



**OECD Economic Surveys**

# **Colombia**

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**OVERVIEW**

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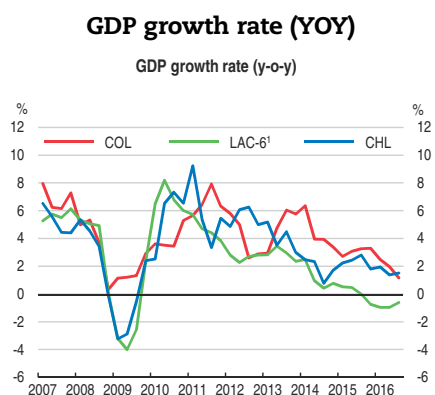
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## Executive summary

- *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



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

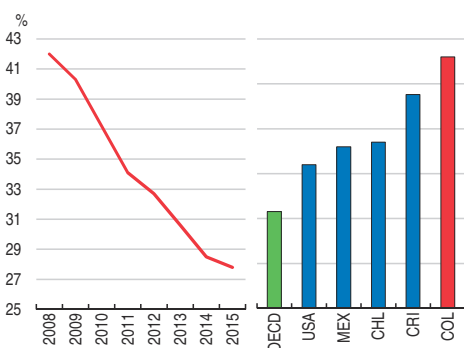
Source: OECD Economic Department Database and the IMF World Economic Outlook Database.

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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



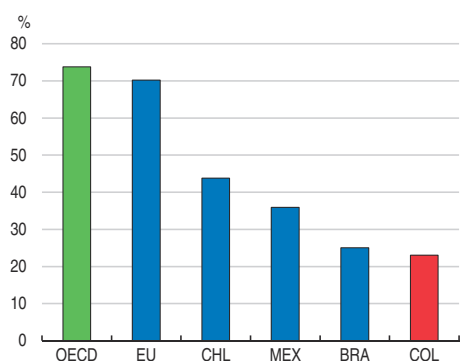
1. For the OECD, data refer to the average of OECD countries' latest available figures. For Chile, data refer to 2013. The P90/P10 ratio is the ratio of income of the 10% of people with highest income to that of the poorest 10%.

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
<b>Further improve macroeconomic resiliency</b>	
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.
<b>Sustain strong economic growth</b>	
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.
Firms' competitiveness is hampered by regulatory burdens and slow judicial outcomes.	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.
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.
<b>Make growth more inclusive</b>	
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.

