectors.

Regulation in roads and rails remains stringent (Figure 1.9). The bargaining power of truck drivers and the existence of barriers to entry affect the level of domestic transport costs (IDB, 2013). Furthermore, Colombia's trucking industry is highly fragmented with many one-truck firms that are relatively inefficient. The cargo fleet is old and operates at

Figure 1.9. **Regulation remains restrictive in the electricity, roads and rails sectors**



Note: Index scale 0-6, from least to most restrictive.
Source: OECD (2015), *Product Market Regulation Database*.

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only 50% capacity (in weight) which suggests an excess of supply over demand (Ministry of Transport, 2015). Also the scrapping scheme – which is currently being modified – has made it profitable to maintain old trucks, as importing a new truck requires scrapping an old one.

Continuing the regulatory reform process and increasing public-sector efficiency would further stimulate competition (OECD, 2014). The National Planning Department is in the process of becoming the single institution responsible for the coordination of regulation efforts across the administration. There are no comprehensive standards for how to prepare regulations. Although the government expressed interest in introducing regulatory impact analysis to improve the quality of new regulations, more political support will be needed to ensure the tool is used at the subnational level.

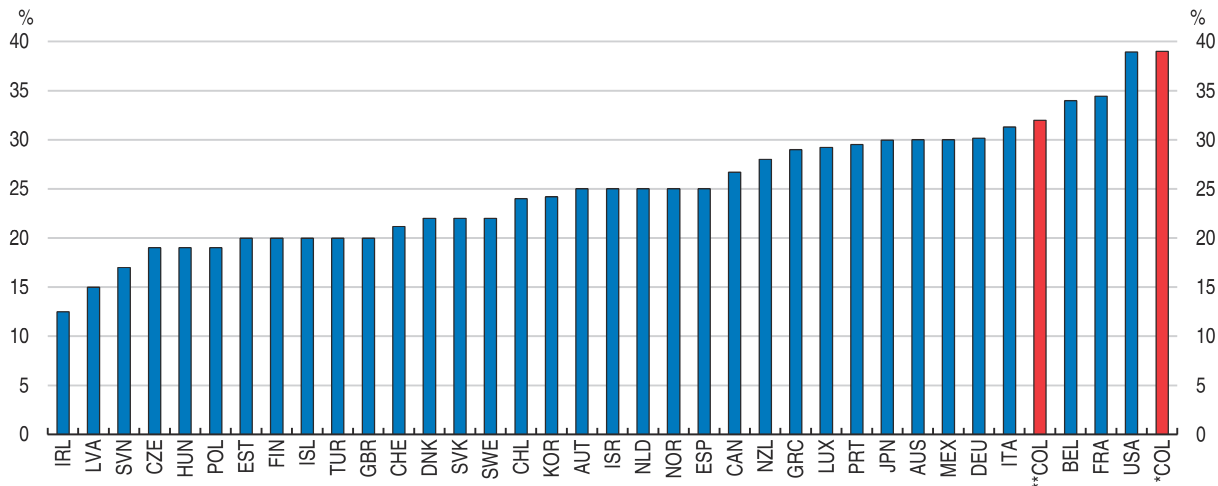
High barriers to competition prevent entry of new innovative and dynamic firms and contribute to misallocation of labour and capital resources towards low-productivity firms and sectors. Colombia could further improve the efficiency of its economy by prioritising reforms that enhance competition in services markets. The OECD Services Trade Restrictiveness Index Regulatory Database shows that regulation on broadcasting, telecommunications and insurance services remain restrictive. In broadcasting, Colombia maintains a 40% foreign equity limit for public broadcasters, and reserves 70% of screen time for local productions in prime time and 50% at other times. Moreover, the number of shares that foreign investors can acquire in public broadcasters is limited and subject to authorisation from the government. In telecommunication, there are commercial presence requirements to provide telecommunication services and the needed pro-competitive regulations are not all in place to ensure access to foreign providers. In addition, the government can overrule the decisions of the telecommunications regulator. In the insurance sector, Colombia maintains commercial presence requirements to provide cross-border services, there are restrictions in writing insurance contracts in foreign currency.

It is important that the regulatory authority is vested with the necessary powers as well as human and financial resources, and that it correctly carries out market analysis. To avoid bid rigging, public procurement officials should undertake comprehensive market studies on a consistent basis. Establishing the minimum acceptable content for market studies through the creation of a checklist, based on best practices, should be used by Colombian procurement groups when they undertake their market studies. Colombia has made progress in making regulations more accessible and communicating administrative requirements, yet regulatory management processes need to be improved, with the introduction of more systematic use of regulatory impact analysis. Colombia also lacks an appropriate legal framework to carry out market studies, together with adequate resources to effectively perform them. Market studies provide competition authorities with an in-depth understanding of how sectors and markets work.

Further reducing corporate taxes could contribute to investment growth

Colombia's relatively high corporate taxes and a complicated tax code are important constraints for investment and productivity growth. Past tax reforms often focused on finding short term fixes instead of more fundamental structural reforms, thereby creating a very complicated system. For example, the 2012 tax reform reduced the statutory corporate income tax (CIT) rate from 33% to 25% but introduced a new "equity" tax on corporate income (known as the CREE) to fund social programmes which were previously financed through payroll taxes. The CREE applied to a broader base than the corporate income tax at a rate of 9% through 2015 and 8% thereafter. The resulting combined statutory rate of 39% is above the average for Latin American and OECD countries (Figure 1.10), and resulted in a high effective corporate tax rate.

Figure 1.10. **Top combined statutory CIT rate is set to decrease but remains high**



Note: * COL refers to 2017 and ** COL refers to 2019.
Source: OECD Tax Database.

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In December 2016, the Congress approved a major tax reform, which includes a reduction in the corporate tax rate and unification of current rates into one in line with previous OECD recommendations (A&R). The reform introduces a standard CIT rate of 33% from 2018 onward. However, during the transition period the rate will be 34% in 2017 and 33% in 2018 augmented by surtaxes of 6% in 2017 for large corporations (profits exceeding COP 800 million or about EUR 250 000), and 4% in 2018. The surtax rate will be 0% for profits below this threshold (see Table 1.1). As a result, the top standard CIT rate will be 40% in 2017 and 37% in 2018 for companies earning profits above the threshold. The current rate of 40% also applicable in 2017 is the highest in the OECD. However, after the transition included in the 2016 tax reform the ranking will improved slightly. The tax burden is further decreased by the deduction of VAT on investment goods from CIT.

Table 1.1. **Comparison of CIT rates before and after the reform**

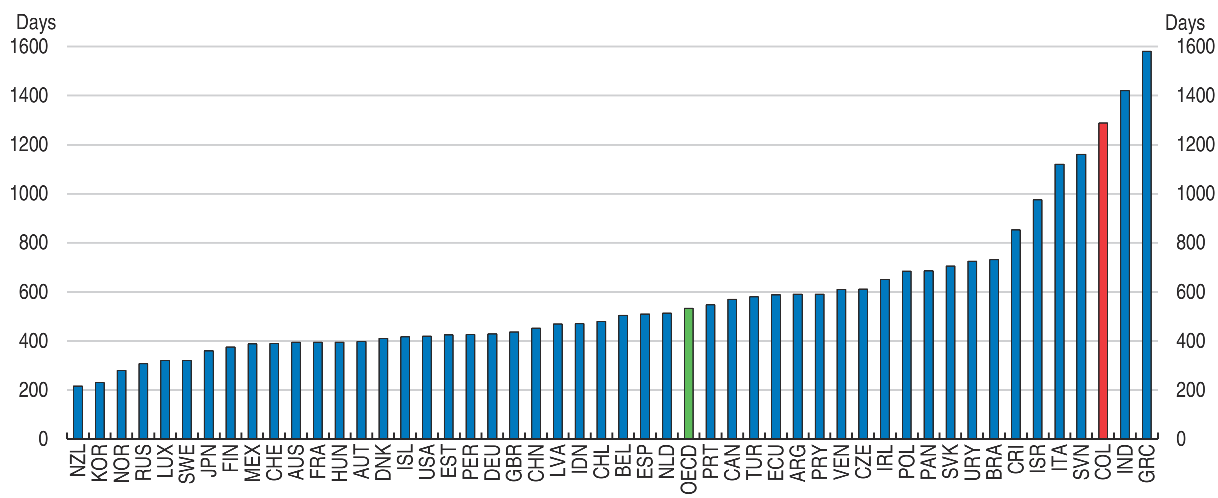
Year	Before the Reform			After the reform		
	CIT+CREE	CREE SURTAX (for profits above COP 800 million)	Total	CIT	CIT SURTAX (for profits above COP 800 million)	Total
2017	25%+9%	8%	42%	34%	6%	40%
2018	25%+9%	9%	43%	33%	4%	37%
2019	25%+9%	0%	34%	33%	0%	33%

While corporate taxation is only one factor that shapes firms' investment decisions, maintaining high statutory and effective tax rates is still likely to have a negative impact on domestic and foreign investment. Therefore, Colombia should continue making efforts to reduce the corporate tax rate towards the OECD average.

Improving contract enforcement and the efficiency of judicial system will raise productivity

A stronger and more efficient judicial system and rule of law will help reduce corruption and informality, favouring the reallocation of resources towards the most productive firms. The costs of doing business in Colombia are pushed up by the difficulties in enforcing contracts through the judicial system. Companies regularly rely on the court system to enforce contracts or settle disputes. Lengthy and cumbersome procedures of dealing with courts can substantially add to firms' costs and reduce their productivity. Enforcing a standard debt contract takes much more time than in OECD and EMEs (Figure 1.11). Empirical evidence suggests that higher enforcement costs hamper firm productivity, and this effect becomes particularly pronounced for young firms (Arnold and Flach, 2015).

Figure 1.11. **The court system is slow to resolve commercial disputes**



Source: World Bank, Doing Business Database, 2017.

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Strengthening contract enforcement through the court system or other forms of arbitration and ensuring sufficiently quick decisions to make contract enforcement easier would improve productivity. Colombia should enhance the efficiency of the judicial system to enforce contracts by introducing a court or division of a court dedicated solely to hearing commercial cases, and make case management easier by introducing electronic case management tools.

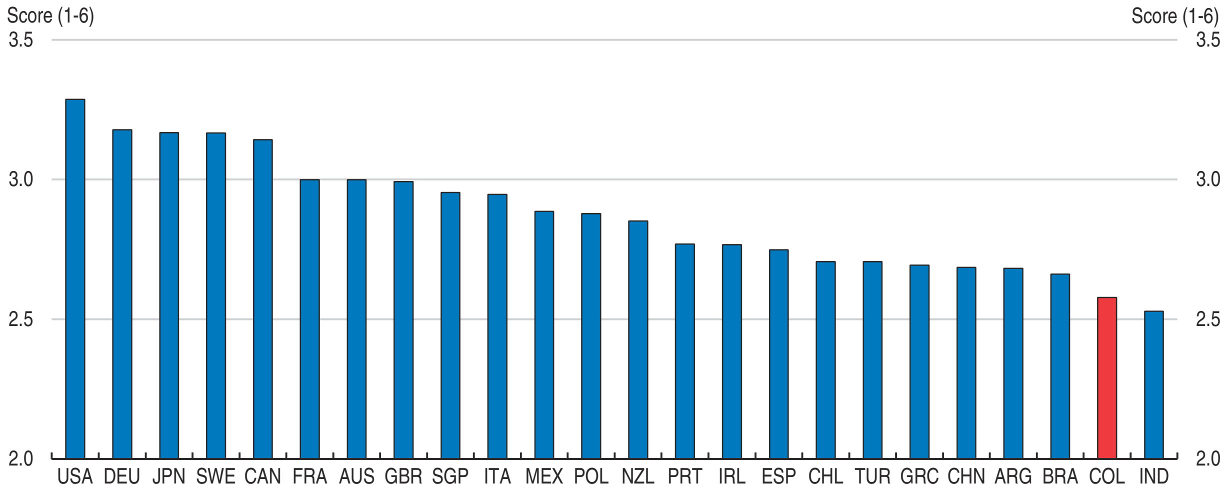
Skills development

Improving management quality

Firms' productivity growth has also been hindered by low management quality. Recent economic literature has drawn attention to the role of differences in management practices in explaining productivity differences. In particular, this research shows that management practices are like a "technology", in the sense that they raise total factor productivity, and can account for a substantial portion of cross-country differences in development (Bloom et al., 2016). Colombian's scores on management practices are among the lowest among emerging markets for which data is available (Figure 1.12). This suggests that Colombian manufacturing firms are, on average, poorly managed in global terms, and

Figure 1.12. **The quality of management is relatively low**

Average management scores, 2004-14



Source: World Management Survey, 2015.

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similar in standard to many low-income countries. When self-assessed, however, Colombian firms described their managerial practices as high quality, suggesting lack of information about best practices around the world. The *escalamiento de la productividad* program will help 3600 firms improve their managerial quality over the next ten years. The program was designed based on a pilot conducted with the World Bank on 180 firms that used a randomized control trial to assure the positive impact of the pilot on firms' managerial practices (DNP, 2016).

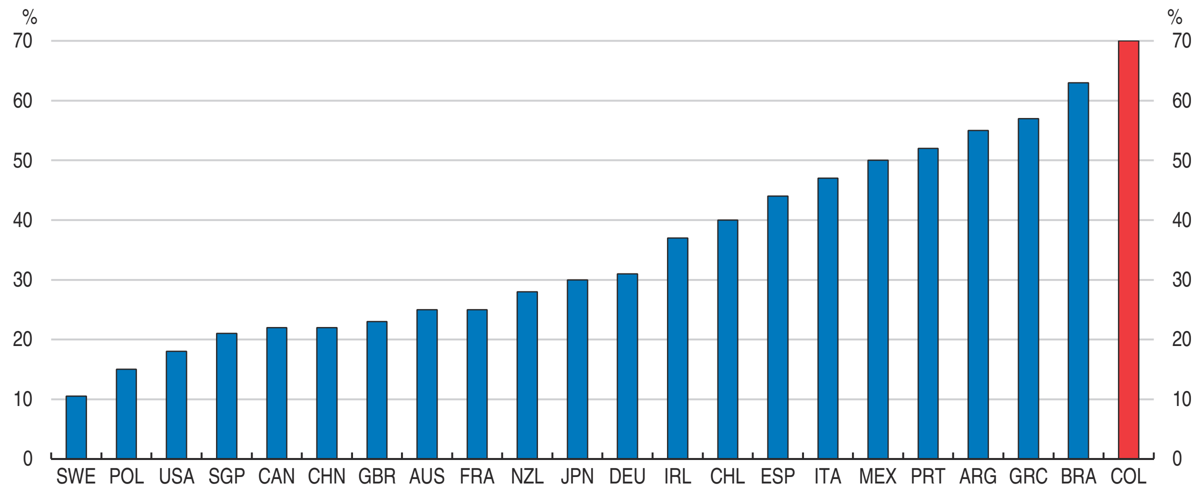
Evidence shows that low management quality could be related to a shortage of skills (Bloom et al., 2012), which as it will be discussed below, is an important constrain in Colombia. But research has shown that the two factors that appear to play an important role are product market competition and family firms (Bloom and Van Reenen, 2007; Lemos and Scur, 2016a). Higher levels of competition (measured using a variety of different proxies, but particularly as trade openness) are strongly associated with better management practices. This competition effect could arise through a number of channels, including the more rapid exit of badly managed firms and/or the inducement of greater managerial effort. As it will be discussed below, although Colombia has made significant improvements integrating to world markets, trade openness remains low, and lack of competition in some sectors continues to be limited.

In terms of family firms, evidence shows that family-owned firms in which the chief executive officer (CEO) is chosen by family ties tend to be very badly managed (Bloom et al., 2012; Lemos and Scur, 2016a). Colombia has one of the highest rates of family owned/ family managed firms in the world (Figure 1.13). The typical structure of ownership in Colombia is characterised by a majority shareholder who would also be the manager of the firm. Minority shareholders have then limited means to redress violation of their rights.

Education, information and incentives are key determinants of the differences in performance. In terms of education and ability, family CEOs tend to be less well educated than non-family CEOs (Bennedsen et al., 2007). When the firm stays under family control, the outgoing CEO inherently has a limited talent pool constrained by family size and is thus

Figure 1.13. **A relatively high share of manufacturing firms are family owned and with a family CEO**

Share of family owned and family CEO firms in manufacturing



Source: Lemos and Scur (2016a).

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less likely to find a talented CEO compared to the broader market. In terms of information, managers in family firms are systematically less aware of their own shortcomings than those in non-family firms (Lemos and Scur, 2016a). This suggests that family firms are less well informed about their own level of quality of management, of "best practices", or whether it is profitable to implement new practices or how to do it.

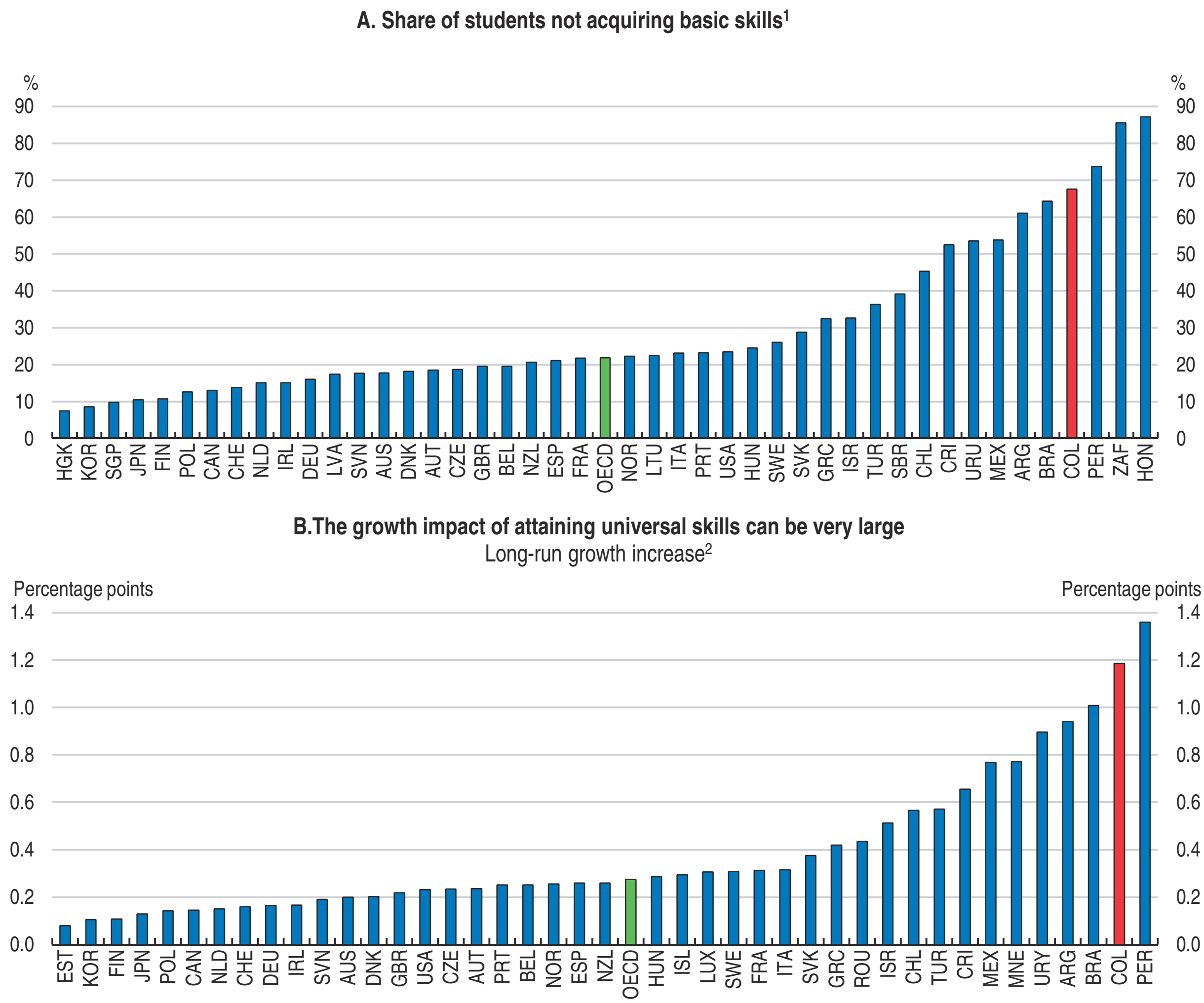
Furthermore, Colombian firms are financed mainly by majority shareholders (usually the family who owns it), suppliers and banks (Gutierrez et al., 2005; Bernal, 2006). This often means high reliance on short-term debt, which can restrict growth. Most of the closely held companies in Colombia are reluctant to seek out an external investor or multiple shareholders through the use of a public market as a source of capital. This reflects lack of knowledge of the public markets and the unwillingness of controlling shareholders to lose their control over the company. This is clearly a constraint to firms' growth.

A factor explaining why a relatively high share of manufacturing firms are family owned and with a family CEO is that in Colombia taxes and other distortive policies favour family-run firms. For example, the wealth tax created an incentive to create many family own firms and divide the wealth between a corporation and family members so each taxpayer would own wealth valued at just below the threshold that triggered the tax. The 2016 tax reform did not extend the wealth tax.

Providing the right skills to the labour force

An important factor behind the low productivity levels in Colombia is the low skill level of the labour force. Skill shortages affect particularly the industrial sector, with 30% of companies identifying difficulties in finding skilled workers as the main obstacle to productivity growth (WEF, 2015). The economic benefits from enrolling more children (see Chapter 2) have been limited because the quality of education. Since 2006, Colombia has had the second largest improvement in PISA – among the 52 education systems with comparable data –, however, it still performs below the OECD average (OECD, 2016b). The majority of students leave school with weak basic skills. The average student has a PISA score in mathematics of 390 out of 600, which is much lower than the OECD average of 490. A significant proportion of young people are unable to demonstrate attainment of Level 2 of skills in PISA exams – 420 points on the PISA mathematics scale – (Figure 1.14.A). This means that many students do not have the basic skills necessary for participating productively in modern economies.

Figure 1.14. **A high share of students do not attain basic skills**



1. Share of students performing below 420 points on international student achievement test. Average of mathematics and science. PISA participants: based on PISA 2012 micro data; TIMSS (non-PISA) participants: based on 8th-grade TIMSS 2011 micro data, transformed to PISA scale.
2. "Long-run growth increase" refers to increase in annual growth rate (in percentage points) once the whole labour force has reached higher level of educational achievement.

Source: OECD (2015), *Universal Basic Skills: What Countries Stand to Gain*, OECD Publishing.

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Having a large share of the population below this skill level affects productivity growth in Colombia. There is a large body of evidence showing the importance of skills in determining the productivity of individuals, and the value of education in raising skills (Heckman, 2013). Deficiencies in educational attainment and skills can also have an adverse impact on overall productivity in times of rapid technological change (Goldin and Katz, 2007). The potential gains of attaining universal skills – when all students fully attain

Level 1 in PISA exams can be very large. Recent OECD estimates suggest that ensuring universal access to secondary education by 2030 at the current level of quality could increase Colombia's annual economic growth by 0.3 percentage points (OECD, 2015c). Improving quality of education so that students attain basic skills by 2030 could raise annual economic growth by 1.2 per cent per year (Figure 1.14.B). Improving education coverage and quality is discussed in more detail in Chapter 2.

An important factor that has affected the quality of education has been the long armed conflict; ending it will help increase the educational level of Colombian children, particularly in those regions that were more affected by it. Research shows that violent attacks in Colombian municipalities where students reside increase the probability of school drop-out (Rodriguez and Sanchez, 2012). According to these results, on average, the end of the armed conflict in Colombia will increase the average education of students residing in conflict areas by almost half a year of education.

Colombia also needs to introduce reforms in all levels of education, starting with early childhood education and care. More investment in Early Childhood Education can help reduce high school dropout rates, improve student performance and reduce gaps in learning achievement (Heckman, 2013; OECD, 2011a). Empirical evidence shows that participation in quality early childhood education is associated with stronger reading performance at age 15, especially for children from families with disadvantaged socio-economic backgrounds (OECD, 2013).

In primary education, Colombia needs to establish a national curriculum framework for school education. This would help in setting high, and equal, expectations for all children and provide guidance to teachers on what students should be learning at each stage of their school career (OECD, 2016b). It should also encourage and support teachers to make more effective use of student assessment. Teachers need greater assistance in how to assess whether students are learning, identify those at risk of falling behind early on and design effective support strategies. To this end, teachers need to be provided with adequate supports such as assessment tools, instructional materials, teacher assistants and recourse to remedial courses. This should be complemented with the development of professional standards and improve teacher education and professional development. Research done for this Economic Survey finds that students at schools that have a higher share of teachers with university degrees perform significantly better in Saber 11 (a Colombian student test) than students in schools that have a low share of teachers with university degrees (Box 1.3).

More efforts should be made to improve technical education. Most pressing skill shortages faced by industrial companies' concern technical workers. Evidence shows that these students perform relatively well: In PISA 2015 students enrolled in pre-vocational or vocational programmes score 27 points higher in science than students in general programmes, after accounting for socio-economic status. However, the share of students both at the secondary levels enrolled in professional and technical degrees in Colombia is low in international comparison (Figure 1.16.A). Evidence shows that, out of all online job listings that included the level of education required, 57% specified a preference for candidates with technical degrees (Lora, 2015). It is, without a doubt, the level of education that has the largest difference between supply and demand, as only 11% of Colombians have a technical degree (Figure 1.16.B). Therefore, more investment in vocational education and training, at both secondary and tertiary level, will help reduce the skill shortage.

Box 1.3. **What are the main drivers of students' performance in Colombia?**

A research conducted for this Economic Survey estimated the drivers of students' performance in Colombia, using data from *Saber 11*, a national standardized test conducted by *Instituto Colombiano para la Evaluación de la Educación*. Saber 11 is mandatory for all senior year high school students who wish to obtain their school degree, and serves as an input for college entrance.

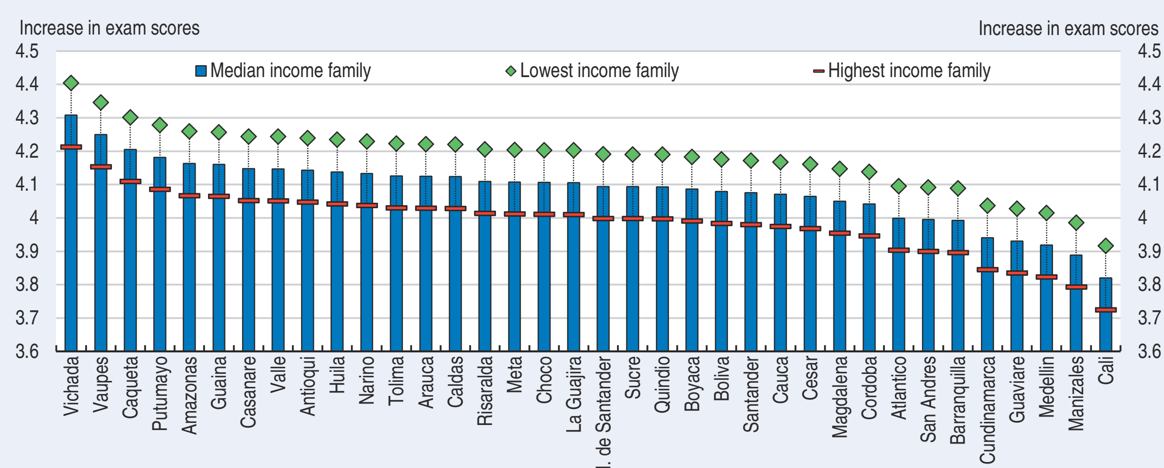
The analysis proposes a model where student performance in mathematics is the dependent variable, and economic, social and cultural status of students and schools, sex and age are included as independent variables. The estimation also exploits differences in policy indicators across regions, and employs interactions to study if more investment in public education can help reduce the impact that socioeconomic factors, such as family income and level of education of the mother, have on student performance. Specifically, the following equation was estimated employing different methodologies:

$$P_i \quad \beta_1 Inc_i + \beta_2 ME_i + \beta_3 Sex_i + \beta_4 Age_i + \beta_5 {}^* PSE_j + \beta_5 Inc_i {}^* PSE_j + A\theta_i + \varepsilon_i$$

Where P_i represents the SABER 11 score in mathematics for student *i*, Inc_i is family income, ME_i is the level of education of the student's mother, Sex_i is a dummy variable for sex taking the value 1 for girls, Age_i is the age of student *i*, *A* is a matrix containing the identified "traditional" variables (e.g. school characteristics), PSE_j is the level of public spending per student that varies at the regional level *j*, and $\in_i$ is an error term.

The results show that students' characteristics and their environment (i.e. sex, age and economic, social and cultural status of students and schools, level of education of their mothers) explain more than 20% of the variation in education performance in Colombia, a percentage relatively high when compared to those found by other studies focusing on OECD countries and based on PISA (Avendano et al., 2016). After controlling for students' characteristics and their environment, the results show that in Colombia, public spending per student are positively related to better learning outcomes. The results suggest that if all regions reach the level of spending per student of the region with the highest spending,– average math scores can increase by 3.8 to 4.3 points (around 8%), depending on the regions, with the highest improvement for low income students (Figure 1.15).

Figure 1.15. **Higher spending in education increases math scores, particularly for low income students**



Source: Heras-Recuerdo and Olaberria, 2017.

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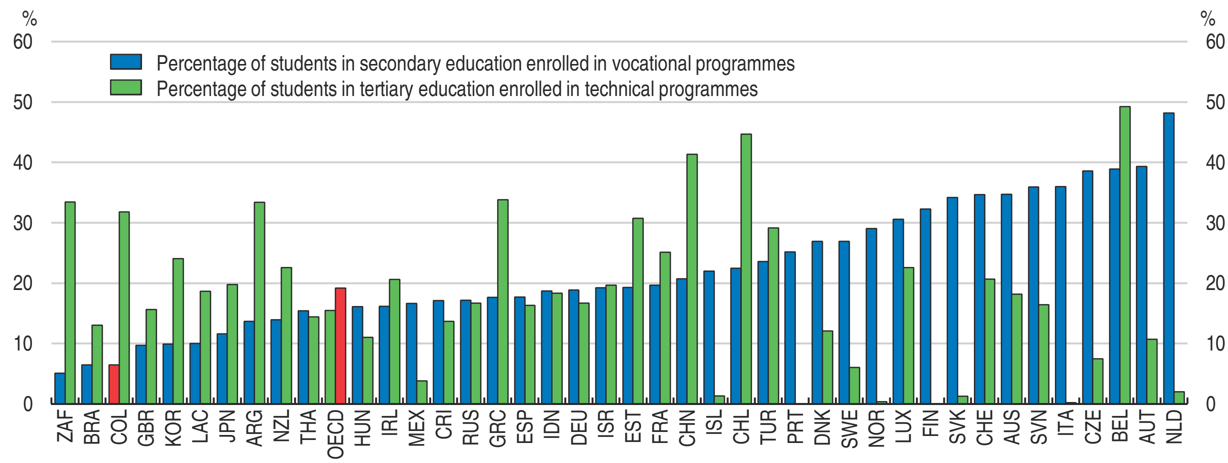
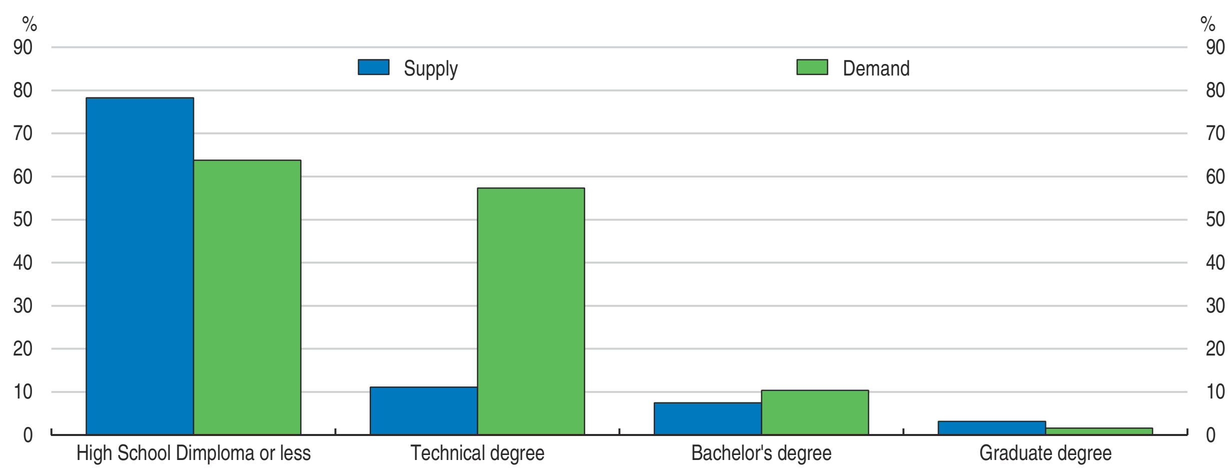
Figure 1.16. **There is a deficit of technicians and technologists**

A. The share of students enrolled in professional and technical degrees is low



B. Composition of labour supply and demand by level of education in Colombia



Note: Technical/vocational enrolment in secondary education (ISCED 2 and 3) as % of total secondary enrolment (ISCED 2 and 3) is the percentage of all lower and upper secondary students enrolled in technical/vocational education programs including teacher training, expressed as a percentage of the total number of students who are enrolled in lower and upper secondary education. Enrolment in technical tertiary education is the enrolment at ISCED level 5B programmes as a percentage of total enrolment in tertiary education. The content of tertiary ISCED level 5B programmes is practically oriented/occupationally specific and is mainly designed for participants to acquire the practical skills needed for employment in a particular occupation or trade or class of occupations or trades - the successful completion of which usually provides the participants with a labor-market relevant qualification

Source: UNESCO Institute for Statistics. Data for 2012; Colombian Atlas of Economic Complexity (Lora, 2015).

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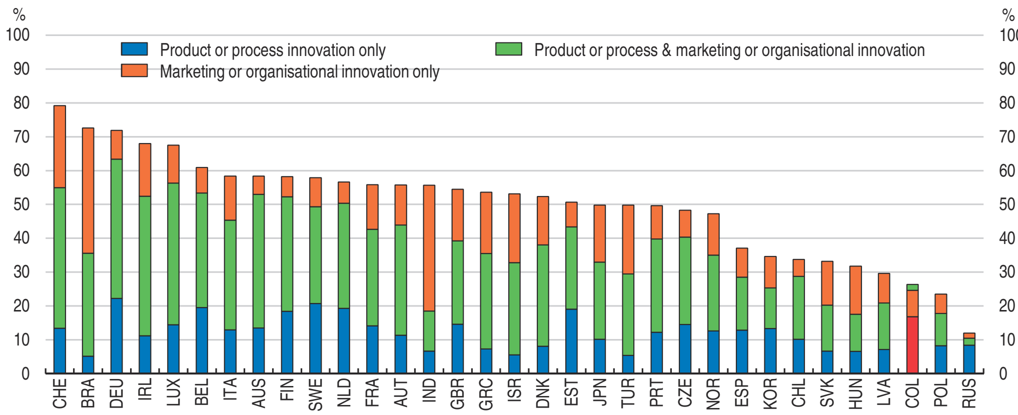
Producing innovations and facilitating its diffusion to promote productivity gains

To increase productivity and strengthen competitiveness in international markets more spending is needed on research and innovation activities. R&D expenditure at 0.2% of GDP is well below other countries in the region or the OECD on average of 2.4% (OECD, 2015d). Colombia's innovation system is still modest, and lacks a strong business core, which is reflected in low average product/process innovation in the manufacturing sector (Figure 1.17). The share of firms introducing new products to the market is also low (Figure 1.18.A). However, firms performing R&D are more likely to introduce new or significantly improved products (Figure 1.18.B). Therefore, more public investment in

Figure 1.17. **Innovation in the manufacturing sector is relatively low**

As a percentage of all manufacturing firms within the scope of national innovation surveys, 2010-12



Notes: International comparability may be limited due to differences in innovation survey methodologies and country-specific response patterns. European countries follow harmonised survey guidelines with the Community Innovation Survey. Please see *www.oecd.org/sti/inno-stats.htm* and chapter notes for more details. For countries following the Eurostat CIS 2012 the data include ongoing or abandoned innovative activities. Only enterprises with 10 or more employees are covered.

Source: *OECD Science, Technology and Industry Scoreboard 2015*.

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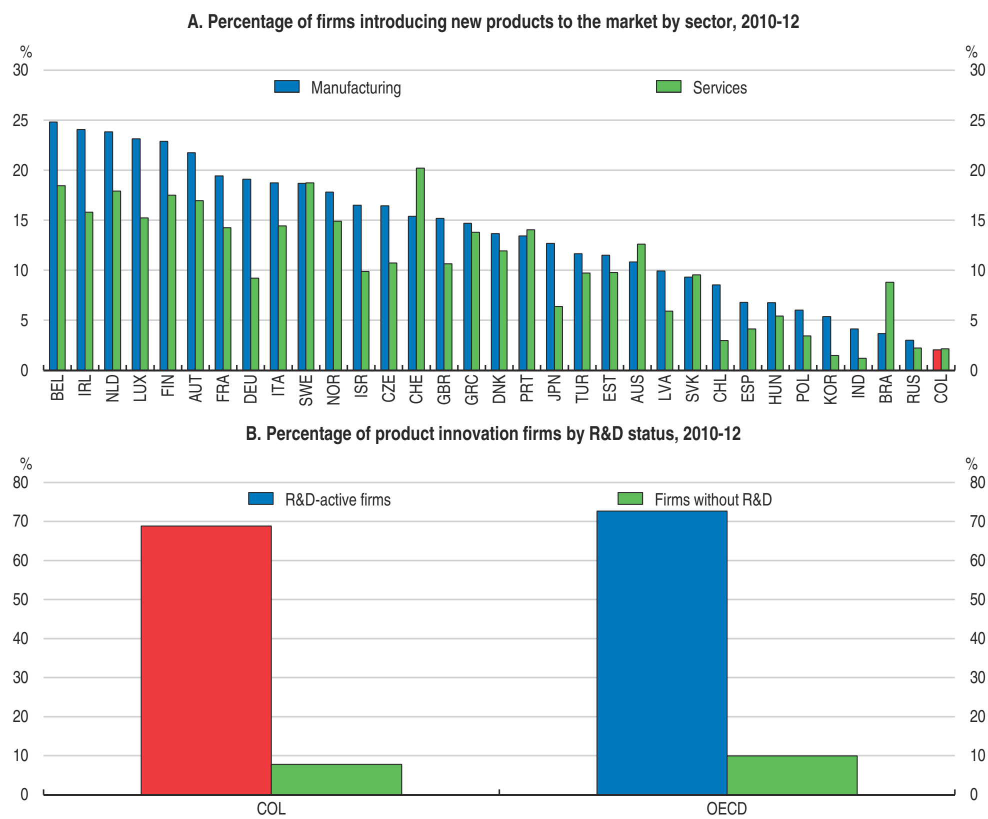
Figure 1.18. **Very few firms introduce new products to the market**



Note: International comparability may be limited due to differences in innovation survey methodologies and country-specific response patterns. European countries follow harmonised survey guidelines with the Community Innovation Survey. Please see *www.oecd.org/sti/inno-stats.htm* and chapter notes for more details; For Colombia, data refer to the simple average of the estimates for manufacturing the in 2011-12 and for services in 2012-13. For the OECD, data refer to the simple average of 28 member countries.

Source: *OECD Science, Technology and Industry Scoreboard 2015: Innovation for growth and society*, OECD Publishing, Paris.

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research and development, and better incentives for firms to innovate, could help increase productivity. The Productive Development Policy (CONPES document 3866 of 2016) includes actions to strengthen productive units through improvements in managerial skills, as well as the incorporation and transfer of knowledge and technology. It includes programs aimed for the scaling up of productivity and technical assistance plans for the agricultural sector.

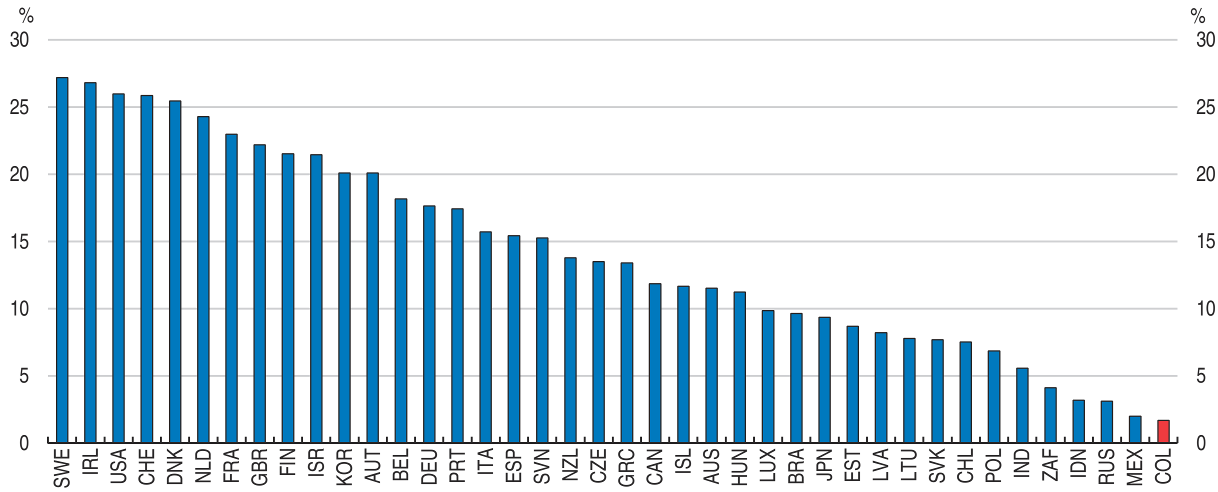
Framework conditions for innovation have improved significantly, and *Colciencias* is promoting research and innovation activities through a number of programmes. *Innovation systems* is a programme by which *Colciencias* provides specialized training to develop innovation capabilities. *Innovation alliances,* managed jointly by *Colciencias* and the chamber of commerce, promote the culture of innovation across companies in clusters. The Ministry of Information Technologies and Communications is also running several programmes linked to innovation, and has an innovation centre geared towards supporting government bodies in implementing e-government tools, as well as training government employees to develop a culture of innovation. This ministry also runs programmes, in conjunction with *Colciencias*, to finance the development of IT-based innovation products and services among companies. Finally, another important tool for promoting innovation and new business creation has been the establishment of iNNpulsa in 2012. Managed by Bancoldex, a state-owned international commerce and business bank, this government agency promotes innovative businesses by allocating co-financing grants to start-ups and other firms, and by running programmes that help strengthen the environment for credit allocation.

To enhance innovation the authorities are implementing measures to encourage expenditure on research and innovation activities in the private sector. The government plans to double expenditure on science, technology and innovation from 0.5% of GDP in 2015 to 1% of GDP by 2018 (National Development Plan 2014-18). The government has also introduced tax incentives for innovation. As a result of the 2016 tax reform, companies that invest in activities that qualify as research, technological development or innovation are able to deduct 100% of related expenditure from their tax base and can subtract a further 25% of the investment value from the tax due. Most private companies that benefit from this tax incentive use it to acquire intellectual property products. This is important, as Colombia has a very low share of investment in intellectual property products (Figure 1.19). OECD research shows that productivity is driven by innovation, and that this process relies not only on investment in research and development (R&D), but also on complementary assets such as software, design and human capital (OECD, 2015d).

Increasing the efficiency and effectiveness of innovation also requires improvements in knowledge diffusion channels. Therefore, it is important to increase collaboration between businesses and education and research institutions, which is weak in Colombia (Figure 1.20). Collaboration with higher education or public research institutions constitutes an important source of knowledge transfer for large firms. Linking business and scientific research institutions can help demonstrate the importance of research crossing several disciplines in new technology development and identify need for relevant applied sciences (OECD, 2015d). Colombia should follow the example of many European countries, where providing grants and loans to firms for R&D is a common mechanism. Furthermore, it should start subsidising joint work between companies and universities or institutes, to boost collaboration. The aforementioned Productive Development Policy, envisages a scheme of vouchers as a mechanism to promote innovation and collaboration between high education institutions and the business sector.

Figure 1.19. **Share of investment in intellectual property products**

Total economy, as a percentage of gross fixed capital formation, 2014.



Source: *OECD National Accounts Statistics* (database); National statistical offices, February 2016.

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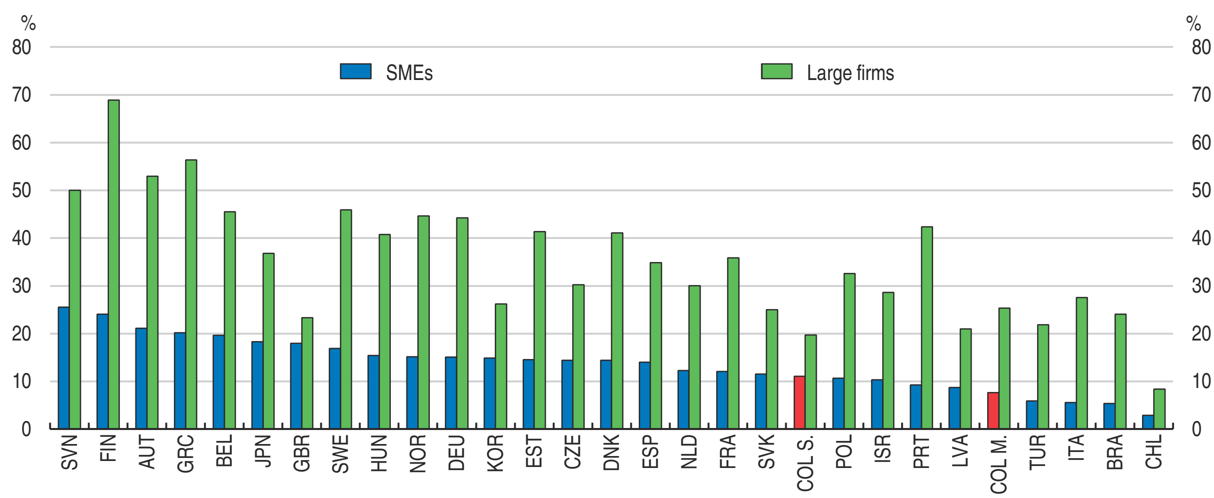
Figure 1.20. **Firms collaborating on innovation with higher education or research institutions is low**

Percentage of product and/or process-innovating firms in each size class, 2010-12



Note: For Colombia, data on manufacturing (COL M.) and services (COL S.) are collected for separate reference periods and refer to 2011-12 and 2012-13.

Source: OECD, based on Eurostat Community Innovation Survey (CIS-2012) and national data sources.