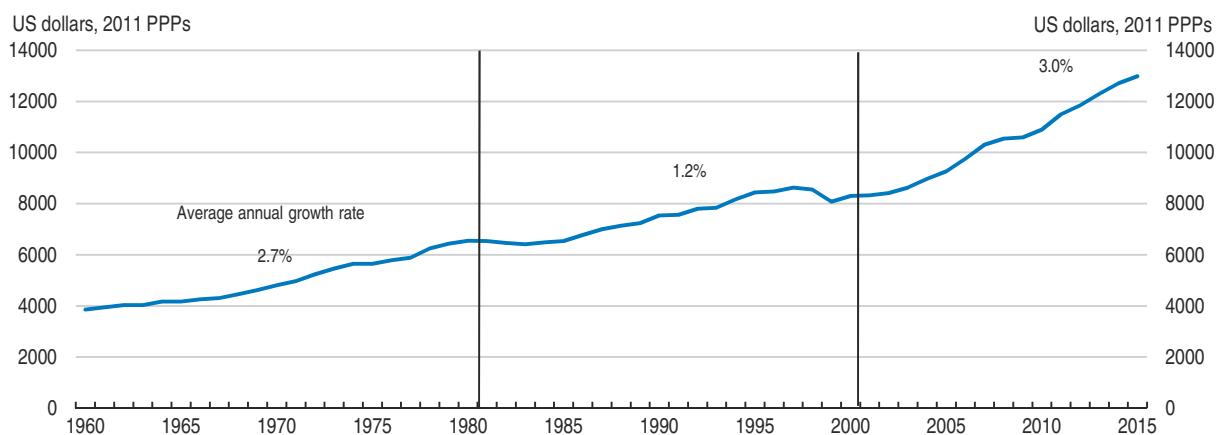
## Assessment and recommendations

- *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*

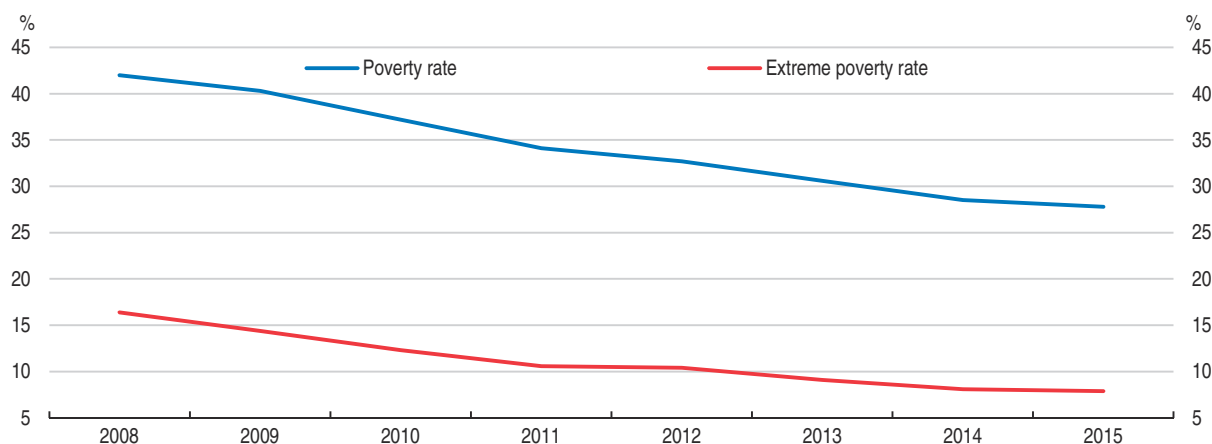
Since 2000, the quality of life of Colombians has improved markedly. Macroeconomic and social policies have sustained strong GDP growth and reduced poverty (Figure 1). Between 2002 and 2015 the poverty rate fell from 50% to 28%, and extreme poverty fell from 18% to 8%. In terms of wellbeing, life satisfaction 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**

**A. GDP per capita is growing since 2000 after two decades of low growth**  
GDP per capita at constant prices



**B. Poverty rates are declining**



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.


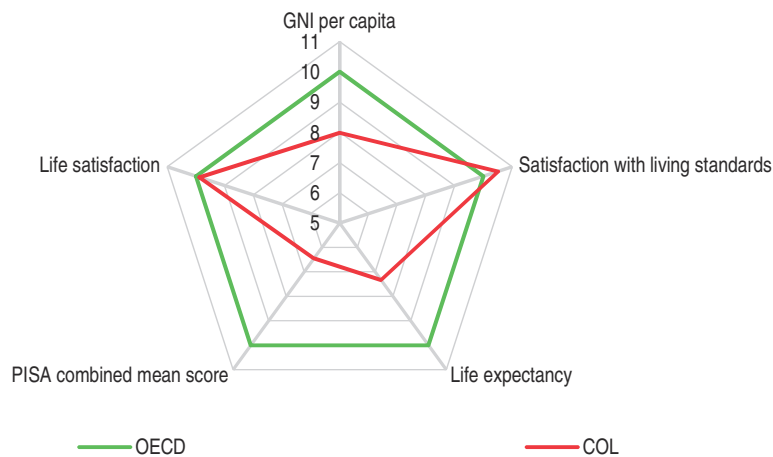
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Figure 2. **Well-being has improved but remains low relative to OECD countries**



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

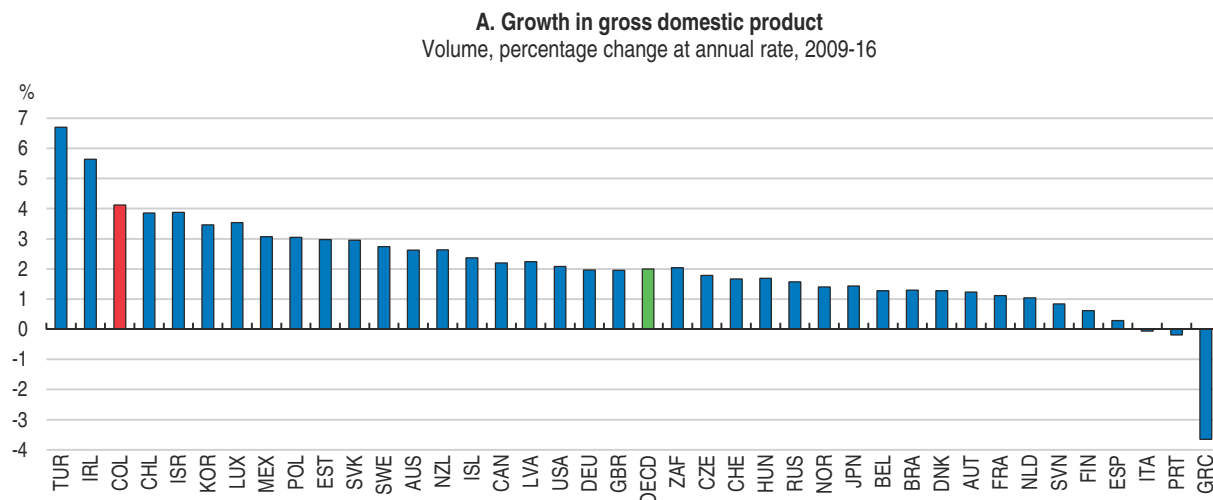
The economy grew by an average of 4.3% between 2009 and 2014, more than double the OECD average (Figure 3). This was driven by the 70% rise in terms-of-trade after the 2008 financial crisis as commodity prices boomed along with strong investment. However, the external environment has changed significantly 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).

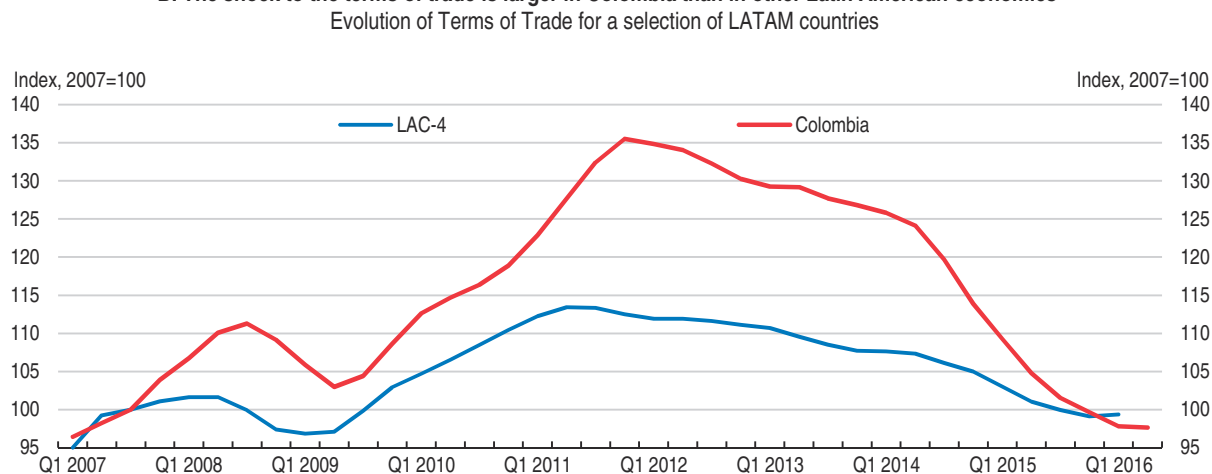
The peso depreciation put pressure on prices, *El Niño* (between the second half of 2015 and the first half of 2016) as well as the trucker's strike of June-July pushed up food prices. Indexation has also led to some second round effects, although these appear to have been contained. The rise in prices 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**