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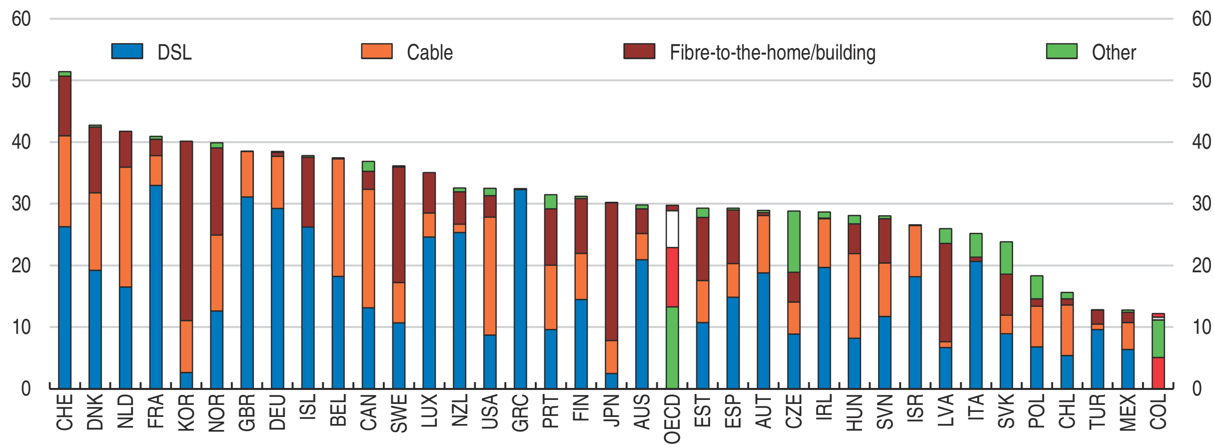
Improving the economy' ability to innovate and grow ultimately depends on the participation of citizens in innovative processes, the degree of sophistication of demand, and the readiness to accept and recognise the potential of science and technology (OECD, 2015d). This requires empowering society to innovate by encouraging participation in the digital economy. More efforts are needed to extend broadband communication networks and services provided. Although the penetration of fixed broadband networks has increased significantly between 2009 and 2014, it remains below OECD averages (Figure 1.21).

Figure 1.21. **Fixed broadband penetration is relatively low**

Subscriptions per 100 inhabitants, by technology, June 2016



Source: OECD, Broadband Portal.

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Extending broadband communication networks and services provided can also enhance productivity in the public sector. Simplifying interactions between citizens and public authorities with digitisation and automation of processes can save both time and taxpayer resources, and reduce corruption. The overall share of individuals using the Internet to interact with public authorities has increased in recent years, but remains below OECD countries (Figure 1.22.A). Online interactions between businesses and public authorities are more developed than for individuals, as enterprises undertake administrative procedures more frequently (Figure 1.22.B).

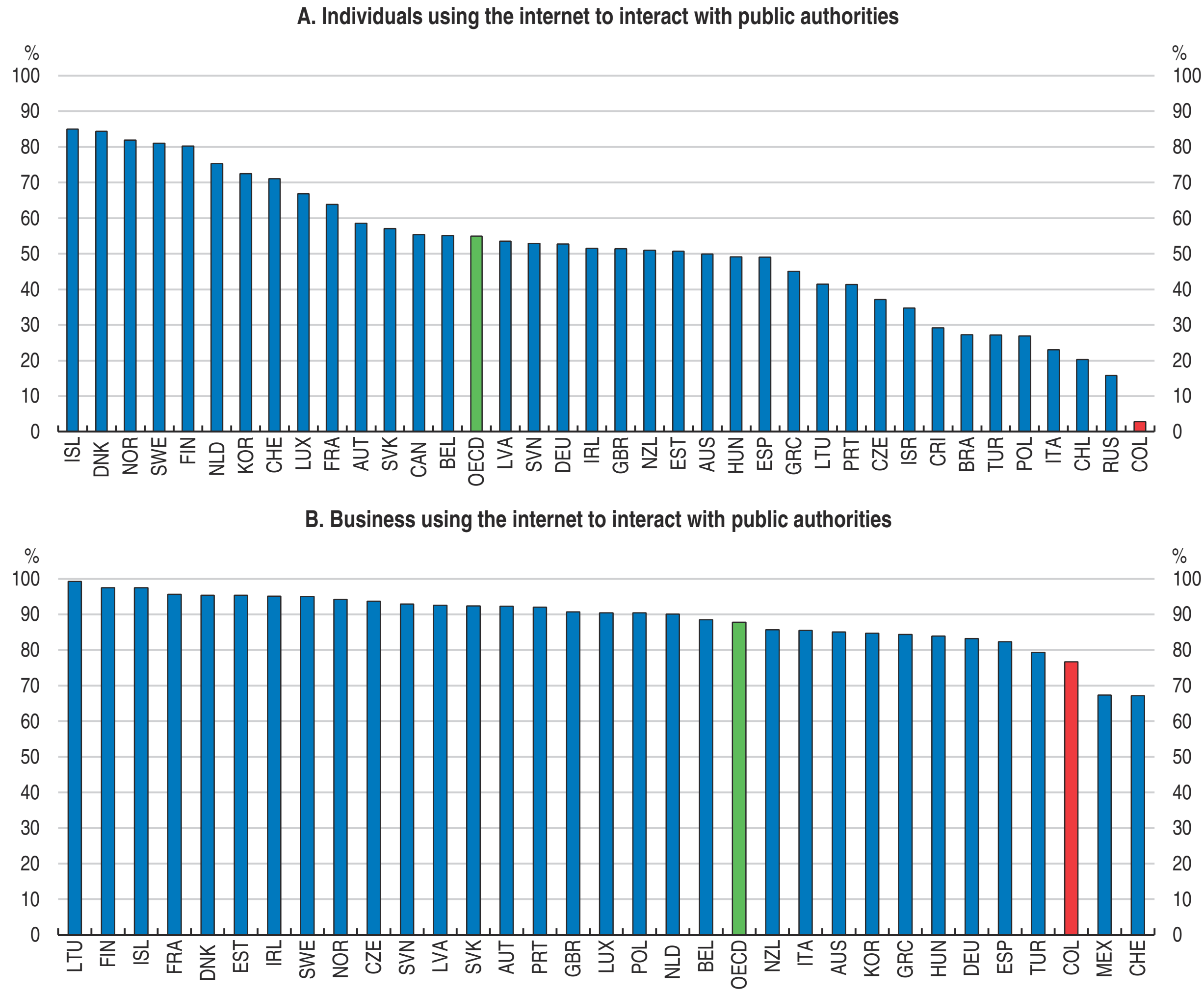
Facilitating integration into global value chains

Colombia has made important efforts to promote trade integration in the recent years by negotiating trade agreements with the U.S., EU, Costa Rica, Korea, Israel, and the Pacific Alliance. These have helped reduce average tariffs from 12.8 % in 2000 to 5.2 % in 2014 (Figure 1.23.A). There is evidence that opening the economy increased plant productivity levels for firms that export goods (Camacho and Conover, 2010). However, while having lower tariffs than many Latin American countries, Colombia still holds higher tariffs than the average of OECD countries (Figure 1.23.B).

Limited access to and competition from international markets tends to lower productivity and potential growth. A large body of literature suggests that more integrated economies tend to grow more rapidly than less integrated ones. Recent empirical studies show that tariffs have a negative effect on productivity and export decisions of firms in downstream industries. Bas (2012) and Chevassus-Lozza et al. (2013) demonstrate that the probability of entering the export market is lower for firms in industries that face higher input tariffs (if the country has no duty-draw-back scheme). Trade openness can reduce the marginal cost of investments in research and development (R&D) or knowledge capital by reducing the price of "knowledge capital." Similarly, international integration can affect the incentives of the private sector and households to invest in human capital. Finally, trade openness increases competition, lowering inputs, capital, and final prices. Recent OECD research finds evidence suggesting that the negative effect of tariffs has been increasing in

Figure 1.22. **The use of internet to interact with public authorities is low**

2014



Source: OECD, *ICT Database*; Eurostat, Information Society Statistics Database and ITU, World Telecommunication/ICT indicators Database, July 2015.

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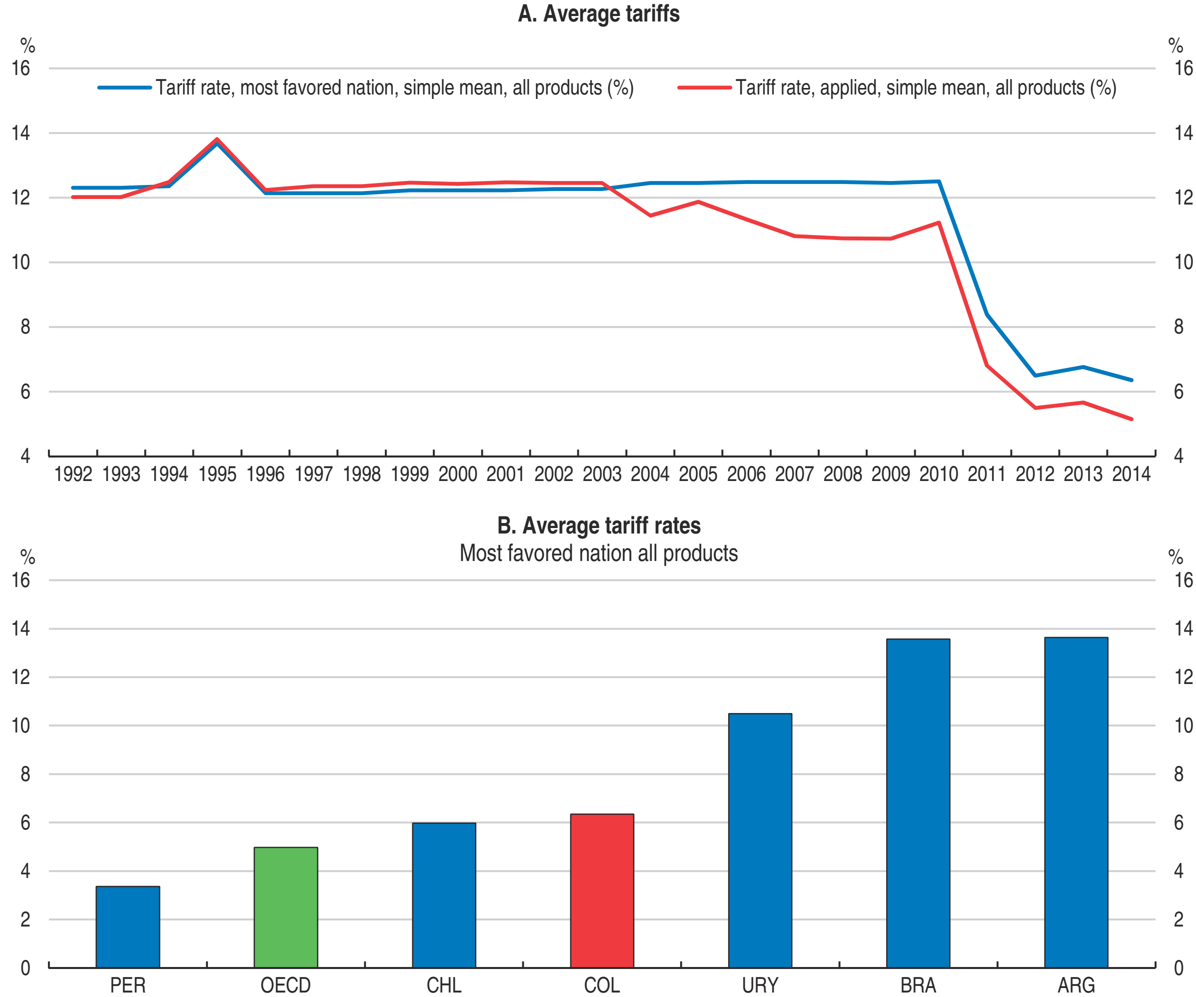
time due to the increasing role of GVC (Johansson and Olaberria, 2014). This is because higher tariffs can significantly reduce the degree of integration to GVCs (OECD, 2013).

Recent OECD analysis suggests that efficient integration into global value chains (GVCs) can be an important element in raising productivity (OECD, 2016c). Colombia's participation in GVCs is limited. It mainly supplies primary inputs via downstream linkages, which is likely to reflect the dominance of commodities in exports (Figure 1.24). Colombia participates little in sectors typically associated with dynamic GVCs like motor vehicles, electronics, and services offshoring, which is likely to reflect the high costs of transport and trade (Figure 1.24B).

Colombia seems to be better integrated to GVCs from a forward participation perspective (Figure 1.25.A), which means that the share of Colombia's value added in trading partners' gross exports is important. Colombia's forward participation is mainly connected with the European Union, United States and Canada, and is mainly explained by the mining

Figure 1.23. **Significant effort has been made to promote trade integration**



Source: World Bank, World Development Indicators 2016.

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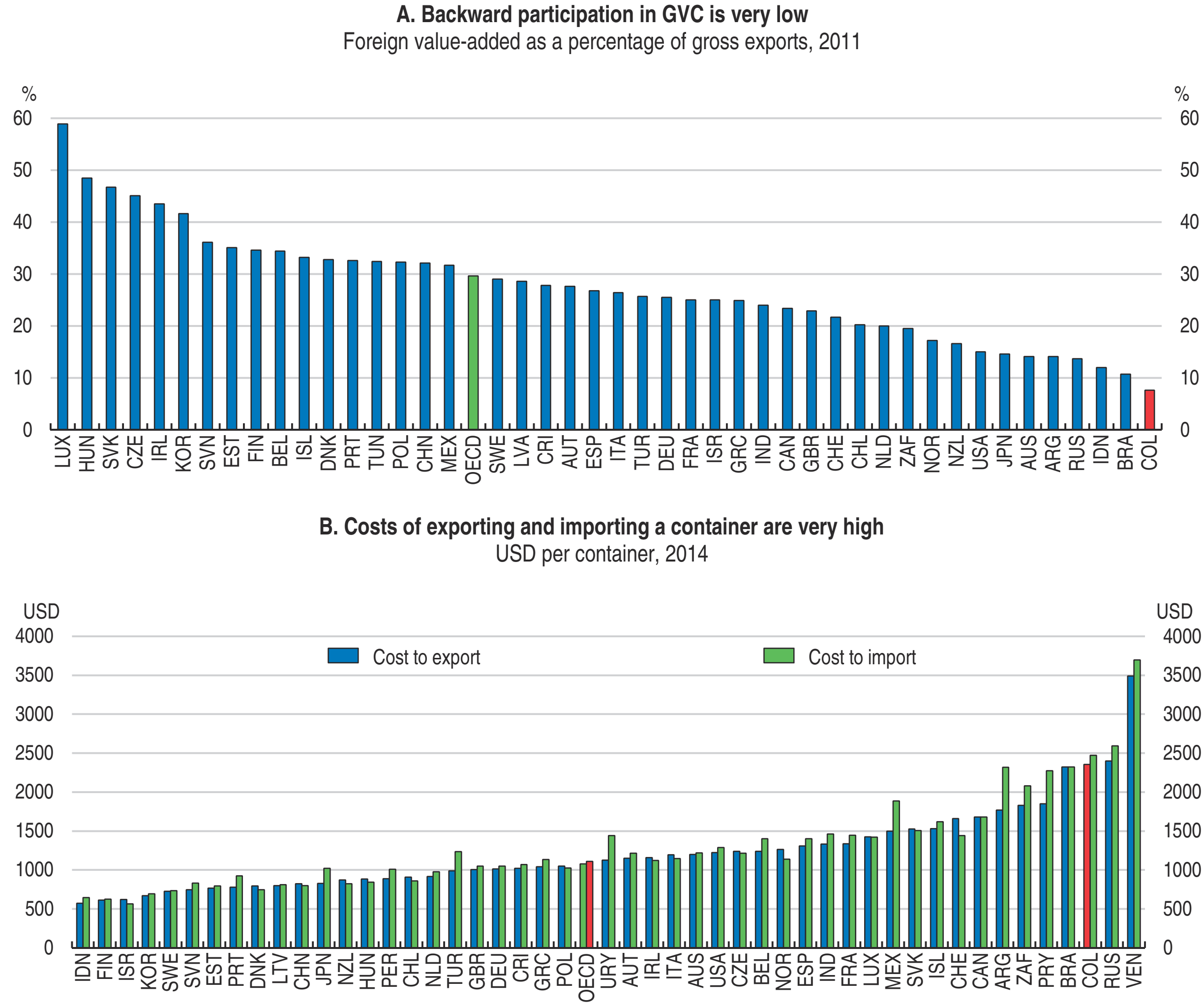
sector (Figure 1.25, Panels C and D). Colombia's forward participation in medium-high and high technology industries is the lowest of all Latin American countries for which data is available. The government is aware of the importance of a better integration, therefore the aforementioned Productive Development Policy (CONPES 3866) focuses on implementing policies for the productive apparatus to diversify into more sophisticated products for which the country has (or is close to having) a comparative advantage, there is high potential demand in local and international markets and products that are similar, as regards know-how and technology, to the ones that the country already produces.

Colombia remains below peer countries regarding its backward participation to GVCs (Figure 1.25.B). This means that the share of foreign value added embodied in Colombia's exports is low and under-performing against peer countries (Figure 1.26). This is shown in a recent paper (OECD, 2016d), which finds that trade policy and FDI openness play an important role for Colombia when compared with countries such as Argentina or Brazil, but not as much when compared with Chile.

Barriers to trading at the border can be measures by the OECD Trade Facilitation Index (TFI). Colombia performs well in information availability, involvement of the trade

Figure 1.24. **Participation in GVCs is very low**



Source: *Trade in Value Added (TiVA) Database*, OECD (2015); World Bank (2015), Doing Business 2015 data.

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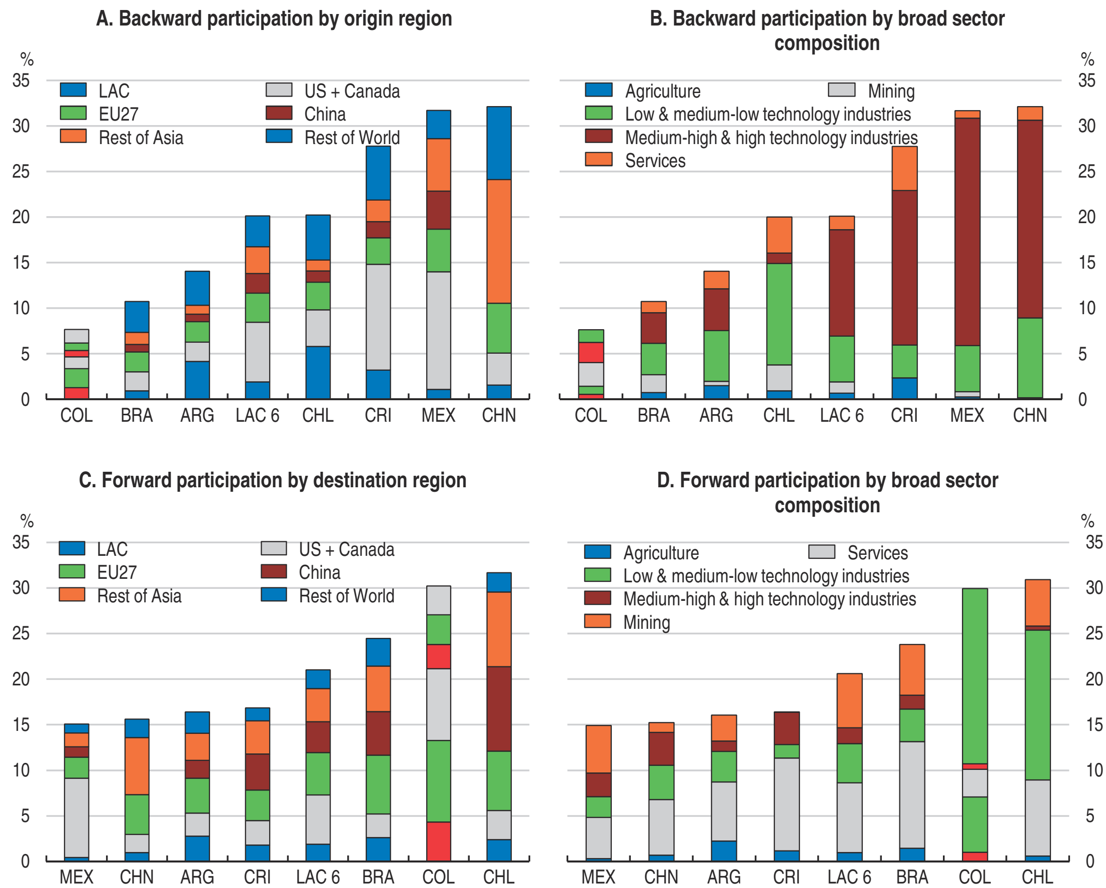
community, simplification and harmonisation of documents and internal border agency cooperation matching or exceeding the average performance of upper middle income countries in all areas measured by the Trade Facilitation Index (OECD, 2015e). Performance in the other TFI areas is stable with the exception of appeal procedures, fees and charges, the streamlining of border procedures and governance and impartiality. Performance in advance rulings, appeal procedures, fees and charges, automation, the streamlining of procedures, external border agency cooperation and governance and impartiality continue to be below best practice.

For upper middle income countries like Colombia the assessment of the impact of trade facilitation measures, both on bilateral trade flows and on trade costs, shows that reforms with the greatest benefit are in the areas of formalities (streamlining border procedures, simplifying and harmonizing documents, and automation), governance and impartiality and information availability (Box 1.4). The indicators involvement of the trade community, advance rulings, and fees and charges also have a significant impact on trade flows. Efforts at reforming these areas should continue.

Figure 1.25. **Colombia's backward and forward participation in GVCs**

2011



Note: The backward participation index is defined as the share of foreign value added in a country's gross exports. Forward participation is defined as the share of domestic value added embodied in foreign countries' exports. For comparibility reasons, most countries included are non-OECD peer countries, such as Brazil, Argentina, Indonesia, Romania, Vietnam, among others.

Source: *OECD-WTO Trade in Value Added Database.*

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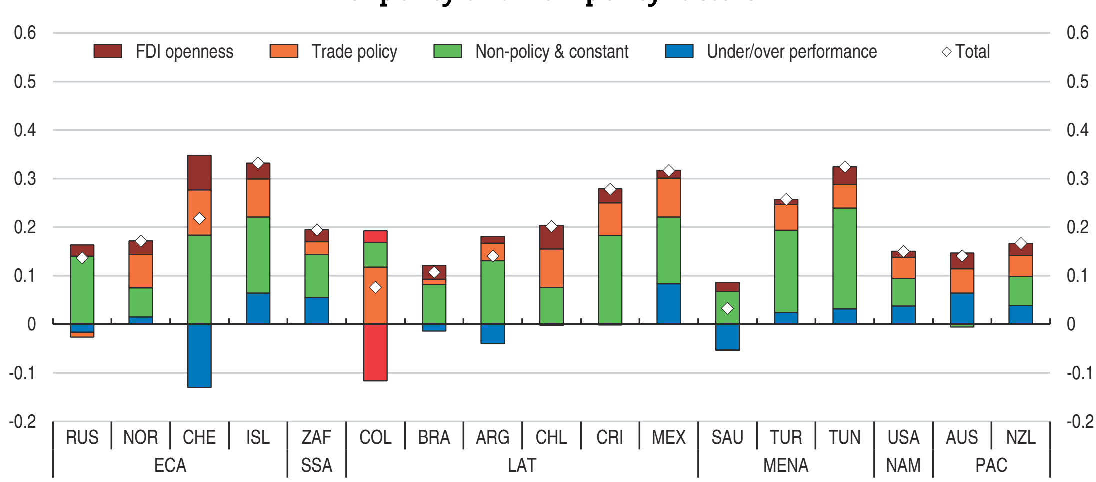
Figure 1.26. **Backward GVC participation: Ratio-relative contribution of policy and non-policy factors**



Source: Cadestin et al. (2016).