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



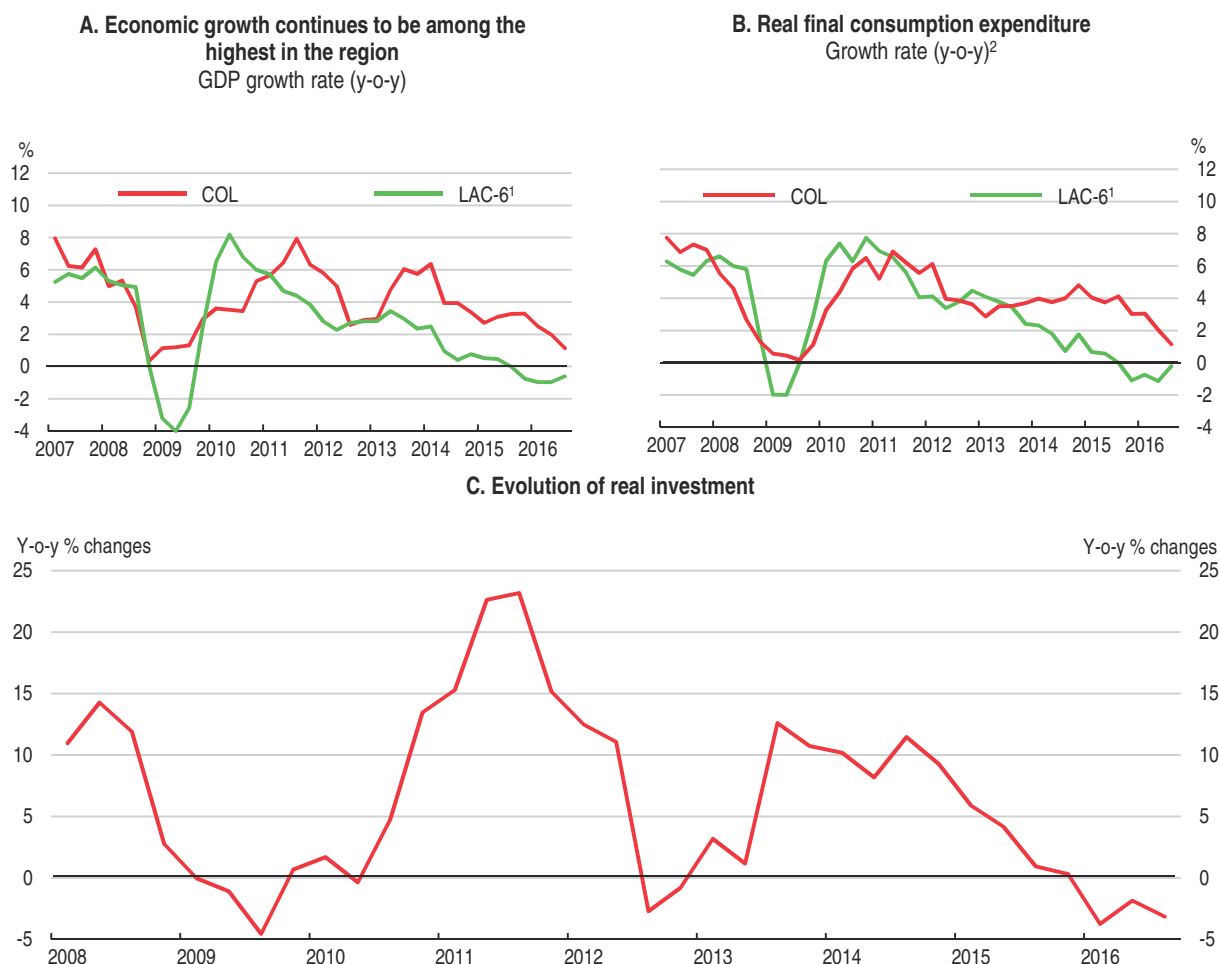
Note: LAC-4 refers to the unweighted average of values for Argentina, Brazil, Chile and Mexico. Series calculated as a 4-quarter centred moving average.

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
<b>Gross domestic product (GDP)</b>	<b>710 497</b>	<b>4.4</b>	<b>3.1</b>	<b>2.0</b>	<b>2.3</b>	<b>3.0</b>
Private consumption <sup>1</sup>	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 <sup>2</sup>	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 <sup>2</sup>	-18 147	-1.9	-0.1	1.3	-0.3	-0.1
<b>Other indicators</b> (growth rates, unless specified)						
Potential GDP	..	3.9	3.7	3.3	3.0	2.9
Output gap <sup>3</sup>	..	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 <sup>4</sup>	..	2.9	5.0	7.5	4.7	3.7
Core consumer prices <sup>4</sup>	..	2.5	4.7	6.5	4.9	3.5
Trade balance <sup>5</sup>	..	-5.5	-8.1	-6.6	-5.5	-5.4
Current account balance <sup>5</sup>	..	-5.2	-6.4	-4.5	-3.5	-3.5
General government fiscal balance <sup>5</sup>	..	-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.

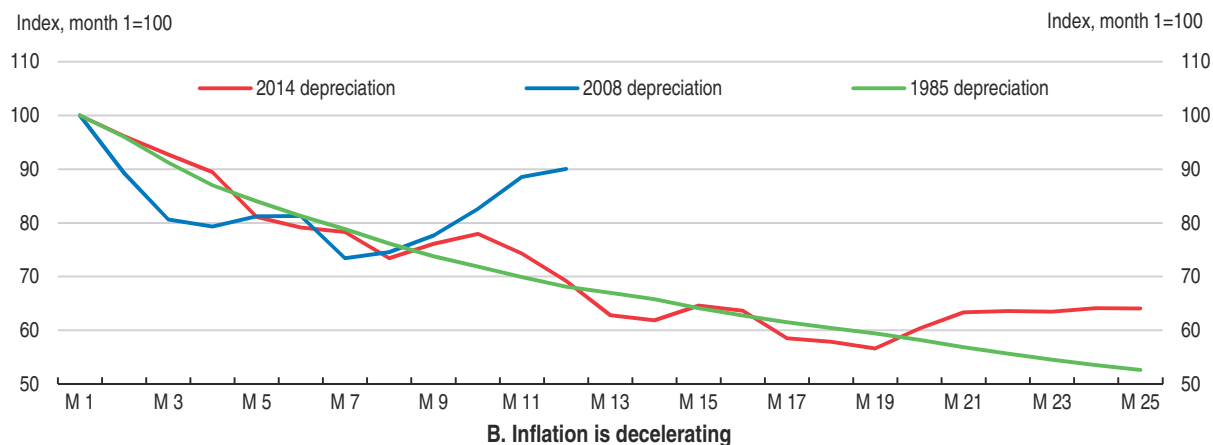
institutions are well capitalised. According to the *Superintendencia Financiera*, financial institutions have enough liquidity to meet their short term obligations. Banks have liquid assets of around 3 times their 30-day Net Liquidity Requirements. In 2015, Banks reported a return on equity (ROE) of 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.