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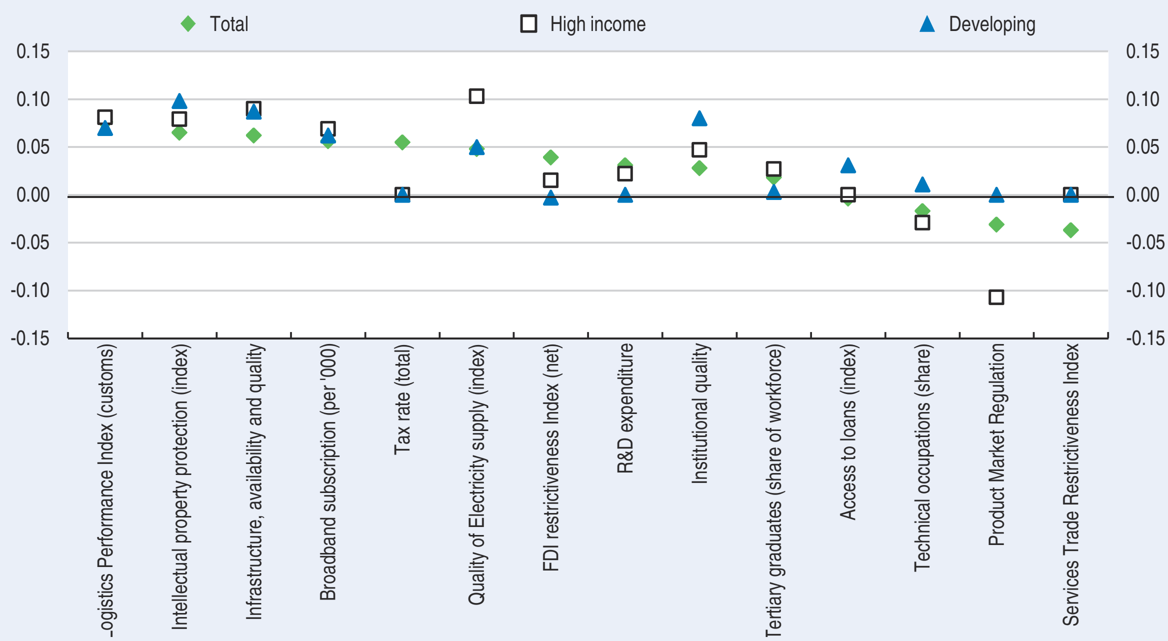
Box 1.4. **Main determinants of GVC participation in Emerging Economies**

In a recent OECD study, Kowalski et al. (OECD, 2015a) quantify the importance of GVC participation determinants across a large number of developed and developing economies. They found that trade facilitation and logistics performance, quality of infrastructure and of institutions, intellectual property protection and quality of electricity supply are particularly important (Figure 1.27). These are all areas where Colombia performs relatively poorly, and where efforts are required to improve GVC participation. Improving infrastructure for trade and logistics, and dealing with other behind-the-border issues present a significant opportunity to boost trade. Colombia's logistics costs, about 23% of product value, are well above OECD countries, including the Latin American members (Chile is 18%, the OECD average is only 9% of product value).

Figure 1.27. **The impact on GVC integration of other policies**



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Strengthen productivity-enhancing institutions

Productivity-enhancing institutions are important in the identification and implementation of policies to solve productivity challenges (Albrizio and Nicoletti, 2016). Unlike most Latin American countries, Colombia has one such institution: the *Competitiveness and Innovation System* is in charge of articulating policies to strengthen competitiveness. As part of this system, the *National Commission for Competitiveness* is a consultative body that provides recommendations for the competitiveness agenda. Given its large size, this commission is very broad and well represented in terms of bringing together different interest in society. This is critical to legitimizing the main policy strategies. At the same time, broadness can make the commission ineffective in terms of making reform happen (Eslava et al., 2014). In practice, the true heart of the system is the commission's executive committee, composed of the heads of four government agencies and two private representatives: the *Private Council for Competitiveness* and *Confecámaras*.

The active public-private collaboration in the *Executive Committee of the National Competitiveness Council* has given some degree of continuity to a public agenda of competitiveness, which used to be affected by changes in government or ministers. It has been successful in the removal of government failures, such as lack of regulations, complexity of procedures, lack of coordination between government agencies, which were identified through the interaction between the program and the private sector (Eslava et al., 2014).

Policy Recommendations for reigniting growth by boosting productivity

Key recommendations

- Sustain the increase in public investment.
- Finance more infrastructure programmes on a regional basis. Implement the road infrastructure program (4G) and guarantee that Private-Public-Partnerships continue to have proper cost-benefit analysis.
- Provide more grants and loans for R&D to enterprises. Fund R&D projects that bring industry and academia together.
- Remove regulations on public ownership and vertical integration in electricity, vertical integration and market structure in rail. Introduce a court or a division of a court dedicated solely to commercial cases and facilitate case management through electronic case management tools.
- Make information on advance rulings on import conditions available more quickly and with higher visibility.

Other recommendations

- 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 career choice and reduce the technicians' gap.
- Provide more grants and loans for R&D to enterprises. Continue to increase the number of e-government services and monitor service quality, and Stimulate competition in the telecommunications sector.
- Fund longer-term projects that bring industry and academia together. Ensure affordable Internet access, especially for lower-income groups.

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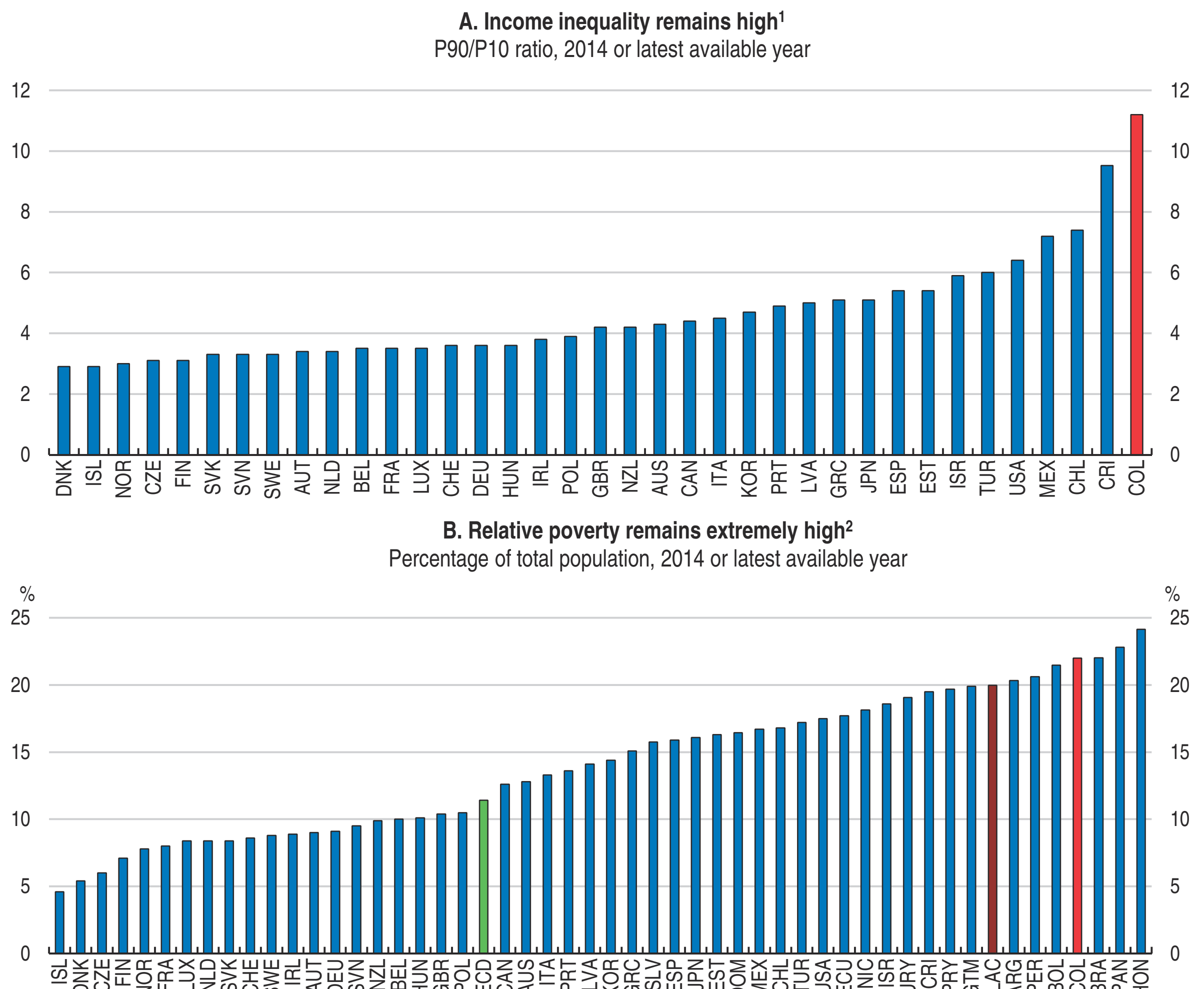
Chapter 2

Towards more inclusive growth

Growth has become more inclusive in recent years. Strong growth and targeted social policies have reduced absolute poverty. Conditional cash transfers and education policies expanding coverage have increased attendance in schools. Universal health care is improving wellbeing of many Colombians. Reductions in non-wage labour costs have increased formal employment and access to social benefits. However, income inequality remains high with large disparities across regions. The causes are many. High informality keeps many workers in low quality jobs without social benefits or access to finance. Inequality is a gender issue as labour force participation rates and wages are lower for women than for men. Inequalities also reflect low social mobility as opportunities for education and jobs are influenced by socio-economic backgrounds. More targeted programmes are necessary to increase education enrolment rates of disadvantaged children in less developed regions. Further reductions in non-wage labour costs can raise formal employment. Better access to labour market programmes, early childhood education and elderly and disability care can boost female labour market participation. More resources are needed for targeted social programmes to achieve stronger outcomes. A comprehensive pension system reform is needed to extend coverage and alleviate old-age poverty.

The quality of life of Colombians has improved substantially over the last decade with rising incomes and declining poverty. Nevertheless, Colombia remains one of the most unequal countries in terms of income distribution compared to the OECD and much of Latin America. Too many people are still poor, and regional differences in income or access to public services are large (Figure 2.1). Income inequalities are also high within regions: Chocó, Cauca and Huila are most unequal, while Cundinamarca, Atlantico and Caqueta are

Figure 2.1. **Inequality and poverty remain high**



1. For Australia, Finland, Hungary, Israel, Korea, Mexico, Netherlands, United States, Colombia and Costa Rica, data refer to 2014. For Japan and New Zealand, data refer to 2012. The P90/P10 ratio is the ratio of income of the 10% of people with highest income to that of the poorest 10%.
2. Relative poverty rates after taxes and transfers (threshold of 50% of the median income). LAC average does not include Chile and Mexico.

Source: *OECD Social and Welfare Statistics and SEDLAC* (CEDLAS and The World Bank) and; OECD (2016a), OECD Publishing, Paris.

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most equal. Inequality is also a gender issue as female labour force participation is low, gender unemployment and wage gaps are high, and violence affects more women than men. Access to education and health is also uneven among regions and socioeconomic groups affecting wellbeing of Colombians, which in turn tends to exacerbate inequality of opportunity.

Making growth more inclusive thus remains an important challenge. Inequality can impede upward social mobility by limiting job opportunities and access to education for the poorest children (OECD, 2011). This has negative consequences for overall economic performance (OECD, 2011, Ferreira et al. 2014). Inequalities can also raise protectionist and anti-globalisation sentiment reducing trade and growth, and add to political challenges via social cohesion.

Inequality has many complex causes. High informality in the labour market keeps workers in marginal, insecure, low paying jobs without access to social benefits. As attainment in education is heavily influenced by social background, the large education premium exacerbates income disparities. Social policies also contribute: the redistributive impact of the current tax system is low and social welfare programmes do not reach a large share of the poor. The pension system covers only formal workers earning at least the minimum wage, which leaves many elderly without income. However, it is complemented by both *Colombia Mayor* and the BEPS programmes, which cover some of the low income elderly. Health coverage is universal, but the quality of health services varies between richer and poorer regions. Low social mobility, influenced by access to education, contributes to inequalities.

This chapter discusses causes of and progress in reducing inequality and poverty in Colombia, and makes policy recommendations for more inclusive growth. The first two sections cover regional disparities and the gender gap in the labour market. The second part discusses the main causes of inequality such as informality in the labour market, the social welfare system (health, social transfers, pensions and taxation), social mobility (education and labour and product market barriers) and financial inclusion.

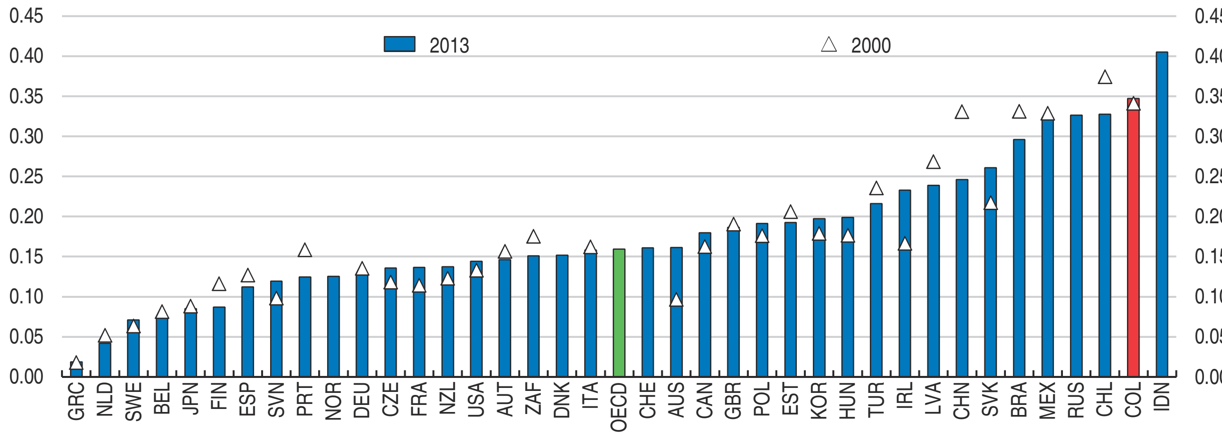
Regional disparities influence inequalities

Regional inequality in GDP per capita, measured by the Gini index, is higher in Colombia than in the OECD and other large emerging market economies (Figure 2.2). For example, it would take the poorest department of Choco 200 years to converge to Bogota's income per capita levels at current growth rates (Galvis and Meisel, 2012). Resource-rich regions have grown faster than others and have higher GDP per capita, but they also have high poverty and inequality. This points to weak redistribution of incomes from oil and mining (OECD, 2014). Regional disparities and growth opportunities are also influenced by topography with high mountain ranges isolating regions in the absence of efficient infrastructure to connect them. Compared to other Latin American or OECD countries, the network of roads and railways is low relative to GDP per capita as discussed in Chapter 1 (OECD, 2014).

Agricultural departments have the highest poverty levels, and 50 years of armed conflict has driven 7 million people from rural areas to cities (*desplazados*), increasing urban poverty as many of them did not have skills required by the urban labour market. The government has launched an important program to support the conflict victims. In 2016, the total estimated budget allocation represented around 1.2% of GDP. The main components

Figure 2.2. **Inequality in GDP per capita across regions is high**

Gini index



Note: The Gini index has a range from zero (when everybody has identical incomes) to one (when all income goes to only one person). Increasing values of the Gini coefficient thus indicate higher inequality in the distribution of income.
For OECD, data refer to the average of 32 member countries.TL3 regions. Australia, Canada, Chile, Mexico, Turkey and the United States TL2 regions. Germany Non Official Grids regions. Brazil, China, Colombia, Indonesia, Russian Federation and South Africa TL2 regions. Regional GVA for Turkey. Regional GDP is not available for Iceland and Israel. For China, data for the Special Administrative Region of Hong Kong, the Special Administrative Region of Macau and Chinese Taipei are excluded. First available years: Japan and India 2001; Mexico 2003; China 2004. Last available year: Austria, Brazil, China, Colombia, Estonia, Finland, France, Germany, Hungary, Indonesia, Ireland, Italy, Japan, Latvia, Lithuania, Norway, Poland, Russian Federation, Spain, Sweden and Switzerland 2012.
Source: OECD (2016), *OECD Regions at a Glance 2016*, OECD Publishing, Paris.

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were education for 36%, health 24%, humanitarian attention 18%, institutional strengthening 6%, and others expenses 16%. The same percentage is expected to be spent in 2017.

Until recently, fiscal policies did little to reduce income disparities, as the revenue sharing system between the central and subnational governments (SGP) did not aim at fiscal equalisation. Many transfers were earmarked, and the better ability of higher-income departments and municipalities to raise tax revenue locally was not shared with the poorer regions.

The reform of the General System of Royalties (SGR) in 2011-12 has reduced these inequalities by sharing royalty revenues from the oil and mining sector more evenly across departments (Bonet and Urrego, 2014). This has important potential implications as royalties finance a large share of public investment. Since the reform, sub-national governments have invested royalty revenues in four main areas: improving road connectivity, research and development projects, improving the delivery of education in the regions and purifying water (OECD, 2014). The additional funds allocated point to a more inclusive approach to regional development (OECD, 2014), which should help reduce regional economic disparities over time. The allocation of the revenues is transparent and based on a formula that measures regional poverty rates and population. The aim is to concentrate additional investment in territories that suffer from poverty and poor access to basic public services. Most of these areas are rural and remote.

Agriculture and rural development have been part of the National Development Plans since the 1990s. Rural development policy has promoted equitable access to credit and land, as well as housing, basic sanitation, education and health (OECD, 2015a). However, these policies have only had limited effect in raising incomes and reducing inequality and challenges remain.

Low incomes in agriculture-dominated regions are influenced by weak property rights. A weak rural property registry ("cadastre") and a complex legal framework have contributed to significant underinvestment and inefficiencies in land utilisation. The cadastre system should be upgraded and the registration of land rights accelerated as contemplated in the peace agreement reached between the Government and FARC in 2016. The land tax system should be strengthened and improved. This could be complemented by an assessment of the current land valuation system and of procedures for land transfer and acquisition (OECD, 2015a).

Gender gaps contribute to inequalities

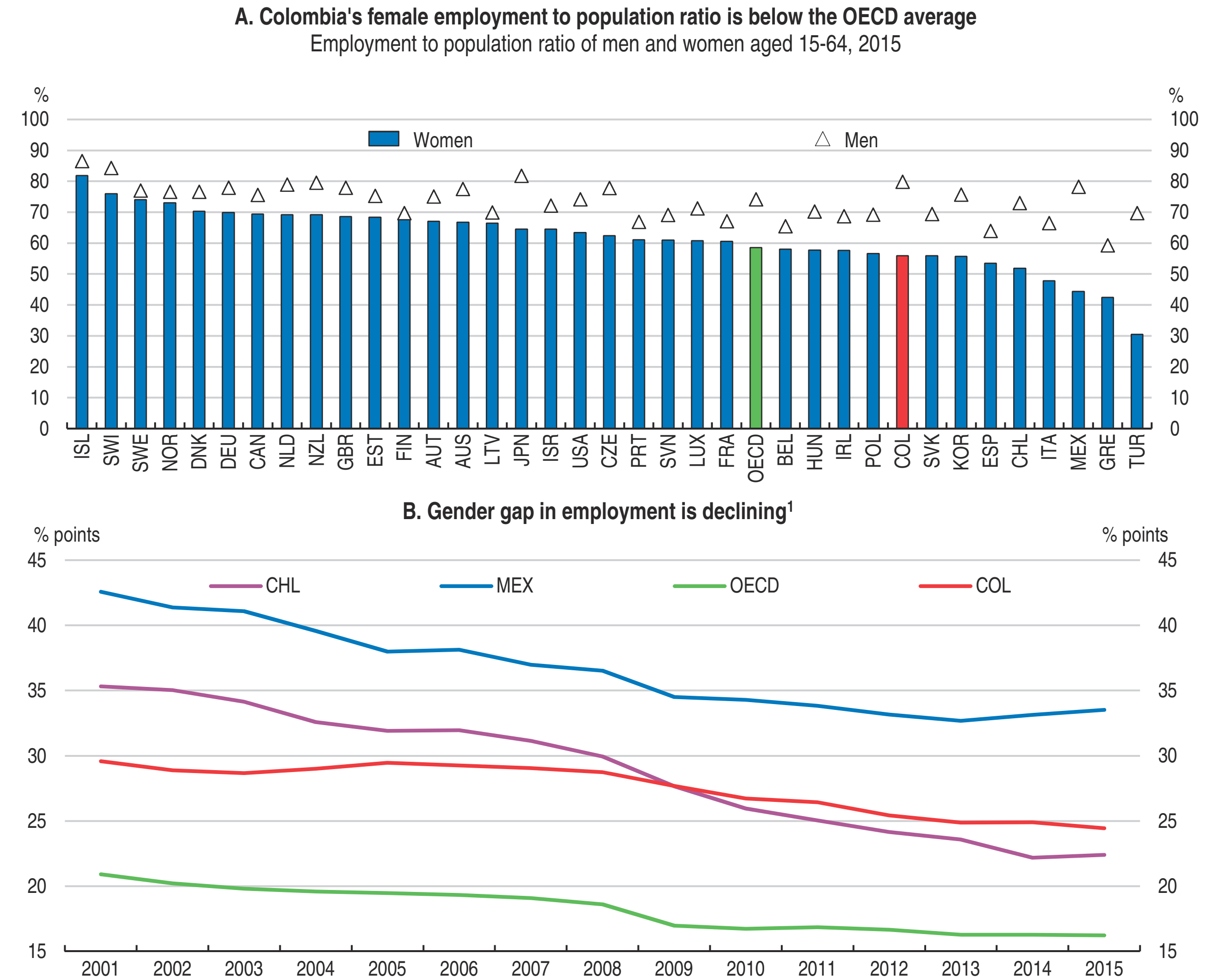
Equal participation of both genders in the economy is crucial for growth and well-being of the population. Moreover, increased employment opportunities for women can contribute to a more equal distribution of household earnings (OECD, 2011). Political, social and economic empowerment of women in countries of the Pacific Alliance (Chile, Colombia, Mexico and Peru) has seen remarkable progress in both a historical and global perspective over the past few decades (OECD, 2016a). Major advances have been made in women's participation in decision-making, years of girls' schooling, women's entrance into the labour market and social protection for families. However, gender gaps still remain, in particular for low-income, low-educated and rural women. Gender wage gaps and differences in labour force participation generate inequality of earnings and of household income. Moreover, women are more likely to work in informal jobs, where earnings are often lower and social protection weaker. Women's reliance on informal jobs can widen gender gaps in job quality and in particular, the gender earnings gap exacerbates income inequality (Gonzales et al., 2015).

Colombia has made great progress in reducing gender inequalities in education. Women are relatively well-educated compared to men and even more likely to have a tertiary degree. Colombia has also made significant progress in providing more opportunities for women to develop their careers: female employment rate, measured for women aged 15-64, increased from 46% in 2001 to 56% in 2015 nearly reaching the OECD average of 59% (Figure 2.3.A and OECD, 2016b). Nonetheless, the gender employment gap, while declining, is still high and remains well above the OECD average as men's employment rates are higher in Colombia than in the OECD (Figure 2.3.B). Significant gender gaps exist in formal employment, unemployment, wages and job quality. Gender inequalities start early in life, and can compound with age. Colombia's gender gap in the share of young people not in employment, education, or training (so-called "NEETs") is higher than in OECD countries (Figure 2.4). Gender gaps also exist in the *quality* of jobs such as average earnings, earnings inequality, labour market security and quality of the working environment (2016b).

The gaps partly reflect childbearing at a young age (OECD, 2016a). Also unpaid time spent on caregiving and housework – tasks overwhelmingly carried out by women across OECD countries – remains a significant obstacle to women's labour force participation throughout the life cycle (Miranda, 2011; Ferrant et al., 2014). Mothers have a lower probability of employment relative to men with and without children, and relative to women without children (Frey et al., 2017). Moreover, as in other emerging economies, and to a lesser extent in many OECD countries, women often take care of older or disabled relatives preventing them from taking a full-time job.

The government has acknowledged that narrowing gender gaps will help reduce inequalities and increase long run growth and wellbeing. It has created a special unit in the Presidency for gender (*Consejera presidencial para la equidad de la mujer*) to identify policy

Figure 2.3. **Gender gaps in labour force participation are declining but persist in Colombia**



1. Gender gaps in employment are measured as male minus female employment to population ratios, in percentage points.
Source: OECD Labour Force Statistics Database.

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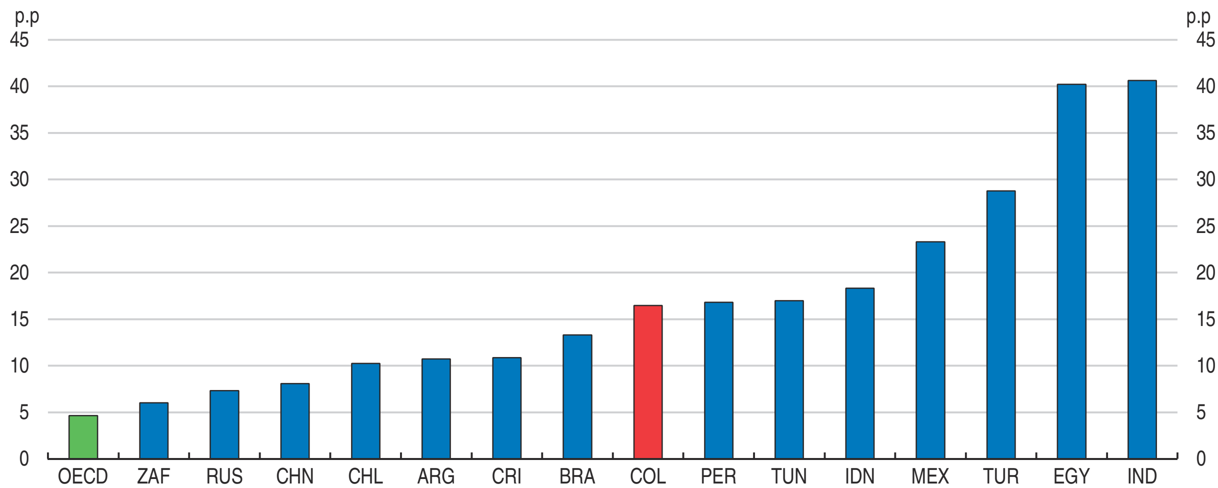
needs. The unit has developed a *Equipares* programme to change behaviour by providing a quality label for companies that meet good gender practices. It is also offering companies that hire women tax incentives, with stronger incentives for violence victims and those over 40 years old. It is also enhancing awareness of the population regarding gender gaps by information campaigns.

A public commitment towards early childhood education and care (ECEC) is particularly important to ensure that families have options to make the work-life decisions that fit their needs. Affordable access to ECEC increases labour market participation of parents with young children (Baker, Gruber, and Milligan, 2005; Bauernschuster and Schlotter, 2015; Thévenon, 2015). ECEC policies are also important for ensuring children's education, health, and material well-being, as investments made in early childhood have lifelong effects (OECD, 2009; OECD, 2011). ECEC has been a priority in recent years in Colombia. Enrolment rates of children from 0 to 5 year-olds have grown from 16 to 41% between 2007 and 2013 and the government adopted the *Cero a Siempre* Strategy to provide a framework for the sector.

Figure 2.4. **The NEET rate is significantly higher among women**

Percentage-point difference in NEET rates between women and men in 2014



Note: NEET: Not in Employment, Education or Training. 2010 for China and Tunisia; 2011-12 for India; 2012 for Egypt; 2012-13 for Peru; and 2013 for Chile. For Argentina and Peru, data refer to selected urban areas. OECD is the unweighted average of 33 OECD countries (Japan excluded).

Source: OECD Education Database for Brazil, Chile, Colombia, Costa Rica, Mexico, the Russian Federation, Turkey and the OECD average; ILO STWTS for Egypt and Peru; Census data for China; and OECD estimates based on the EPH for Argentina, the NSS for India, the SAKERNAS for Indonesia, the QLFS for South Africa and the ENPE for Tunisia.

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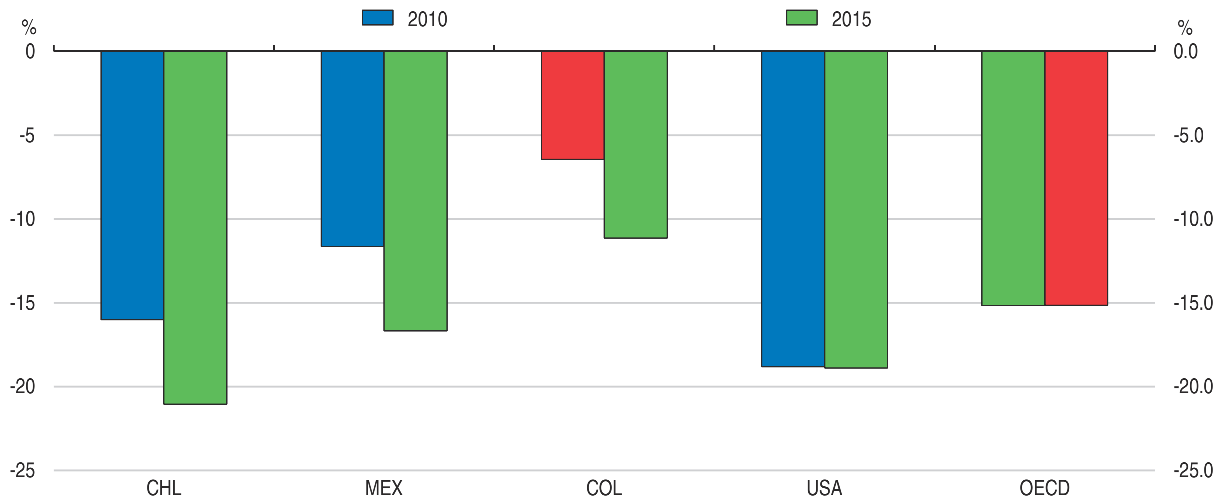
Colombia should support parents, and especially those with low education levels, and from disadvantaged socio-economic backgrounds, who are often less inclined to give their children a fair chance in education (OECD, 2012a). Poorer children can be helped by providing books and other resources to create a positive home learning environment. The *Family modality* program provides support primarily in the home and targets pregnant women, breastfeeding mothers and children from birth to two years-old in rural areas. Improving school readiness by expanding the *family modality* to all disadvantaged areas with well-trained and qualified staff who can effectively engage families and children in learning up to the transition year should be a policy priority.

Financial and social outreach measures could be considered to encourage participation among disadvantaged families. Evidence from Chile's conditional cash transfer programme, Solidarity in Chile (Chile Solidario), which combines cash assistance with psycho-social support for families, succeeded in raising the proportion of children attending pre-school (Vegas and Santibáñez, 2010).

40% of Colombian mothers with children under age five have at least one child in formal childcare (OECD estimates based on DANE, Encuesta Nacional de Calidad de Vida, 2015) compared to 60% in the OECD (OECD Family Database, 2016; OECD Education Database, 2016). However, this hides disparities between socio-economic groups (see below). Colombia also performs below the OECD average in formal pre-primary school enrolment: in 2013, only 41% of three- to five-year-olds were in pre-primary school compared to 84% in the OECD. Colombia has an unmet need for childcare, as 21% of mothers whose children are not enrolled in formal childcare report that they could use it (Frey et al., 2017).

Colombia has a lower wage gap than the OECD average and many Latin American countries (Figure 2.5). Gender wage gaps are influenced by women's higher probability of career interruptions, occupational and sectoral segregation, gender preferences (and/or constraints) for shorter or longer paid work hours, employer discrimination, and differences in the unpaid work burden at home, which restrict the time women can spend in paid work (OECD, 2012). Moreover, pay gaps only reflect the differences of observed wages of the employed. Any difference in participation between men and women tends to bias the wage gap estimates as earnings gaps are compounded by lower female employment rates (Frey et al., 2017).

Figure 2.5. **Median gender wage gap of full-time employees, 2010-15**



Note: Difference between median wage of women and median wage of men divided by the median wage of men. Data refer to monthly wages.
Source: Most recent year of Encuesta Nacional de Calidad de Vida for Colombia, Encuesta Permanente de Hogares for Argentina, Pesquisa Nacional por Amostra de Domicílios for Brazil, Encuesta de Caracterización Socioeconómica Nacional for Chile, Encuesta Nacional de Ingresos y Gastos de los Hogares for Mexico, The Annual Social and Economic Supplement (ASEC) to the Current Population Survey for the United States.

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However, Colombia's relatively low gender wage gap should be interpreted with caution, as cross-national differences in the gap are determined by differences in the composition of the workforce for both men and women. Gender gaps vary by age and educational status. Low-educated women in Colombia earn 7% less than their male counterparts, while for the highly-educated the pay gap rises to 14%. The highest gap is among holders of an upper-secondary degree.

The relatively small wage gap may reflect selection effects around the type (and number) of women who enter and remain in work. The composition of the workforce is particularly important in countries like Colombia, where the participation gap is high. The most highly-educated women are a small proportion of the female labour force. The small gender pay gap across the entire population is primarily driven by the participation of less educated women with lower wage gaps. The employment rate of women with lower education (less than upper-secondary education) was 45% in 2014, 40 percentage points lower than the one for men. In contrast, 60% of women holding an upper secondary non-tertiary degree were employed, 27 percentage points less than men with similar educational achievements. Finally, women with a tertiary degree have an employment rate of 79%, just 12 percentage points lower than that of men (OECD, 2015b).

Gender differences also exist in hours worked. Women are less likely to work full-time than men. The share of women working part-time among the 15-64 year-olds is around 25%, more than double the share of men. Moreover, in many regions the gender gap in the share of part-time work is more than 20 percentage points (OECD estimates of DANE, Encuesta Nacional de Calidad de Vida, 2015). Taking into account part-time workers, the median monthly gender pay gap is 7%, only slightly higher than the gap for full-time workers. However the gap between the 10% lowest-paid women and the 10% lowest-paid men is close to 55%. This strongly suggests that gaps in hours worked, between low-paid men and women, is one of the main drivers of gender wage disparities.

Sharing the burden of unpaid household chores, childcare and looking after ageing parents more equally between men and women would improve work- life balance for women and men alike (OECD, 2012b). The availability and the costs of childcare should be set at a level that makes full-time jobs profitable for women. Investing in ECEC will not only enable women to work but will also yield important gains for children's cognitive and socio-emotional development, particularly given the poor home environments that Colombian children might face at home (see below). Affordable long-term care facilities are also needed. Enabling parents to make flexible work arrangements and discourage workplace cultures penalising women for interrupting their careers to have children and encouraging excessive hours are key to improve the work-life balance. It is important to raise the awareness of the population regarding gender issues from young ages by information campaign starting from school.

Informality in the labour market contributes to inequalities

Income inequality in Colombia, as in the OECD and Latin American countries, largely originates from the labour market (Joumard and Londoño Vélez, 2013, Hoeller et al., 2012; López-Calva and Lustig, 2010). Strong economic growth since 2000 improved employment outcomes, especially for women, youth and older workers. However, a large wage premium for those with higher education, high unemployment and many people working in the informal sector enlarge the income dispersion.

The high level of informality exacerbates inequality as informal workers, with low bargaining power, are paid less for the same level of education (Figure 2.6). Moreover, they often suffer from poor working conditions and lack of social safety nets, which puts them at a high risk of poverty when they lose their job or retire.

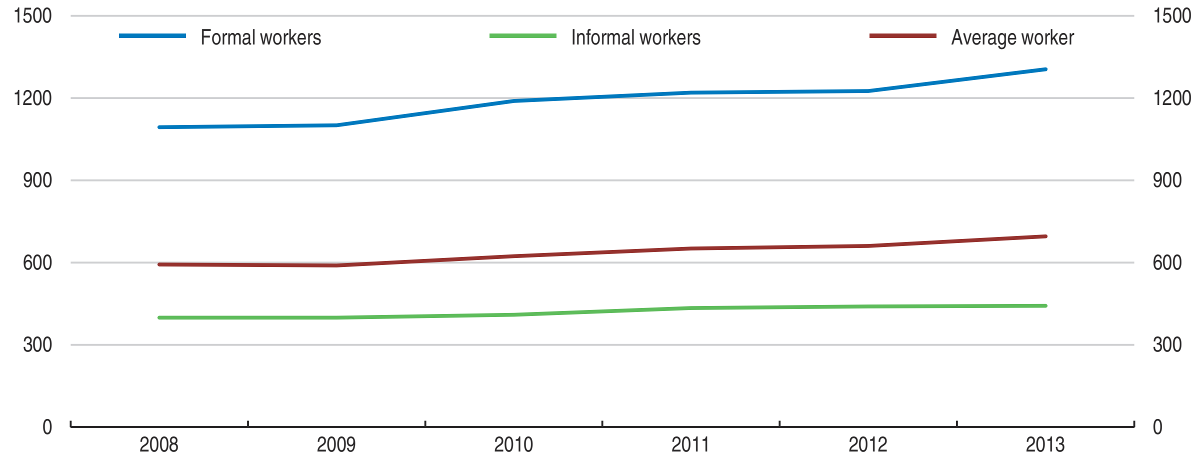
Certain labour regulations contribute to informality

Informality among employees and self-employed is higher than in many emerging markets and Latin America and Caribbean countries (LAC) (Figure 2.7). The share of the self-employed in total employment (52%) is well above the OECD average (17%) (Figure 2.8). The majority of the self-employed work in unregistered businesses without access to social security. The informality rate is around 65%, if measured by the share of employees and self-employed not contributing to the pension system (DANE). The large earnings gap between formal and informal workers reflects the higher incidence of informality among low-skilled workers and those working in traditional low-productivity sectors.

Informality is partly due to the high minimum wage, which at 85% of the median wage is well above the OECD average (Figure 2.9). As a result, almost half of the total workforce (formal and informal) earns less than the minimum wage. The high minimum wage

Figure 2.6. **Large earnings gap between formal and informal workers**

Gross earnings in thousands of Colombian pesos, 2008-13



Note: Formal workers are employees and self-employed people aged 15-64 who pay pension contributions. Since formal workers contribute to health insurance (4% of their wage) and pensions (4%), the net earnings gap with informal workers is slightly lower than shown in the figure. The GEIH survey does not provide information on net earnings.
Source: OECD calculations based on the DANE, Gran Encuesta Integrada de Hogares.

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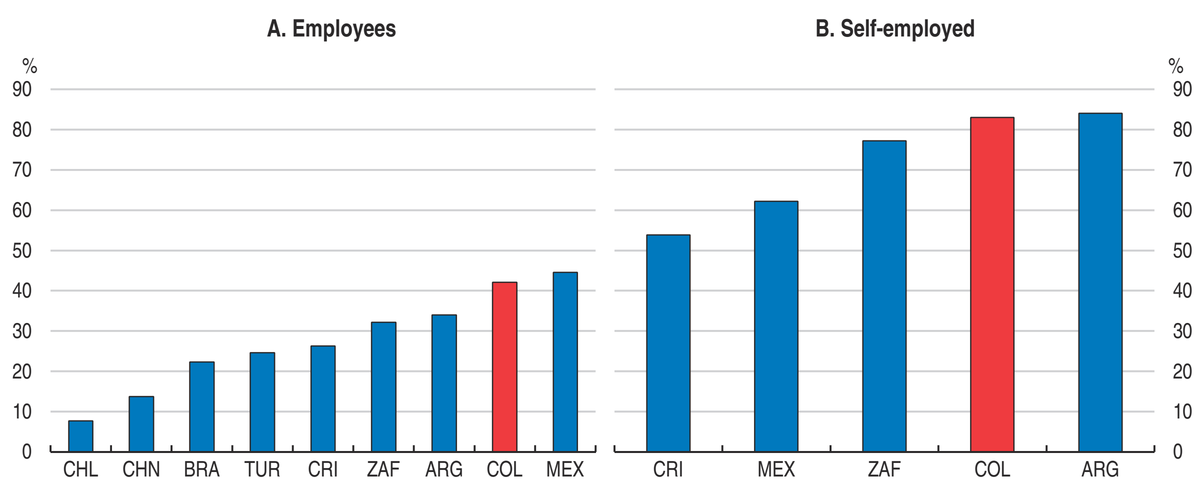
Figure 2.7. **Informality is high**

Informality rates among employees and self-employed aged 15-64, latest available year



Notes: (1) Informality among employees is defined as the share of employees not contributing to the pension system among the total number of employees aged 15-64 years. (2) Informality among self-employed is defined as the share of self-employed who did not register their business among the total number of self-employed aged 15-64 years. (3) The data refer to 2013 for Colombia and Costa Rica; to 2012 for Argentina, Brazil, Mexico, South Africa and Turkey; to 2011 for Chile; and to 2009 for China.
Source: OECD (2016a).

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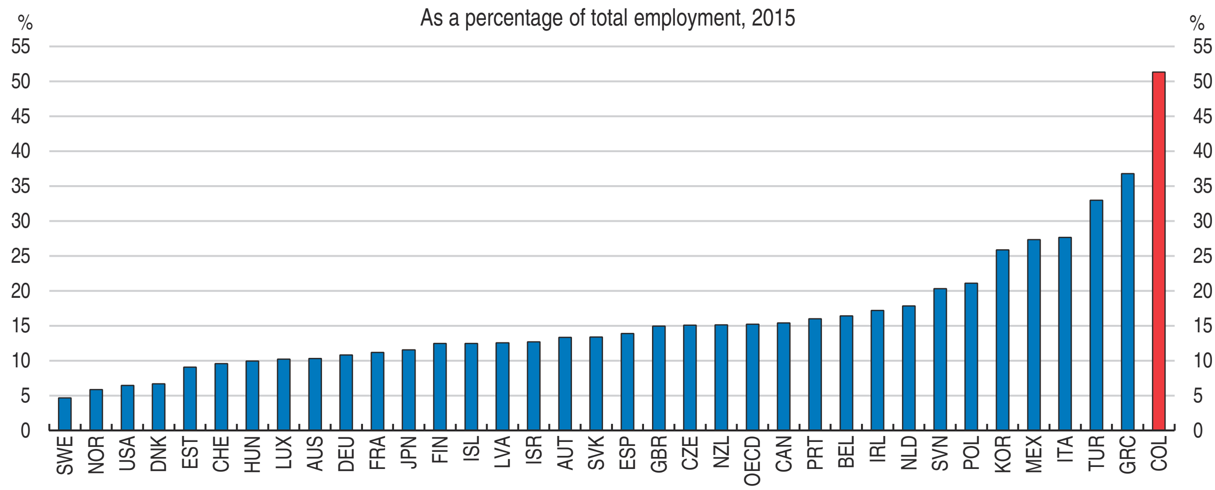
reduces quality employment prospects for low-skilled workers, youth, and old-age workers especially in less developed regions where productivity is lower. Non-wage labour costs, such as contributions to the *Cajas de Compensación,* remain high despite recent reforms compared to OECD countries, and encourage informality (OECD, 2015c). Low productivity related to the low qualifications of many workers; lack of awareness about the rights and benefits associated with the affiliation to social security; inflexible social security

Figure 2.8. **Self-employment is widespread**



Note: For OECD, data refer to the simple average of data values for all OECD economies for which data are available. For Mexico, data refer to 2013. For New Zealand, data refer to 2014. Self-employment is defined as the employment of employers, workers who work for themselves, members of producers' co-operatives, and unpaid family workers. The latter are unpaid in the sense that they lack a formal contract to receive a fixed amount of income at regular intervals, but they share in the income generated by the enterprise.
Source: *OECD Economic Department Database* and DANE, GEIH.

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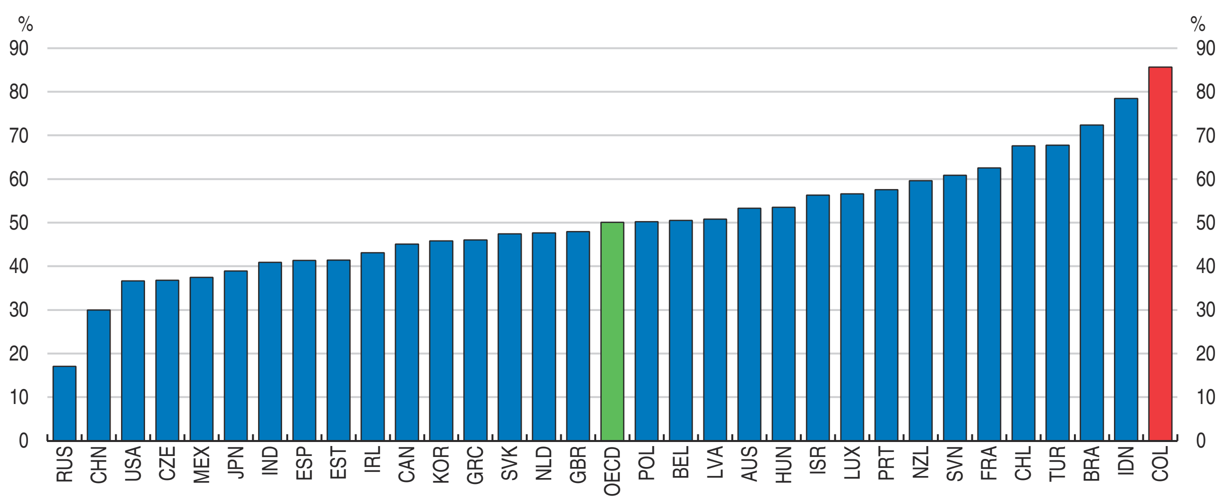
Figure 2.9. **The minimum wage is high**

As a percentage of the median wage, 2014 or latest available year



Note: Missing OECD countries do not have a national statutory minimum wage except for Mexico. Percentage of minimum to average wage for China, Indonesia, the Russian Federation and India.
Source: OECD (2016), *Going for Growth Database*.