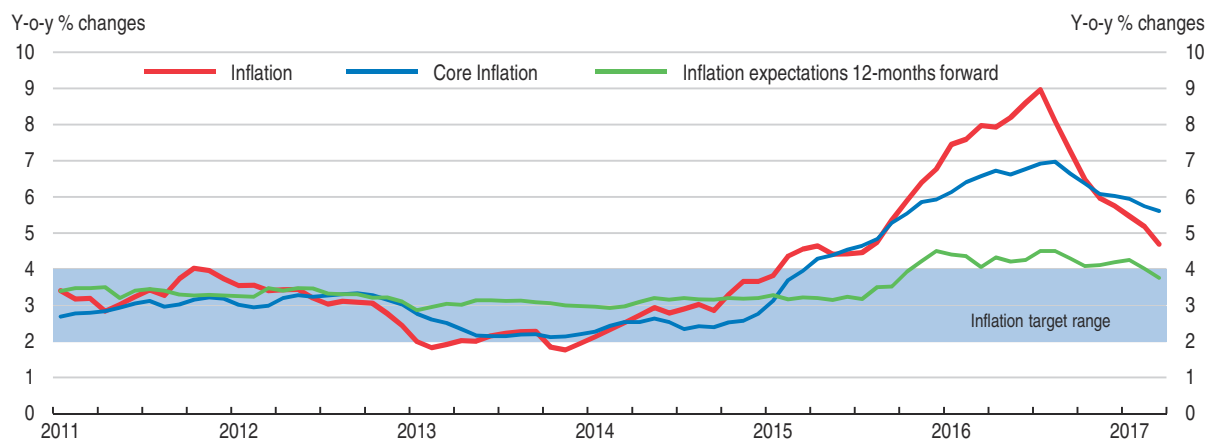
Financial inclusion has been an important priority for the government for a number of years. Policies have mainly aimed at providing microcredit to the poor; spreading formal banking system usage; enhancing the use of electronic payments; and making financial services more affordable (Karpowicz, 2014).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

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

**A. The depreciation of the exchange rate has been extremely large**  
2014, 2008 and 1985 national currency depreciation episodes



**B. Inflation is decelerating**



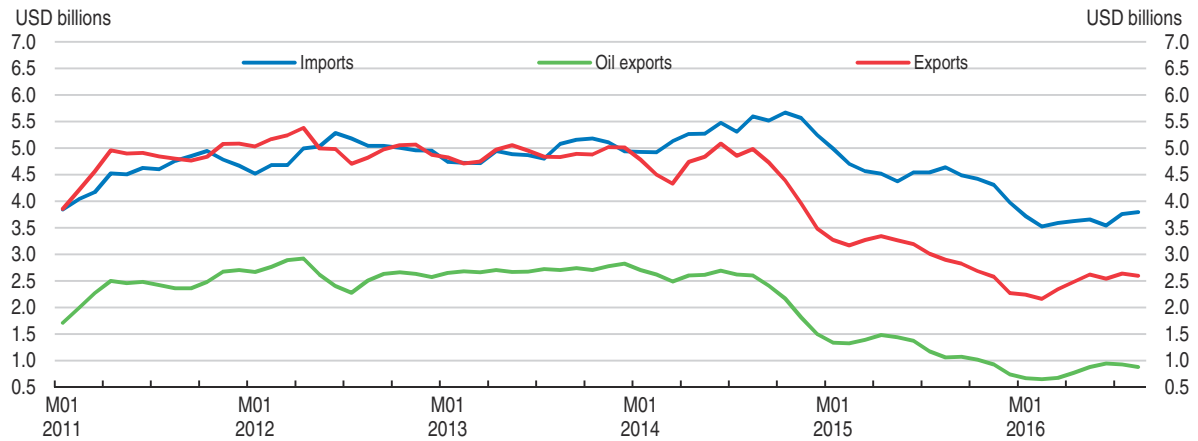
Note: In panel B, inflation expectations come from the survey Encuesta de expectativas analistas económicos (Banco de la República). Core inflation refers to all-items excluding basic food, public services and fuels.

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).


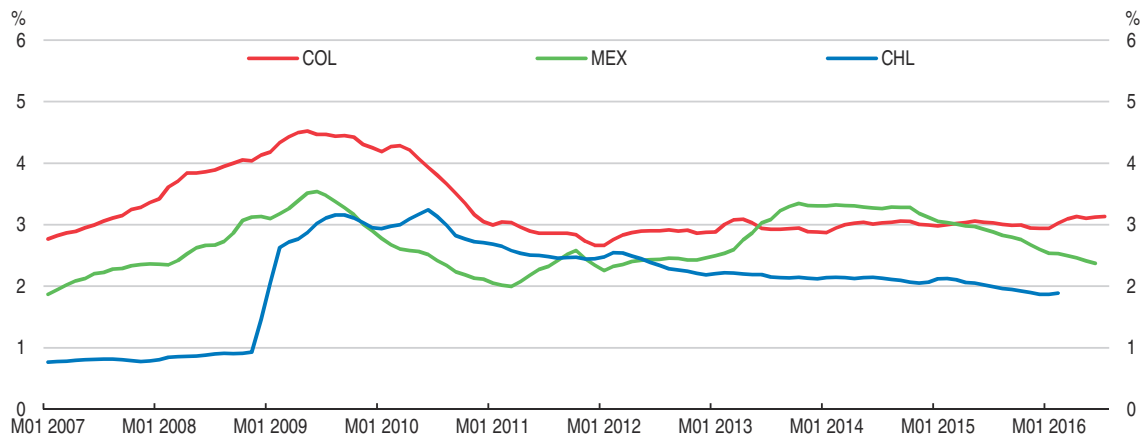
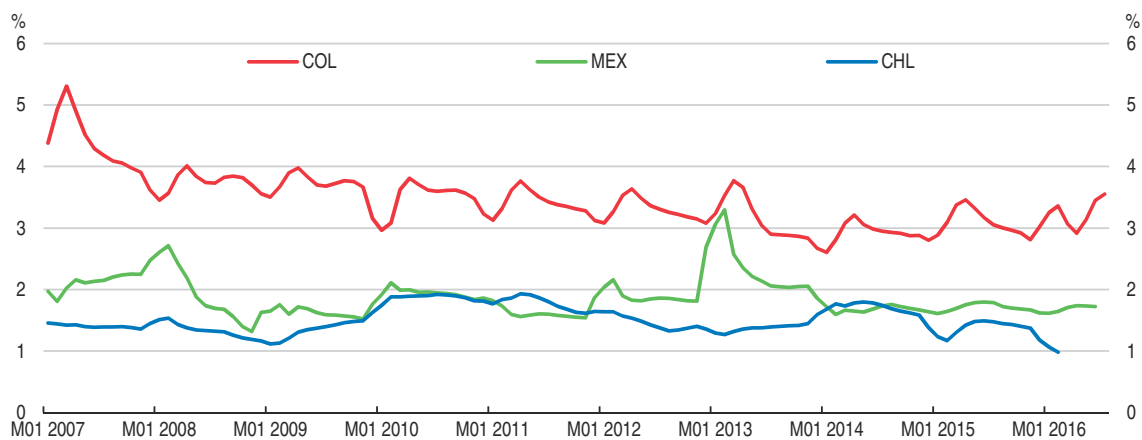
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Figure 7. The financial system is sound