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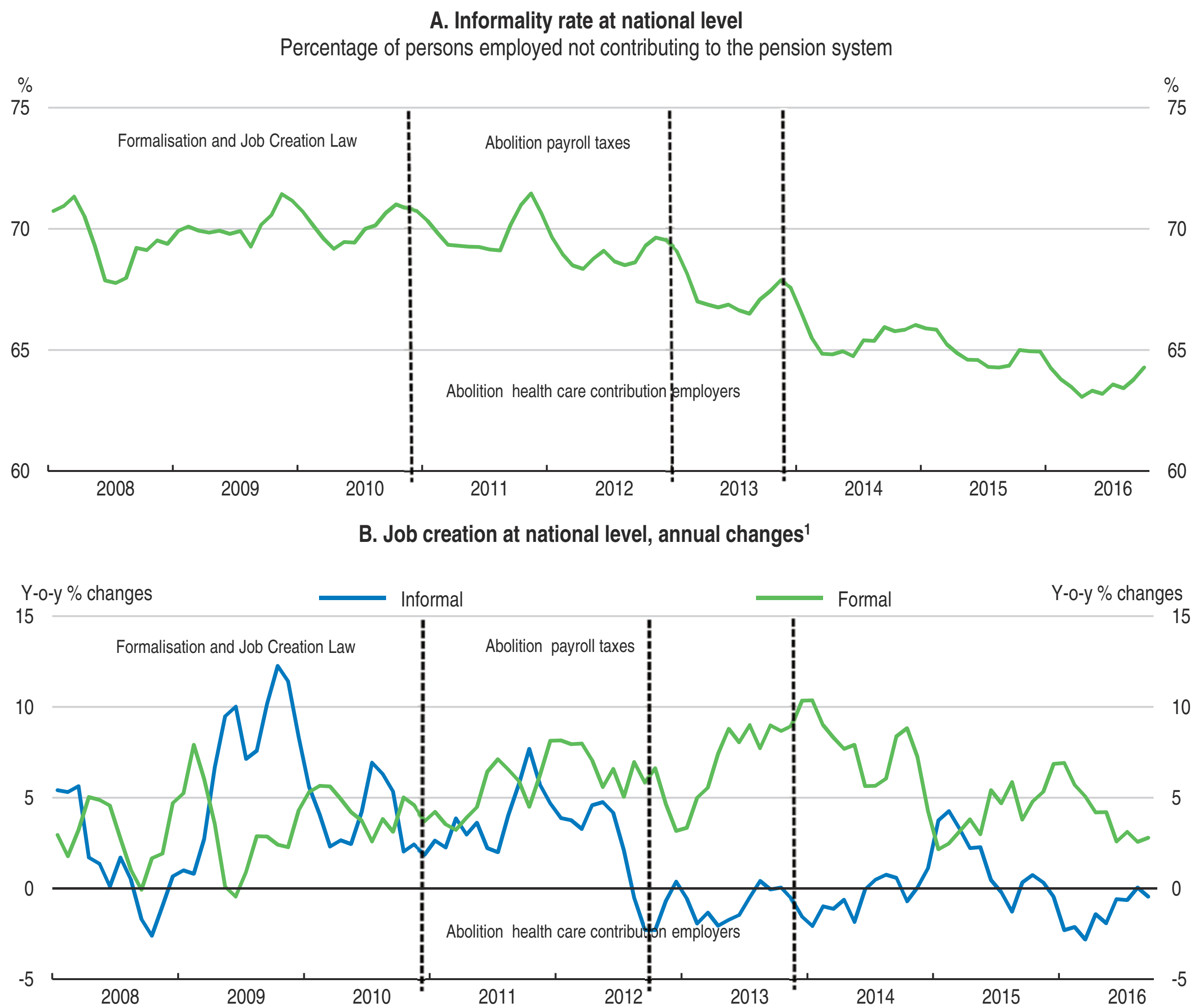
contributions for certain population groups and sectors; complex procedures for the registration of companies and the affiliation of individuals to social security; and weaknesses in the monitoring process of compulsory contributions to social security also contribute to informality (World Bank, 2010).

The Colombian authorities have promoted labour formalisation. The Formalisation and Job Creation Law of 2010 established a package of incentives to formalise firms and employment. Similarly the tax reform of 2012 significantly reduced non-wage labour costs (various taxes on wages) such as the contribution to vocational training (OECD, 2016c). While the effects of the former seem limited, formal job creation increased after the adoption of the latter (Figure 2.10). Based on the affiliation to the social security system and on the 13 metropolitan areas, formal jobs would have increased from 40% of total employment in 2011 to 50% by end 2016.

Figure 2.10. **Evolution of formal and informal job creation**



Source: OECD (2016a).

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A range of new strategies and measures were put in place since 2015 to promote employment and labour formalisation. These include hiring subsidies for 40 000 young workers; signature of a memorandum with ILO to formalise rural jobs; launching of a national network of labour formalisation to inform workers about the advantages of social security and recent changes; design of a one-stop-shop for the registration of companies and for different social security systems; extension of rights for domestic workers; accident insurance for self-employed workers; pilot to organise 6-months paid apprenticeships for university graduates in the public sector. The impact of these measures still needs to be assessed. To reduce high informality rates, focus should be placed on further reducing the non-wage labour burden on wages; simplifying the complex procedures for the registration of companies and the affiliation of workers to social security. The creation of a one-stop shop to deal with licenses to open and register a new business will help. Past OECD surveys have recommended differentiating the minimum wage by age and regions and slowing the rate of increase to inflation to increase the gap with average wages. This could help reduce inequalities, promote better job creation, increase productivity and inclusive growth. At the minimum, establishing social dialogue to discuss differentiating the minimum wage by age and regions should be considered.

Some social insurance programmes reduce incentives to formalise

Some social insurance programmes without a clear link between contributions and benefits also limit formalisation of employment. For instance, the health care system with a contributory scheme for formal workers and a non-contributory scheme for informal ones with almost equal benefits contributes to informality. Moreover, there is a discontinuity in health care coverage when an individual's employment status changes. Workers (or their household members) who are receiving treatment through the non-contributory subsidised system have to submit a request for the continuation of the treatment to the contributory health care regime upon entering a formal job, which may imply delays in ongoing treatments. Conversely, workers who lose their formal job may not be able to quickly regain access to the subsidised health system as the registration process takes time (OECD, 2016c). While universal health coverage is crucial (see below), it would be important to find other sources of funding for the subsidised scheme to help employment formalisation. Higher productivity that would support higher growth would help to raise more revenues, which in turn will help sustain increase social spending including health (see Chapter 1).

Disconnection between contributions and benefits also affects the family compensation funds (*Cajas de Compensación Familiar*). Employers contribute 4% of their wage bill, while an increasing part of the contribution is used to finance social programmes directed to informal workers. As recommended in the last *OECD Economic Survey of Colombia in 2015,* the government could consider revising the financing of the *Cajas de Compensación* system. For instance, making voluntary the contribution to the services not available to all formal workers would help formalisation.

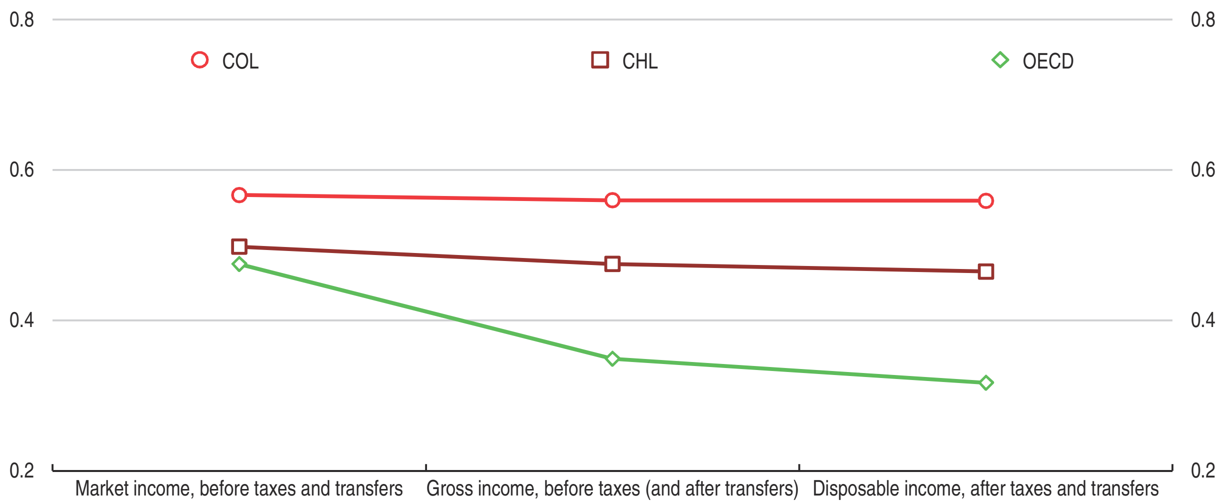
Taxes and transfers redistribute little

The low redistribution in the tax system compared to OECD and many Latin American countries (Figure 2.11) partly reflects the relatively low overall tax intake. Even if taxes and transfers were more progressive, their impact on inequality would be small. The tax mix is also regressive with heavy reliance on consumption taxes, and regressive exemptions (OECD, 2015c). The redistributive impact of taxation is further reduced by the fact that most income and wealth taxes are paid by firms rather than households. Colombia needs to increase redistribution of income through the tax and transfer system. The introduction of the dividend tax included in the December 2016 tax reform and elimination of the wealth tax will help in that respect. However, keeping the personal tax income base and rates unchanged and raising VAT will reduce progressivity of the system.

The unemployed have high risk of poverty

Despite improved employment outcomes in recent years, unemployment is still high and the level of allowances too small to protect the unemployed against poverty. In 2013,

Figure 2.11. **The tax and transfer system does little for redistribution**[1]



1. Gini coefficient by income definition, 2011. Estimates based on *OECD Income Distribution Database*'s definitions. Estimates for Colombia were provided by the National Department of Statistics (DANE) and based on National Quality of Life Survey (*Encuesta Nacional de Calidad de Vida*, ECV).

Source: OECD (2016a).

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the government introduced a new unemployment protection mechanism (*Mecanismo de protección al cesante*). It provides small allowances for some unemployed, a voluntary system of individual unemployment savings accounts, a network of public employment services and active labour market policies (OECD, 2016c). In September 2016, 10% of the unemployed were receiving these allowances partly because of the high share of informal workers without access. The workers are encouraged to contribute to individual saving accounts but as they can withdraw money for other purposes than unemployment (e.g. to finance education or purchase a house), the system is diverted from its primary goal of income protection. The government should reinforce the system by restricting options to withdraw the funds for other reasons than unemployment. Moreover, to help return to the labour market, the income support should be complemented with sufficient funding for employment service providers and active labour market policies which is currently limited (OECD, 2016c), in spite of recent efforts made by the public employment service.

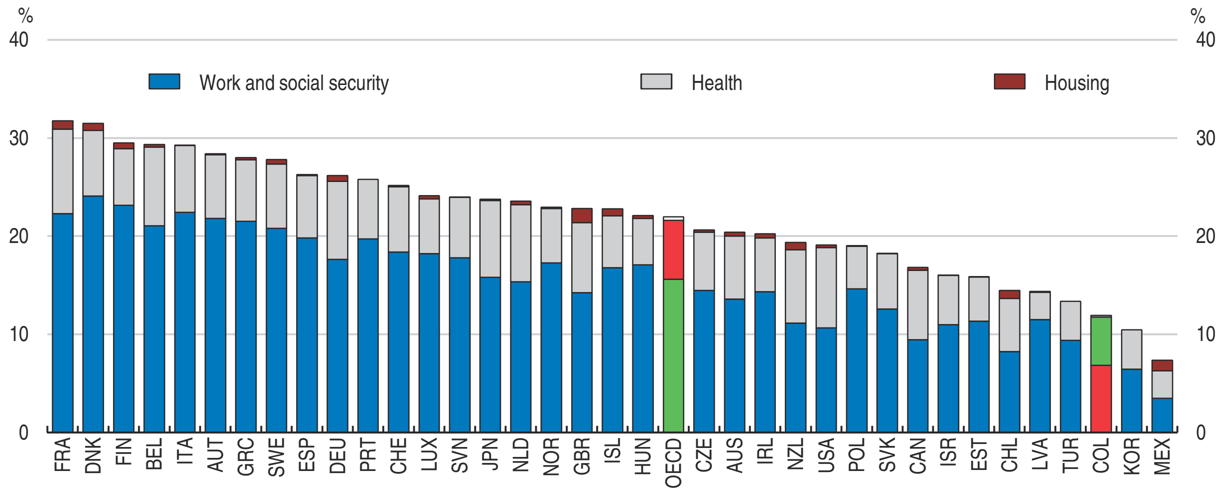
The social system has reduced inequality and poverty but could redistribute more

Public social spending has increased remarkably since the 1990s due to commitments in the Constitution and higher decentralisation of public expenditure (OECD, 2016c). Nonetheless, it remains low relative to GDP and compared to the OECD average (Figure 2.12), is not always well targeted and has a very limited redistributive impact. In 2011, work and social security benefits, including pensions, represented the bulk of the spending. In 2013, public social expenditure in Colombia was 13.6% of GDP compared to 22% in the OECD on average. Social spending in Colombia has subsequently increased to 14.4% of GDP in 2015.

The programmes have reduced inequality and poverty, but they are regressive in absolute terms. In 2008, the top 20% of the income distribution benefited from 45% of social spending while the bottom 60% got 40% (Núñez, 2009). More recent data is not available. Education spending contributes the most to the reduction of inequality and poverty, through pre-school, primary and secondary education. In contrast, public expenditure on

Figure 2.12. **Public social spending in Colombia is much lower than the OECD average**

As a percentage of GDP by main components, 2013 or latest available year



Note: For Colombia, social spending components are based on classification used by Colombian Ministry of Finance; in the case of the health category, data include drinking water supply and environmental sanitation spending. For OECD countries, the SOCX social protection branches are classified as follows: old-age, survivors, incapacity, active labour market programmes, unemployment, family and other social policy areas (Work and social security), health (Health), housing (Housing). For Australia, Canada, Korea and New Zealand, data refer to 2014. For Chile, Colombia and Israel, data refer to 2015.

Source: *OECD Social Expenditure Database* (SOCX), Ministerio de Hacienda y Crédito Público (2016).

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tertiary education is concentrated in the top quintiles. Health spending also contributes considerably to the reduction of inequality and poverty although it is slightly skewed towards the top of the income distribution. The tax reform is expected to increase revenues overall, which gives room to increase social spending.

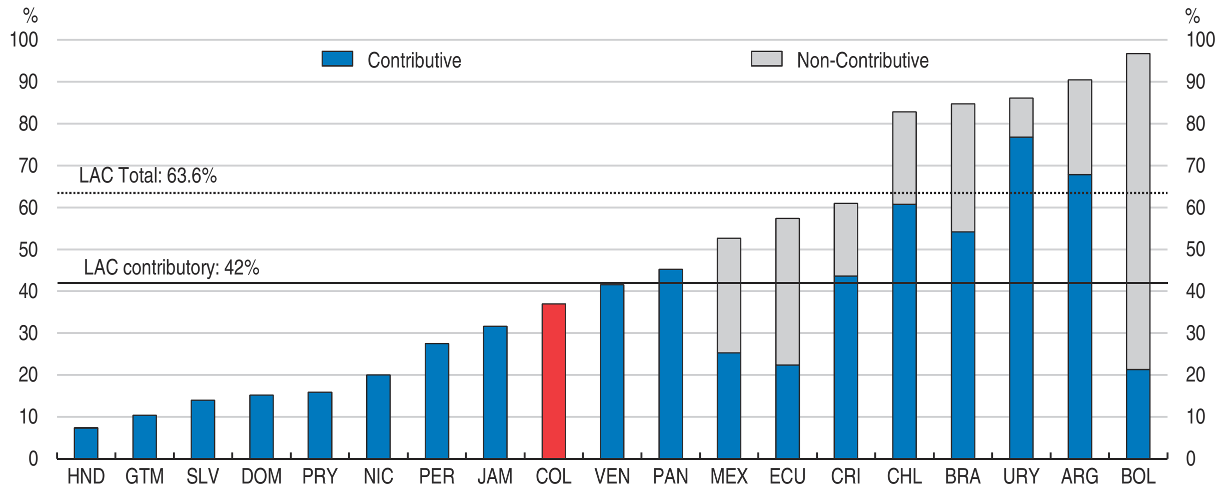
The pension system is highly unequal

The level of well-being among the elderly is low compared to OECD countries mainly due to income insecurity. Half of the elderly live below the poverty line. Pensions are estimated to increase the Gini coefficient by 1.63 percentage points (Nunez, 2009) and less than 6% of pension spending targets households in poverty (Lustig and Melendez, 2014). This reflects the low coverage of the pension system, especially for women and lower-skilled workers, and the weakness of other income support for the elderly (Figure 2.13). Around 35% of the population above retirement age receive a pension (Ministerio del Trabajo, 2014) which is low compared to OECD average (around 90%) and many Latin American countries.

The high level of informality and stringent eligibility requirements explain this low coverage. Only formal sector workers who earn at least the minimum wage can contribute to the system. This leaves many people without coverage due to the high incidence of informality. The system comprises two plans (the public defined-benefit plan and a private defined contribution plan) that compete with each other as workers can switch from one to the other several times during their working lives (for an assessment of the system see de la Maisonneuve, 2015). The Constitution requires pensions to be at least equal to the minimum wage, which is costly given its relative high level compared to skills and the median wage. The minimum pension is around 60% of the average wage while it is below 20% on average in OECD countries. Pension eligibility is also reduced by the stringent eligibility requirements (around 25 years of contributions), which is long given the relatively low stability low-skilled

Figure 2.13. **Pension coverage in LAC countries**

Percentage of people aged 65+ with a pension



Note: The population covered by *Colombia Mayor* is not included. LAC-19 is the average of the 19 Latin American courties displayed in the chart.
Source: Bosch, Melguizo and Pagés (2013).

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workers face in the labour market. Currently, only 22% of the retirement-age population receives a pension from these two plans, which is low by international standards. An additional 15%, judiciary, military and police and teachers, among others, are covered by special regimes.

The public defined-benefit plan is very generous for the few that benefit from it, contributing to inequality among the elderly. The reference salary to calculate the pension uses the last 10 years of earnings, which is much shorter than in most OECD countries. The replacement rate normally ranges between 65-80% of the average contribution wage, which is high in comparison with OECD countries, and reaches 100% for people earning the minimum wage. The system benefits those with steep earnings profiles, frequently those with high education and income.

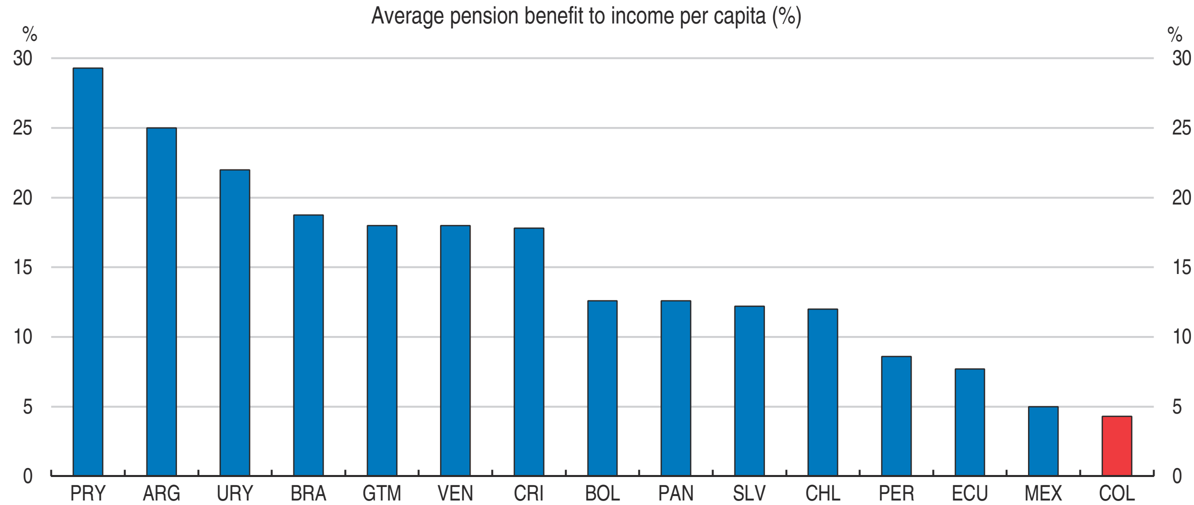
To deal with the lack of pensions for workers in the informal sector, the government has recently launched the *Beneficios Económicos Periódicos* (BEPS) programme to extend coverage. The BEPS sets up individual retirement accounts, for which the government subsidises 20% of individual contributions for low-income households. People can contribute to the scheme even if they earn less than the minimum wage. Thus, in principle, it allows for a contributory old-age scheme without the minimum wage constraint. The reform is welcome, although so far only a few thousand people have joined the system. This may reflect the difficulty lower-income people have to save for old-age.

Old age income support is low

The government also provides old-age income support for the poor through *Colombia Mayor*. To be eligible, a woman should be at least 54 and 59 for men, however people over 65 years old are prioritised. The average benefit is about a tenth of the minimum wage, which in relative terms is below that of most OECD countries, and well below the Colombian poverty line. The support is less than 5% of GDP per capita and total expenditure for the scheme is 0.02% of GDP, which are below similar support in other LAC countries (Figure 2.14).

The number of recipients of Colombia Mayor has increased significantly in recent years to reach 62% of the 2.4 million potential beneficiaries. The planned extension of coverage is welcome and should be accompanied by an increase of the benefit.

Figure 2.14. **Social pensions in Latin American countries**



Note: For Brazil, data refer to the weighted sum of average pension benefit to income per capita ratios of two pension programs, Previdencia Rural and Beneficio de Prestacao Continuada. Weights applied are the ratios of beneficiaries in each program to total population aged 65 and above.
Source: Rofman et al., 2013, *Social Pension Database HelpAge*, Household Surveys and author's calculations.
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Pension coverage for all workers can be raised by reforming the two current public and private plans and extending the BEPS. The coverage could be extended, while fiscal costs could be contained, by relaxing the constraint that the minimum pension must be at least equal to the minimum wage. However, this would require a difficult constitutional reform (OECD, 2015c). Another option is to give people who reach retirement age with less than the required number of years a partial pension. This retirement payment would be equal to the minimum pension adjusted for the difference between the effective contribution period of the retiree and the mandatory 25 years. Coverage can also be increased by expanding the potential beneficiaries of the BEPS, allowing those earning less than the minimum wage and having no access to the BEPS now due to income limits to contribute. The 2016 Tax reform included the Single tax for small business, which pursues formalization; one of the components of the tax is a contribution to the BEPS, which will allow the small merchants to safe for their retirement.

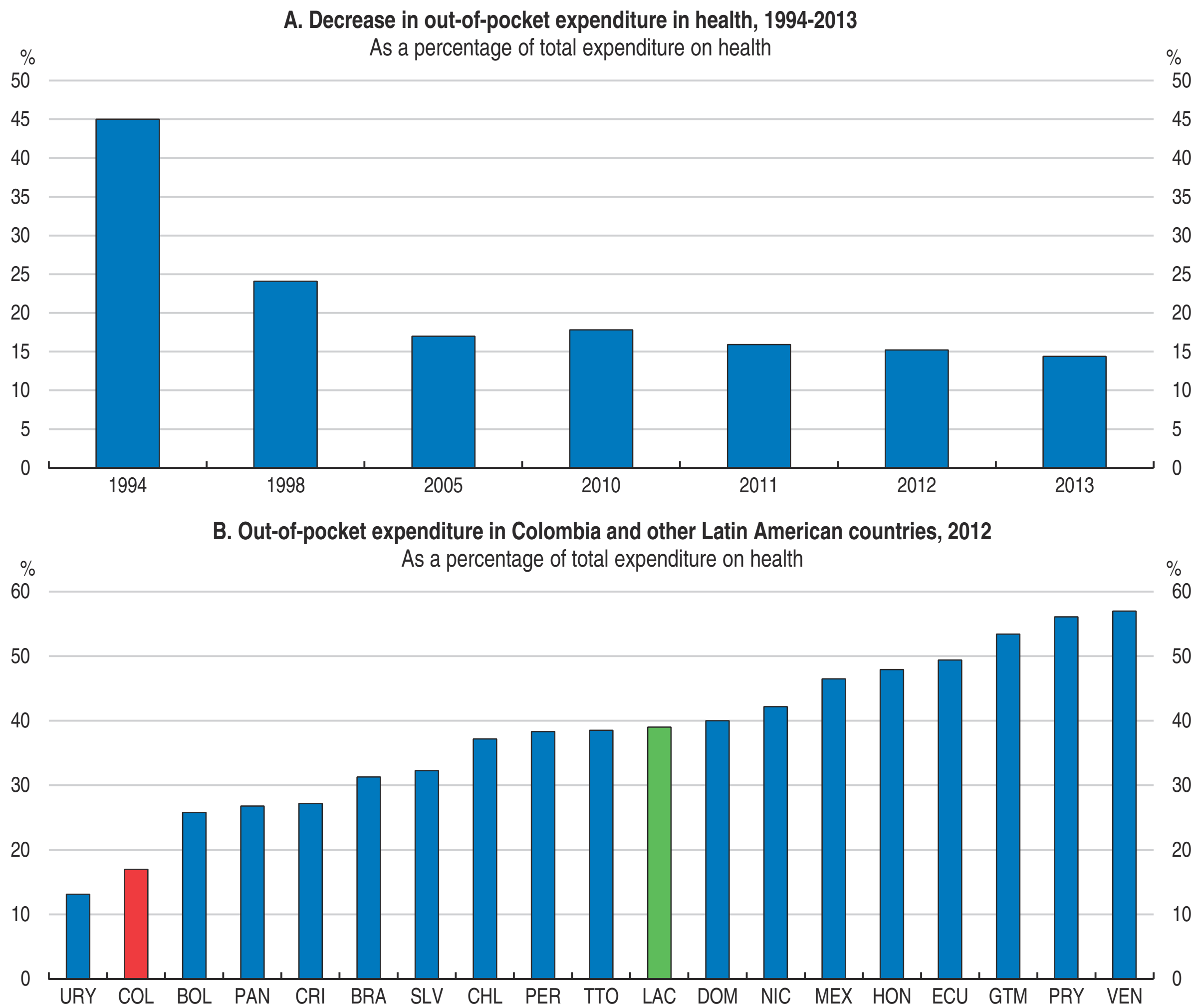
Coverage can also be increased by reforming the public defined-benefit plan. Lowering the replacement rate towards that of the private system (halving it) would eliminate the arbitrage between schemes and reduce the subsidies to the rich (OECD/IDB/WB, 2014). Including more years of earnings to calculate the level of the pension would raise equity. Equalising the retirement age between men and women – currently at 62 and 57 respectively – would raise female pension coverage through longer contribution periods and higher chances to fulfil the requirements. Gradually moving towards a scheme that increases the retirement age in line with life expectancy would increase long-term sustainability. However, ultimately expanding pension coverage will require shifting more of the workforce to the formal sector, where they will be able to pay contributions.

The complexity of the system and the many adjustments required to make it more equitable and sustainable suggest that a comprehensive pension reform is needed (see OECD, 2015c) for a detailed proposition). In particular, such a reform should extend the coverage and level of old-age income support (*Colombia Mayor*). The eligibility to the BEPS and the minimum income support should be expanded to guarantee old-age income for more Colombians (OECD, 2015c).

Health coverage is almost universal but access to quality services remains difficult for the poor and in rural areas

Colombia has made rapid progress towards universal health coverage over the past 20 years. Out-of-pocket payments have substantially declined (Figure 2.15) and almost all citizens have access to an equal basket of services whether they are in formal or informal employment (OECD, 2105d). After the reforms in 1993, affiliation increased most rapidly in the poorest quintiles (from 4% in 1993 to 89% in 2013) and in rural areas (from 7% in 1993 to 93%

Figure 2.15. **Health care is relatively affordable**



Note: The average for Latin America (LAC) includes those countries whose data are available for 2012, excluding Colombia.
Source: Data provided by Ministry of Health and Social Protection. Health accounts from National Statistics; and WHO (2015), Global Health Observatory (GHO) data.

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in 2013). The perception of the quality of health care services has also increased. The share of Colombians reporting that health services overall are "good" or "very good" increased from 78% of the population in 2003 to 85% in 2010 with the steepest increase in the poorest quintile. Waiting time for a general consultation has also fallen from 6.4 days in 2003 to 3.8 days in 2010. Outcomes have also improved: life expectancy at birth reached 74 years in 2014 (from 68 years in 1990) compared to an OECD average of 81 years (75 years in 1990) (OECD, 2016d).

Equitable access to health care services is important as it contributes to greater equality of opportunities (OECD, 2015d). However, given the remoteness of many areas in Colombia, poor availability of health centres and health professionals, deficient transportation and high transportation costs make it extremely challenging to ensure an adequate standard of care quality in all regions (OECD, 2015d). Regional disparities and socio-economic inequalities in access to health care therefore remain. 16% of the rural population reported foregoing health care needs because of the distance to services, compared to 2.3% of the urban population in Colombia's 2011 quality of life survey (DANE). Similarly, preventive health care consultations (in the 12 months prior to being surveyed) rose from 30% in 1997 to 63% in 2010 in the poorest quintile and from 50 to 79% in the richest quintile, meaning that the gap only narrowed slightly.

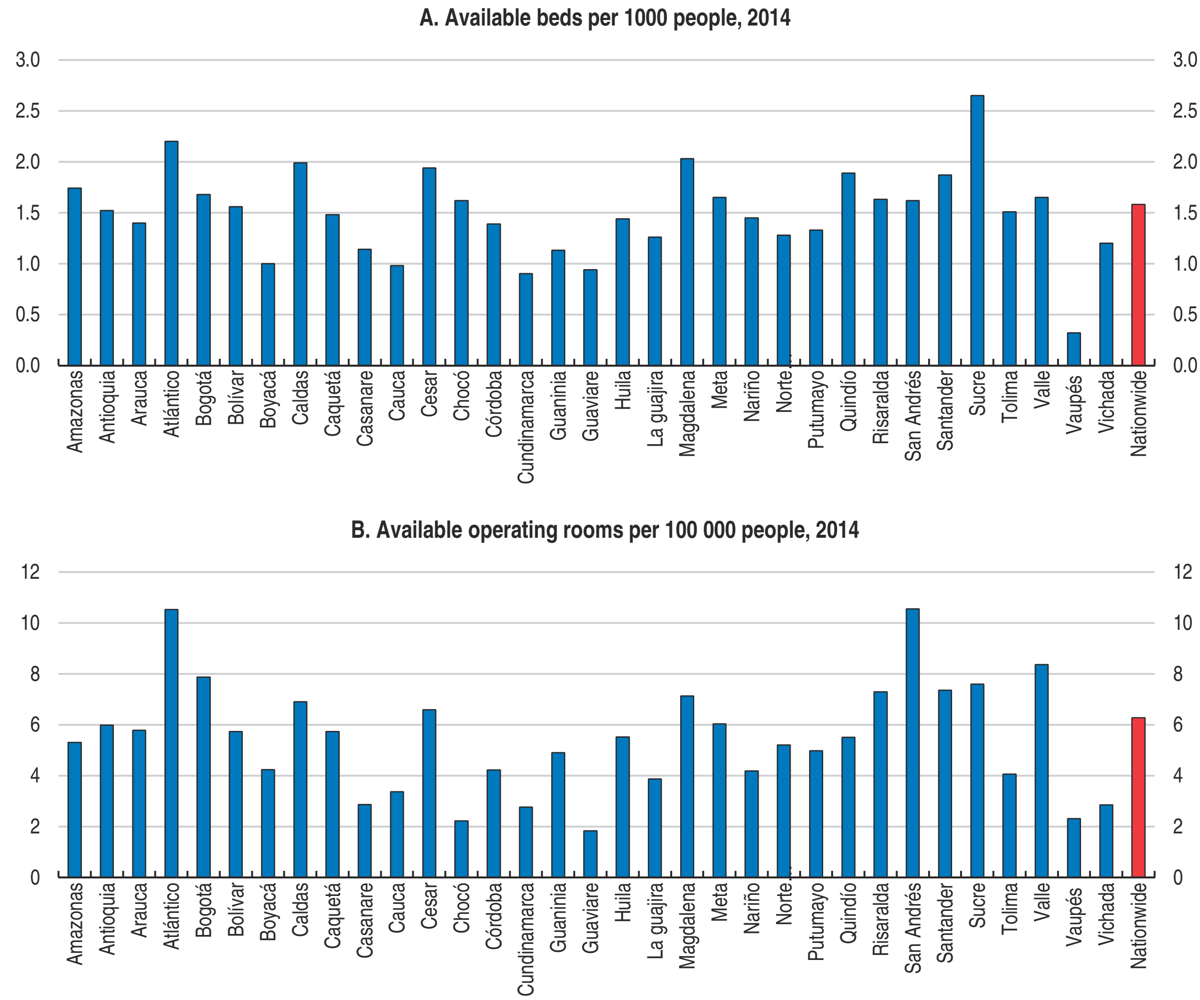
Health outcomes also differ across regions. Maternal, neonatal and infant mortality rates tend to be higher in rural areas and for specific population groups (e.g. indigenous and Roma people). Infant mortality rates decreased from 70 deaths per 1 000 live births in 1970 to 14 in 2014 but rates in some rural departments such as Guainía, Vichada, Chocó, Amazonas and San Andrés remained above 20 per 1 000 live born in 2010. Some minority ethnic groups also have higher than average maternal and infant mortality rates, although declining due to improvements in sanitation.

Many rural areas are also inhabited by indigenous communities, who may have beliefs, traditions and models of health care that are substantially different from those in urban areas and OECD countries. The most advanced urban areas also have health care providers using very advanced technologies, as well as good quality public services such as potable water, whereas other cities and rural areas fall behind with limited or no such services (Bernal, 2012). In addition to the direct health effects, the Colombian armed conflict has worsened access to health care, education, drinking water and transportation (ICRC, 2011). With most victims coming from rural areas, the conflict has aggravated geographic and socioeconomic health inequalities.

Under-resourcing in remote and rural areas contributes to inequalities in health services (Figure 2.16). The density of generalists, specialists and psychiatrists is much lower in those areas. The density of generalist (primary care) doctors, varies from less than 2.5 per thousand inhabitants in Chocó, Guanía, Vaupés and Vichada to over 17 in Bogotá/ Cundinamarca, Risaralda, Santander and Valle del Cauca (2013 data). Stark differences are also seen in secondary care services. Around one third of all secondary care specialists work from Bogota (OECD, 2015d). The distribution of surgical facilities and hospital beds also varies a lot across districts (Figure 2.16). Rural departments such as Vaupés, Cundinamarca, Guaviare and Cauca have less than 1 bed per 1 000 inhabitants (OECD, 2015d) and Casanare, Chocó, Cundinamarca, Guaviare, Vaupés and Vichada do not even reach half the national average in terms of operating rooms.

Since the introduction of the Sistema General de Seguridad Social en Salud in 1993 (SGSSS, or General System of Social Security in Health) additional resources have been

Figure 2.16. **Health care resources and access to care remain worse in rural and remote areas**



Source: Ministry of Health and Social Protection.

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targeted to rural, remote and indigenous populations to compensate both for greater health care needs as well as the increased costs of delivering services in areas of limited accessibility. Other efforts to provide a better service in rural areas have included translating health information into local dialects and using telemedicine (OECD, 2015d). Colombia is also investing in an expanding range of options to use new information technology and communication platforms (ITC). The Ministry of Health and Social Protection and the Ministry of Information Technologies and Communications have a joint programme of work to improve the connectivity of the health sector called *Vive Digital* to encourage the adoption of ITC in health services. In particular, health providers are encouraged to adopt digital medical records and extend the use of telemedicine. According to 2014 data (*Encuesta de Línea Base de Telemedicina*), the vast majority of health care providers have some capabilities for tele-consultation, and this has emerged as a useful tool to improve access to primary care services in remote populations at a moderate cost, but its usage should be expanded throughout the country to be truly effective.

A different delivery and financing model is needed in rural and remote areas to achieve levels of access and quality that are comparable to advanced urban settings (OECD, 2015d).

Rural and remote areas require a supply-led model of health care, rather than the demand-led model of managed competition that was prioritised by the 1993 reforms. On the ground, however, it appears that relatively little innovation has occurred, other than modest efforts to translate information into local dialects or use telemedicine as described above.

The Ministry of Health and Social Protection has designed a strategy to optimise the assignation process of doctors that aims for a better distribution throughout the country, improving coverage in rural and remote areas. The strategy includes flexibility in hiring conditions, as well as a gradual improvement of wages and result based incentives that aim to encourage primary care clinicians to take up posts in these areas (OECD, 2015d). Despite these improvements the system faces challenges to maintain and improve efficiency and sustainability. Colombia is trying to strengthen primary care and direct the health system away from avoidable use of hospital beds.

Colombia should implement innovative models of service delivery. This will require multidisciplinary teams comprising specialist primary care doctors, nurses, pharmacists and wider professionals. Encouraging health practitioners such as nurses or pharmacists to take on new tasks has been a key element in meeting rural and remote health care needs. Legal obstacles to extending nurses' and other professionals' roles should be removed, for example by developing protocols which authorise nurses to prescribe a limited set of medications under specific circumstances. Colombia already has a telemedicine strategy in place, and this should be extended to cover more medical conditions and geographical areas. For example, there is potential for telemedicine to link specialists in radiology to rural patients and clinicians. Access can also be enhanced by flying specialists in and out of remote areas. Such schemes work particularly well when a visiting specialist works alongside a local clinician. Outreach specialists should be encouraged to act as mentors to local health care workers, building knowledge and confidence, encouraging continuity of care and, most importantly, forging a sustained service network between rural and urban health care providers (OECD, 2015d). In 2015, the Ministry of Health and Social Protection developed the Politica de Atención Integral en Salud (PAIS, or integrated health care policy) which is a new model of care that aims to better integrate primary care, public health activities and wider intersectoral action at community level.

Social welfare programmes are well targeted and achieve positive outcomes

Colombia has introduced many programmes for the poor and the vulnerable such as Unified Network (*Red Unidos*), More Families in Action (*Mas Familias en Acción*) and Youth in Action (*Jóvenes en Acción*). *Red Unidos* is a social services intermediation programme to tackle extreme poverty. It doesn't provide cash or in-kind benefits but ensures that families can access available social programmes and services. *Mas Familias en Acción* is a conditional cash transfer program targeting vulnerable families with children. *Jóvenes en Acción* aims to ease transition from secondary-education to labour market by promoting enrolment to post-secondary education (OECD, 2016c). A new programme aims to create jobs for the most vulnerable population though the new 4G infrastructure programme by giving priority to employees from low socioeconomic sectors, after an initial training period.

These programmes are well targeted and achieve positive outcomes but more resources are needed to raise their impact. Spending could be increased not only on the amount of cash benefits but by undertaking reforms in related policies. For instance, although Familias en Acción has increased school enrolment, the impact on education achievement was smaller due to lack of improvements in the quality of education.

Similarly, the impact of Red Unidos was limited due to lack of resources, but also social workers are less qualified in comparison to Chile Solidario; the visits to beneficiary families are infrequent and means are insufficient to respond to eventual increases in the demand for social programmes or services. Furthermore, lack of co-ordination between different programmes, agencies and levels of government reduce the efficiency and effectiveness of programmes (OECD, 2016c).

Low social mobility contributes to inequalities

In many OECD and Latin American countries income inequality is influenced by low social mobility (Corak, 2013, Azevedo and Bouillon, 2010, Daude and Robano, 2015). Social mobility seems to have worsened in Colombia in recent decades, although it remains hard to measure. Based on the SABER (A Colombian education test) results, Gamboa and Londono (2015) suggest that between 1997 and 2012 equality of opportunities deteriorated. In recent years social mobility through education has improved but it continues to remain low in comparison of other LAC countries and for vulnerable regions and socio-economic groups (García et al., 2015). Social mobility is in turn influenced by opportunities to improve one's life, which depend on access to and quality of education and ease of participating in labour and product markets in the economy. The armed conflict also has affected upward mobility: evidence shows that victims who suffered more severe episodes of violence have lower hopes and perceive overly pessimistic prospects of upward mobility (Moya and Carter, 2014).

Education enrolment has increased significantly but disadvantaged groups remain behind

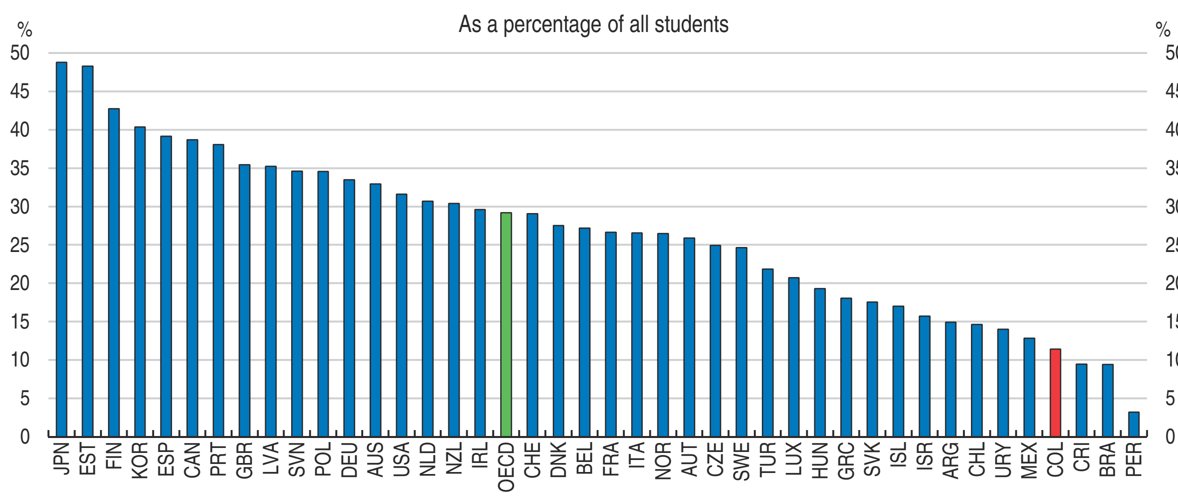
Colombia has made impressive gains in expanding access to education but the quality is still deeply unequal and too many students leave education without the basic skills they need to succeed in life, work and further learning. The latest PISA results show that the percentage of 15-year-old students who don't have the basic skills in science, reading and mathematics is 38% in Colombia compared to 13% in the OECD on average and to 23% and 34% in Chile and Mexico respectively (OECD, 2016e). Raising the quality of teaching will be vital to improve student learning. Important steps have already been undertaken to ensure that entry into and promotion in the teaching profession are based on merit, and to strengthen the skills of the current workforce. A shared understanding of what it means to be a good teacher would reinforce these efforts, setting high expectations and guiding teacher education, remuneration and appraisal (OECD, 2016e).

Despite increased investment in recent years, public funding for education in Colombia is below that of other major emerging economies in Latin America and per-capita spending is well below the OECD average. In real terms, Colombia currently spends USD 24 000 per student from age 6 to 15, which is about half of spending by Costa Rica or one fifth of United States. Colombia needs to invest more and it needs to invest its limited resources in a more equitable way (Heras Recuero and Olaberria, 2017).

Access to education is influenced strongly by socio-economic backgrounds. In Colombia parental education has a strong correlation with individual social mobility. People born in small municipalities, in rural areas, and in the Atlantic, Pacific and South-east regions are the most disadvantaged (García et al., 2015, Ferreira and Melendez, 2012). Low access to education and educational performance in rural areas is explained by the higher rates of poverty, malnutrition, teenage pregnancy, pressure to work, conflict and violence and insufficient infrastructure (CIPI, 2013 and OECD, 2016e). The low attendance rates also reflect poor transitions between levels, high dropout rates and that a significant number of children never enter the education system. Many students also enter school after regular entry age, which tend to reinforce high levels of grade repetition and poor academic achievement (OECD, 2013a; Garcia Villegas et al., 2013; Barrera, 2014). Evidence show that the long armed conflict in Colombia has reduced the average education of students residing in areas experiencing conflict by half a year on average (Rodriguez and Sanchez, 2012).

Socio-economic background, geographic location, ethnicity and gender still heavily determine the educational opportunities of Colombian children. According to Colombia's Demographic and Health Household Survey 2009-10 a student from the poorest socio-economic level has a school life expectancy of 6 years, which is half that for an individual from the wealthiest socio-economic level, and is much more likely to be out of school (Garcia Villegas et al., 2013; UNESCO-UIS, 2015). PISA 2015 results also show that Colombia has one of the lowest percentages of resilient students compared to OECD countries, which means that few disadvantaged children overcome their background to achieve high results (OECD, 2013b and Figure 2.17).

Figure 2.17. **Share of resilient students across OECD and LAC countries, 2015**



Note: A student is classified as resilient if he or she is in the bottom quarter of the PISA index of economic, social and cultural status (ESCS) in the country/economy of assessment and performs in the top quarter of students among all countries/economies, after accounting for socio-economic status. For Argentina, data refer to the Autonomous City of Buenos Aires.
Source: OECD, *PISA 2015 Database*, Table I.6.7.

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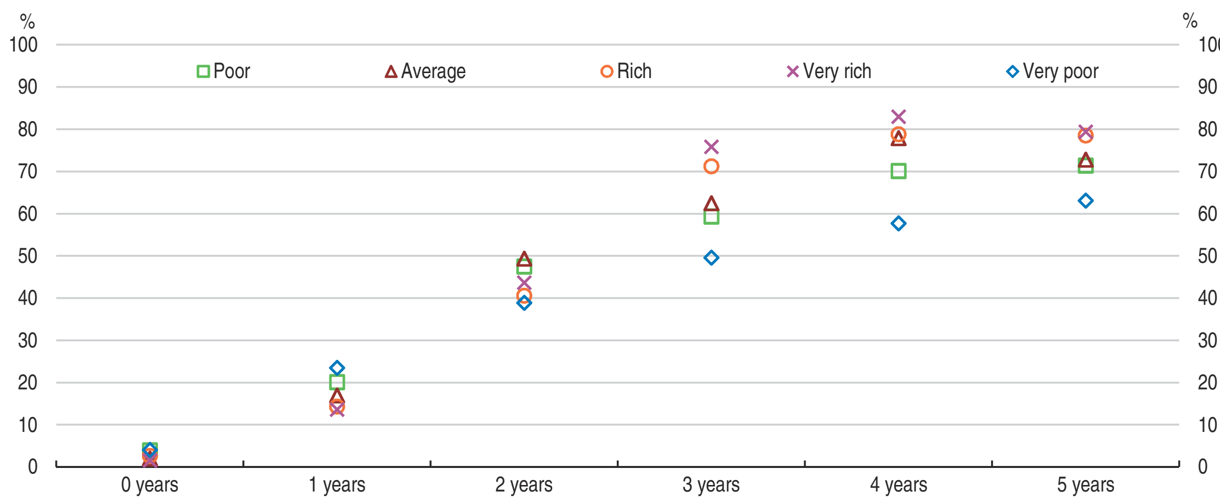
Over the past two decades, governments have sought to increase education participation and performance among poor and vulnerable students. The Government prioritised the expansion of ECEC services for vulnerable and disadvantaged families, in particular to address the high level of child poverty. Funding policies, such as conditional cash transfers aimed at improved equity of access in primary and secondary education. Measures were also targeted to vulnerable groups, such as ethnic communities, children with special educational needs, individuals affected by violence and rural populations. Flexible school models, ethnic education developed in collaboration with the local community, school meals and school transport have also helped to reach disadvantaged groups. To improve poorer children's access, education was made free from the transition grade (grade 0 for 5 year-old children) to the end of upper secondary education in 2012.

However, indirect costs such as transport and learning materials remain (OECD, 2016e). In 2012, they were estimated to represent 2.7 monthly minimum wages per year in urban areas (CLADE, 2014). Major investments in infrastructure and education resources have also been undertaken. Major reforms of the teaching profession have been implemented and a strong evaluation system established.

Enrolment increased in every level and region but remains behind those in OECD and is similar to other Latin American countries. Participation in early childhood education and care (ECEC) and tertiary education more than doubled to 40% and 50%, respectively, in the last decade. However, enrolment in ECEC remains low compared to OECD countries. The participation rate of 3-year-old children (48%) is much lower than the OECD average (70%). Weak provision and lack of awareness of the importance of ECEC are main factors explaining the low enrolment (Alvarez et al., forthcoming and Bernal, 2014) and access remains out of reach for many poor children, especially in rural areas (Álvarez et al., forthcoming; Figure 2.18).

Figure 2.18. **Participation rates in ECEC, by socio-economic level (2012)**



Source: Bernal, R. (2014), "Diagnóstico y recomendaciones para la atención de calidad a la primera infancia en Colombia", Cuadernos Fedesarrollo, No. 51, Fedesarrollo, Bogotá, Colombia, *www.fedesarrollo.org.co/wp-content/uploads/2014/04/debate_pres_2014_cuad51.pdf*.