## A. Non-performing Loans to Total Gross Loans



## B. Return on Assets



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


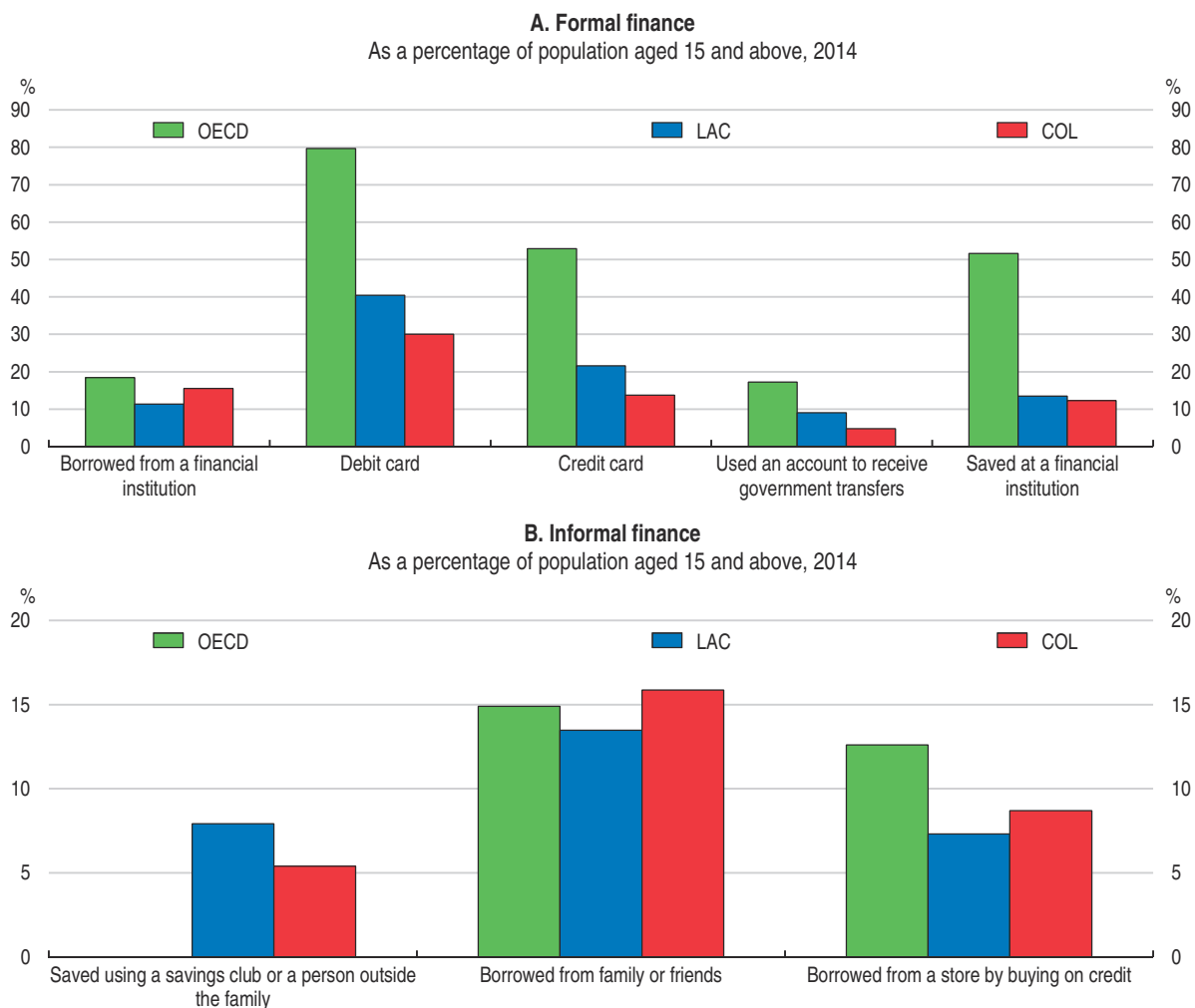

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Figure 8. **Financial inclusion is low**

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 Niño* 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
<b>Total revenues</b>	<b>16.7</b>	<b>16.1</b>	<b>15.0</b>
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
<b>Total expenditures</b>	<b>19.1</b>	<b>19.2</b>	<b>19.0</b>
Investment	3.0	3.1	2.1
Interest	2.2	2.6	3.0
Public spending	13.9	13.5	13.9
<b>Headline fiscal deficit</b>	<b>2.4</b>	<b>3.0</b>	<b>4.0</b>
<b>Structural fiscal deficit (fiscal rule)</b>	<b>2.3</b>	<b>2.2</b>	<b>2.1</b>
<b>Primary balance</b>	<b>0.7</b>	<b>0.6</b>	<b>0.9</b>

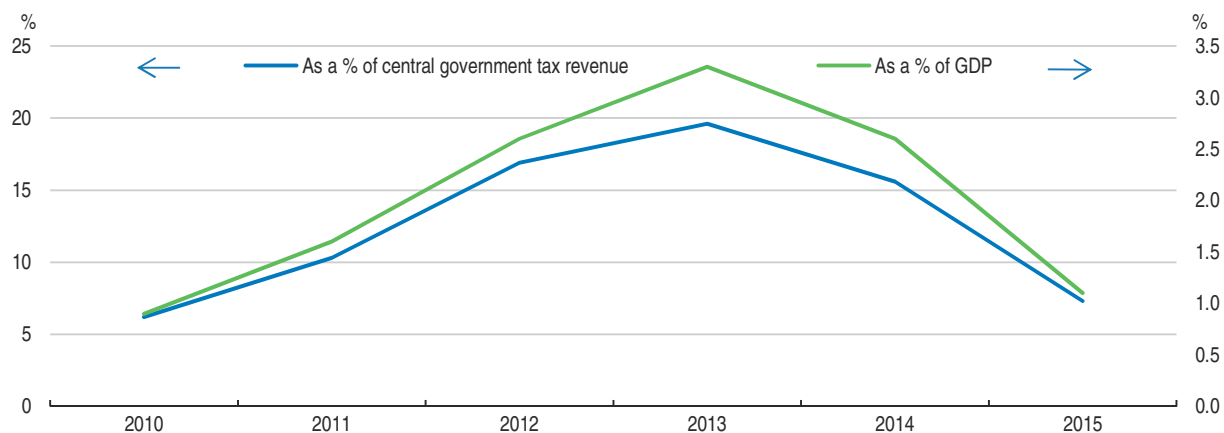
Source: Ministerio de Hacienda y Crédito Público.