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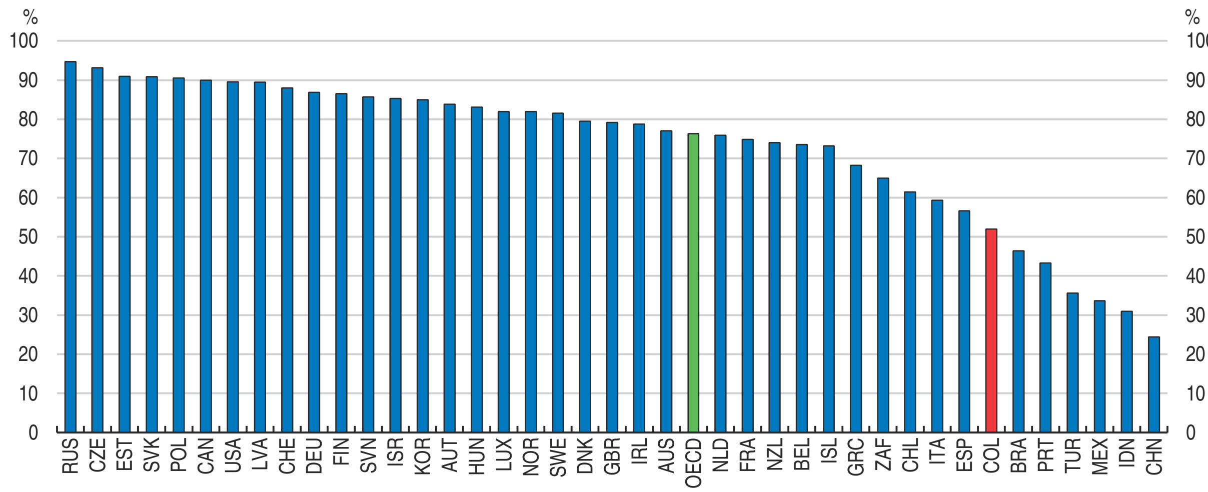
The number of people having attained upper secondary education (USE) remains low compared to OECD countries (Figure 2.19). Colombia committed to achieve universal compulsory USE by 2030. The forces drawing students out of the classroom are multiple and complex, and vary across regions and between rural and urban areas. The 2010 National Dropout Survey identified financial pressures and the low perceived value of USE among the major factors behind students dropping out (MEN, 2013a). A significant proportion of secondary students combine work and study. The opportunity costs of upper secondary education are high for students from low socio-economic backgrounds and they often choose to work in the informal economy (OECD, 2016e). Alongside high opportunity costs, factors that play a particularly important role at the upper secondary level include teenage pregnancy, violence (inside and outside the classroom) and distance to school. In 2015, 42% of the children aged 5+ had a commuting time of between 10 and 20 minutes while 23% spent more than 20 minutes in transport (DANE, Encuesta Nacional de Calidad de Vida, 2015).

Figure 2.19. **Share of adult population that has attained at least upper secondary education, 2014**

As a percentage of 25-64 year-olds



Note: In most countries data refer to ISCED 2011. The countries with data that refer to ISCED-97 are: Brazil, Indonesia, the Russian Federation, Saudi Arabia and South Africa. See the description of the levels of education in the Definitions section. OECD data point refers to the OECD average.

1. Brazil, Chile, France, the Russian Federation, Saudi Arabia: Year of reference 2013.
2. The United Kingdom: Data for upper secondary attainment includes completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (18% of the adults are under this group).
3. China: Year of reference 2010.
4. Indonesia: Year of reference 2011.
5. South Africa: Year of reference 2012.

Source: OECD (2015), *Education at a Glance 2015: OECD Indicators*, OECD Publishing.

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In secondary education measures were taken to facilitate the enrolment of students from disadvantaged families, improve the relevance of upper secondary education and, where necessary, help students continue their education whilst working. The main challenge of USE is to shift a system built to prepare a minority of students for university towards an inclusive system that responds to diverse students' aspirations and backgrounds. The abolition of tuition fees has been a very important step for the involvement in USE.

Colombia made progress in enrolment in tertiary education, with gross enrolment rates doubling between 2004 and 2013. The enrolment rates are slightly above other leading Latin American countries – except Chile – and have expanded faster than these countries. Nonetheless, it remains low compared to OECD countries. In tertiary education also students from low socio-economic backgrounds and rural and remote areas have lower attendance. In 2011, while 53% of young people from Colombia's richest quintile were enrolled in tertiary education, they were only 9% in the poorest quintile.

The Colombian government's new flagship policy to help students from low-income backgrounds to access high-quality tertiary education is the new Hard Work Pays Off (*Ser Pilo Paga*) scholarship programme. It grants scholarships to 10 000 students a year for 4 years from 2014 in terms of loans and grants which cover their full tuition and living costs. The loans from Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior (ICETEX) are also helping many students from poorer families access tertiary opportunities they could never have had otherwise. The percentage of students with financial support has risen over the years, from less than 5% in the first semester of 2002 to 20% in the second semester of 2014 (MEN, 2015a). The main Vocational Education and Training provider is the National Training Service (Servicio Nacional de Aprendizaje, SENA) which provides the majority (58%) of technical and technological programmes at the tertiary level. Many of the disadvantaged students pursue their studies in SENA. This institution will have a major role to play in the post-conflict era (OECD, 2016e).

Enhancing education opportunities can be tackled with targeted policies

Raising the quality of education remains a priority in Colombia. The lack of a national curriculum framework for basic and upper secondary education makes it difficult for teachers, schools and students alike to direct their efforts towards higher standards. Raising the quality of teaching will be vital to improve student learning. Important steps have already been undertaken to ensure that entry into and promotion in the teaching profession are based on merit, and to strengthen the skills of the current workforce (OECD, 2016e).

It is particularly important to raise parent's awareness of the importance of ECEC for social mobility (see above). Improving schools, particularly disadvantaged ones, is vital if education is to be an engine for inclusive growth and social cohesion in Colombia (OECD, 2016e). The national transfer system (SGP) should ensure that all schools receive at least the minimum resources required to provide quality learning opportunities. Greater consideration should be given to the level of disadvantage of students and schools in the most challenging contexts to provide teachers with more resources to support their students (OECD, 2016e). Finally, external assessments need to provide schools with better tools to foster improvements.

In secondary education, further measures are needed, such as raising the amount of allocations for those in Grade 11 with higher opportunity costs of staying in education and differentiating payment rates by income groups or other measures of living standards (OECD, 2016e). In tertiary education, public funding to support access for low-income students, either through loans or scholarships, needs to be increased and targeted on those with the greatest financial need. The ICETEX loan conditions could be more flexible for students from very low-income families or rural areas and stricter for those with less financial need.

A way of reducing the regional disparities is a better use of distance learning. In tertiary education, Colombia needs now to increase the enrolment to move closer to the OECD average and raise the quality of its education for everyone (OECD, 2016e). Disadvantaged students should also be provided with better career information to support their choices, make the admission process more transparent to give them a fairer chance, take action against the large number of poor quality universities which might not give them any returns to their financial efforts, or better integrate the VET sector – and the SENA in particular- into the tertiary system as they are more likely to opt for these type of studies.

Labour market policies can also affect social mobility

Easier employment protection for regular contracts correlates with a looser link between parental educational background and children's wages in European OECD countries. The explanation of these findings is not straightforward. One hypothesis is that stricter employment protection on regular contracts is used by protected workers (so called "insiders") to claim higher wages (Lindbeck and Snower, 1988; Garibaldi and Violante, 2005), at the expense of the unemployed and precarious informal workers (so called "outsiders"). To the extent that individuals from advantaged backgrounds are more likely to be among the group of “insiders”, while individuals from less advantaged backgrounds are more likely to be among “outsiders”, strict protection may increase the relative wage differential between the two groups. In turn, an increase in wage inequality may translate into higher intergenerational wage persistence (Causa and Johansson, 2009). Overall, the Colombian employment protection legislation is in line with those in OECD countries, but fixed-term contracts and subcontracting through temporary work agencies (TWA) is widespread. While this provides flexibility for firms to adjust their workforce to changing economic circumstances, it means high degree of job insecurity for the workers involved. While Colombia has very flexible regulations on fixed-term contracts and rather strict rules on TWA employment, the shares of both types of contracts in total employment are high. Moreover, transitions from informal to formal employment are very low, and those who manage to move to the formal sector are more likely to work under a fixed-term contract than a permanent one, which in turn carries a higher risk of falling back into informality or unemployment. Weak enforcement of the employment legislation further contributes to labour market duality. It will be important to strengthen labour law enforcement and raise fines for labour law infringements related to social insurance (OECD, 2016c), however almost 50% of the employed are self-employed and so are not covered by labour legislation.

Low financial inclusion is contributing to inequality

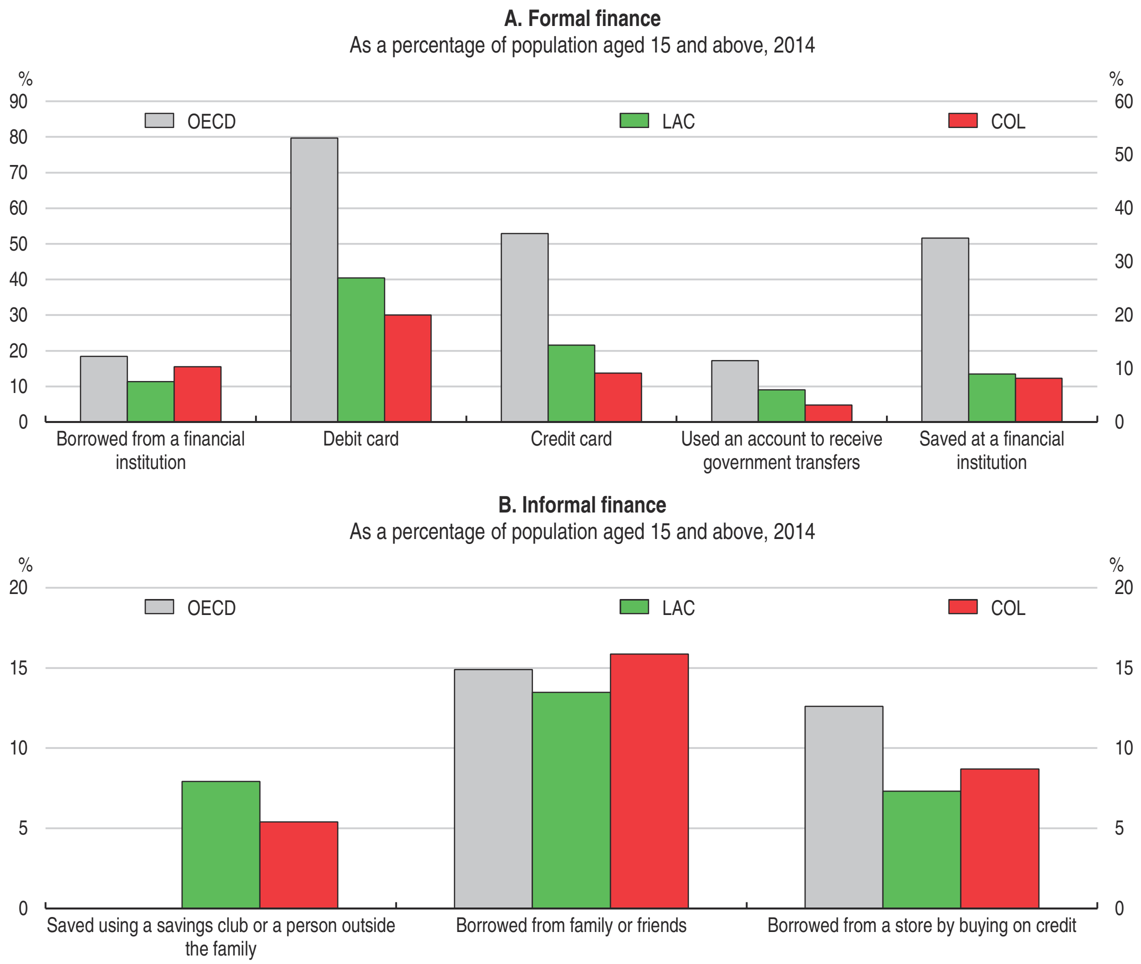
Despite steady improvements, financial inclusion is still low compared to OECD and Latin American countries (Figure 2.20). This may contribute to higher poverty and income inequality (Park and Mercado, 2015, Burgess and Pande (2005), Allen et al. [2013]). Physical infrastructure, the number of access points for financial services such as commercial bank branches, points of sale and ATM machines has increased but is still below OECD and LAC economies. Moreover, the costs are still high and probably excluding many poor individuals. For instance, the number of ATMs per 100 000 adults increased from 24 in 2007 to 40 in 2015 but is still below the OECD average of 96 and the LAC6 average of 73 (IMF, 2016).

Financial inclusion can be hindered by both supply-side barriers such as regulatory constraints, geographical or infrastructure barriers, and demand-side barriers such as low levels of financial literacy and linguistic barriers and reduced social and technological inclusion (Atkinson and Messy, 2013). The most affected people are often the young, the poorest socio-economic groups, those living in rural areas and the self-employed.

An important way to address demand-side barriers is to promote financial education as a way of increasing financial literacy (Hinz, 2014, Atkinson and Messy, 2013). Financial literacy can be defined as a combination of awareness, knowledge, skill, and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing (Atkinson and Messy, 2013). This can take many forms such as awareness campaigns, collective or individual training (Deb and Kubzansky, 2012). But many studies have found that these need to be well designed and carefully targeted to the relevant audience, as evidence indicates that not all financial education initiatives translate into a change in behaviour (OECD, 2005, OECD, 2015e, Cole and Fernando 2008, Deb and Kubzansky, 2012). Many countries aim at improving financial inclusion whilst recognising the importance of strengthening financial literacy skills (Box 2.1).

Financial education needs to be complemented by consumer protection regulations (Atkinson and Messy, 2013 and Hinz, 2014). The G20 highlights that consumer protection is the most relevant issue moving forward in financial inclusion. The leaders stipulate that

Figure 2.20. **Financial inclusion is low**



Note: OECD aggregate excludes Hungary, Iceland, Latvia, Mexico and Turkey. LAC refers to 23 countries in Latin America and the Caribbean (Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Trinidad and Tobago, Uruguay and Venezuela).
Source: Global Findex (Global Financial Inclusion Database).

StatLink http://dx.doi.org/10.1787/888933483386

Box 2.1. **Financial inclusion: Experience in selected countries**

Financial inclusion is an important topic for inclusive growth in many countries (Atkinson, A. and F. Messy [2013]). A 2010 survey of financial regulators from 142 economies showed that 88% had some aspect of financial inclusion, financial education or financial consumer protection in their mandate (CGAP, 2010). The policy aims of financial education for financial inclusion are typically to strengthen an emergent financial service sector, or to provide consumers with the protection and skills they need to operate within the existing financial market in a way that promotes their own financial well-being and opportunities. The experience of Brazil, India, Portugal and Fiji are presented in this box.

Brazil

Financial inclusion has been a goal of the Central Bank of Brazil since the 1990s and was formally made a strategic objective of the Bank in 2010. In 2007, the Brazilian Committee for Regulation and Inspection of Financial, Capital, Insurance, Pension, and Capitalization

Box 2.1. **Financial inclusion: Experience in selected countries** *(cont.)*

Markets (Coremec) convened a working group to develop a national strategy for financial education. However, in its first report on financial inclusion in 2010 the central bank noted that the following challenges remained: i) improvement of data on financial inclusion; ii) wide-scale dissemination of credit services (especially microfinance) and savings; iii) tailoring supervision mechanisms; iv) strengthening the institutional structure of financial education and of protection of the users' rights (Banco Central do Brasil, 2010).

The Brazilian government has subsequently created the National Committee for Financial Education (CONEF) to coordinate the actions of regulators, the Ministry of Education and other government bodies (Tombini, Presentation for G20 Ministers' Meeting, 2012).

India

India aims at achieving financial inclusion on a massive scale. Indians face many barriers to financial inclusion, including a lack of branches in remote or poorer areas, the lack of formal identification documents, very low incomes, a lack of confidence in financial service providers and low levels of literacy, numeracy and financial literacy. On top of this, banks face a high cost to reaching out excluded populations and limited profit opportunities in the short term, as many of the potential clients have limited money to pay into financial institutions.

The Indian Financial Inclusion Plan is led by the government and the Reserve Bank of India (RBI) but it also includes regulatory bodies, banking associations, schools, NGOs and civil society. The RBI issued a directive requiring banks to draw up plans to provide bank services to rural areas with a population of at least 2,000. A banking service may be provided through either a branch or a "business correspondent" i.e. an individual bank agent providing banking services door-to-door in unbanked areas through various devices such as mobile phones and micro ATMs. At least 4 products must be provided by the banking services in order to meet the conditions set by the RBI.

Various other changes have been necessary to action the Indian Financial Inclusion Plan. Improved, compatible technology was necessary to connect remote branches to main offices and to process transactions rapidly. Simplified authorization procedures were put in place to allow branches to open, and KYC requirements were relaxed on small accounts, to include simple introduction by someone who could prove their identity. Furthermore, widespread roll-out of unique identity numbers using biometric data has offered a unique opportunity for financial service providers to accurately identify their clients without the need for further documentation, and increase account security. Financial literacy initiatives have also been seen as key to addressing lack of confidence and knowledge about financial products and their uses; these have been delivered through a wide variety of channels, including schools, road shows, pamphlets and films.

Portugal

Portugal's goal is to provide basic banking services at low cost. In Portugal, household customers have access to a range of banking services deemed essential at a relatively low cost. The condition to access this regime is that consumers hold a single current account. The so-called basic banking services include the opening of a current account, the provision of a debit card and direct debits, and the access to the operation of the basic banking account through ATMs, home-banking service and credit institution's branches. These banking services are made available by credit institutions that voluntarily decide to provide them. Although it works on a voluntary basis, the credit institutions that decide to join this regime must comply with the rules.

Box 2.1. **Financial inclusion: experience in selected countries** *(cont.)*

Credit institutions cannot charge fees for basic banking services that annually exceed 1% of the monthly minimum wage. Consumers may acquire other banking products or services not included in the basic banking services package, such as term deposits, transfers or credit products, but for these products they are subject to the fees in force in the credit institution.

Credit institutions must inform the public that they provide basic banking services through the disclosure of a notice at their branches and websites. In order to reinforce the dissemination of the basic banking services and promote financial inclusion, the information on these services is widely publicised on the National Plan for Financial Education website and the Bank Customer website. Also, financial education lectures on basic banking services and household budget management are organized for trainers working in institutions that deal with vulnerable groups of the population.

Fiji

A financial inclusion project in Fiji identified ways in which financial education could be better utilised to support the uptake of a new financial product provided as a means of receiving welfare payments (Leonard, 2011). The research showed that the first step for financial education in support of financial inclusion should be to "educate consumers on the usage of bank accounts and new technology".

The research indicated that financial education should not necessarily be targeted exclusively on the intended recipient of the product, but also on their households. This was felt to be particularly important where the recipient was elderly or disabled.

Source: Atkinson, A. and F. Messy (2013).

integration of financial consumer protection policies into regulatory and supervisory frameworks contributes to strengthening financial stability (G20-OECD taskforce, 2013).

Financial inclusion has been an important priority for the Colombian government for a number of years. The National Financial Inclusion Strategy's goal is to promote access and use of financial services, in particular among informal workers. Policies have mainly aimed at providing microcredit to the poor, spreading formal banking system usage; enhancing the use of electronic payments and making financial services more affordable. The Government has subsidized the opening of bank accounts for most *Familias en Accion* transfer recipients and lowered the financial transaction tax on accounts with a low balance (Karpowicz, 2014). Making the transaction tax permanent, as suggested by the tax reform, may thus hamper financial inclusion. A 2014 law also created a simplified license for becoming a financial institution for transaction and payment purposes only, aimed at increasing the number of players in the financial sector. The government is promoting the use of alternative guarantees (collateral) and creating a registry of electronic invoices to increase access to financial services and facilitate credit to SMEs. In 2015 the financial inclusion commission was created to ease inter-institutional coordination in the development and implementation of financial inclusion initiatives. The Financial Superintendency (SFC) and *Banca de las Oportunidades* developed several financial inclusion indicators considering institutions supervised by the SFC, by *Superintendencia de la Economía Solidaria* and microcredit NGOs. According to the last report, 77.3% of Colombian adults had at least one financial product in June 2016. More should be done to promote financial education especially to the most vulnerable people such as the young, women, rural people and low socio-economic groups.

Policy recommendations to make growth more inclusive

Key recommendations

- Further reduce taxes and fees on wages (non-wage labour costs).
- Simplify procedures for company registration and the affiliation of workers to social security.
- Establish social dialogue to discuss differentiating the minimum wage by age and regions.
- Ensure the provision of affordable, good-quality child care and affordable long-term care for elderly relatives or those with disabilities.
- Expand access to and make greater use of active labour-market programmes.
- Provide more public support to increase enrolment rates of disadvantaged children in less developed regions.
- Expand early childhood education.

Other recommendations

Gender gap

- 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.

Labour market

- Increase income support to the unemployed and provide sufficient funding for employment service providers.
- Restrict options to withdraw funds for reasons other than unemployment (like house purchase/renovation or education) in the system of individual unemployment savings accounts.

Education

- Provide educational home visits and group meetings, delivering books and resources and giving Early Childhood Education and Care staff practical tools and materials to help them work effectively with families.
- Continue improving the initial education and professional development of the Early Childhood Education and Care workforce by introducing tailored, practical pedagogical professional training, ensuring at least a post-secondary level qualification at the same level as primary school teachers and actively recruiting and retraining excess staff from the primary sector.
- 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.
- 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.

Pension

- Thoroughly reform the pension system to reduce old-age poverty and inequality.
- Expand eligibility of the *Beneficios Económicos Periódicos* programme.

Policy recommendations to make growth more inclusive *(cont.)*

- Increase coverage and benefit levels of the minimum public income-support programme (Colombia Mayor).
- Equalise the retirement age between men and women. In the medium term, increase the retirement age and link it to life expectancy evolution.

Health

- Explore ways how the wider primary care workforce can contribute to the country's health care challenges. Remove legal obstacles to extending nurses' and other professionals' roles in health care.
- In rural and remote areas, encourage outreach specialists to act as mentors to local health care workers, building knowledge and confidence, encouraging continuity of care and, most importantly, forging a sustained service network between rural and urban health care providers.

Financial inclusion

- Enhance financial education and target it to the most vulnerable people such as the young, women, rural people and low socio-economic groups.

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Growth in Colombia has been among the strongest in the region, reflecting the flexible exchange rate and inflation targeting monetary policy, and fiscal rules. The strong growth and welfare programmes to the most vulnerable groups have substantially reduced poverty. Lower taxes and fees on wages have brought more people to better quality formal jobs, thereby raising both productivity and inclusiveness. Productivity and job opportunities have also been enhanced by recent reforms facilitating the opening of business, obtaining construction permits, registering property and paying taxes. However, productivity growth is still low and the gap between rich and poor among the highest in Latin America. Informality and gender gaps remain high, and social mobility low. Years of armed conflict, stringent local regulations and distortions in the tax system have created disparities in productivity and access to basic services across regions. Further simplifying procedures for company registration and the affiliation of workers to social security, improving labour market programmes, expanding early childhood education, and raising education quality would boost inclusion, social mobility and living standards. Greater and more affordable child, elderly and disability care would open the job market to more women. Raising productivity will be fundamental to continued increases in living standards for all Colombians.

SPECIAL FEATURES: PRODUCTIVITY; INCLUSIVE GROWTH

Consult this publication on line at ***http://dx.doi.org/10.1787/eco_surveys-col-2017-en***.

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