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.

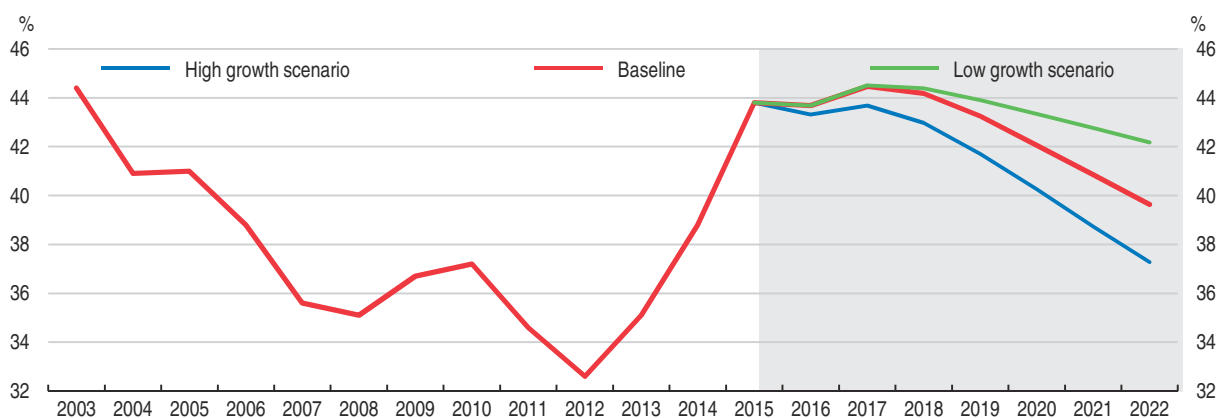
Persistently low oil prices will continue to put pressure on government revenues and narrow the space for more spending. In the medium term, however, expenditures will have to increase to satisfy large social needs. The weakening of public finances together with large external imbalances raises macroeconomic 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**

**A. Fiscal revenues have deteriorated because of the drop in the oil prices**  
Central government's oil revenues



**B. A structural tax reform would help to keep the public debt on a sustainable path**  
Public debt to GDP projections under different scenarios



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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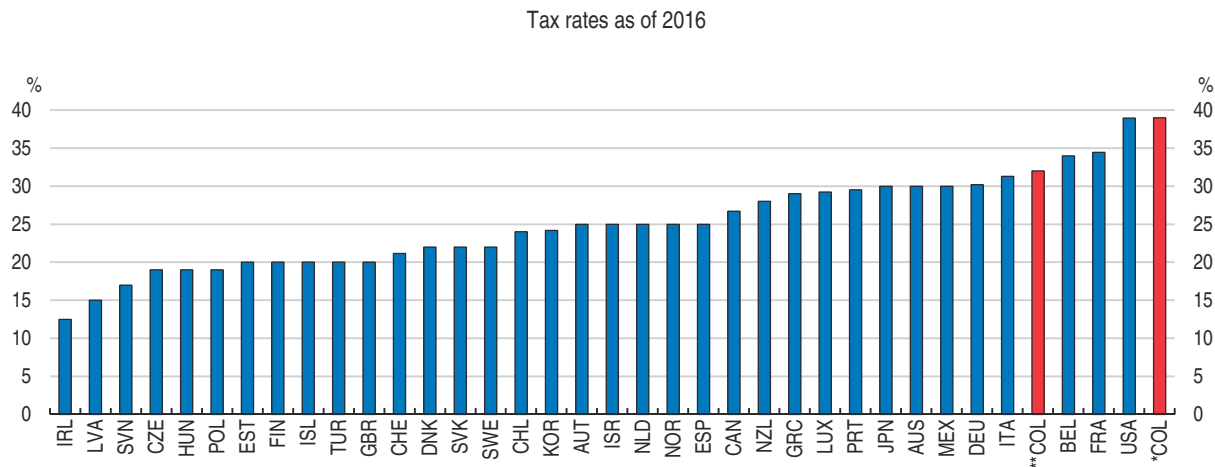
The 2016 tax reform is expected to bring new sources of revenue, which will increase non-oil revenues by an estimated 3 percentage points of GDP by 2022. The higher revenues are estimated to help stabilise public debt around current levels under alternative growth scenarios, and put the public debt/GDP 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**



Note: \* COL refers to 2017 and \*\* COL refers to 2019.

Source: OECD Tax Database.


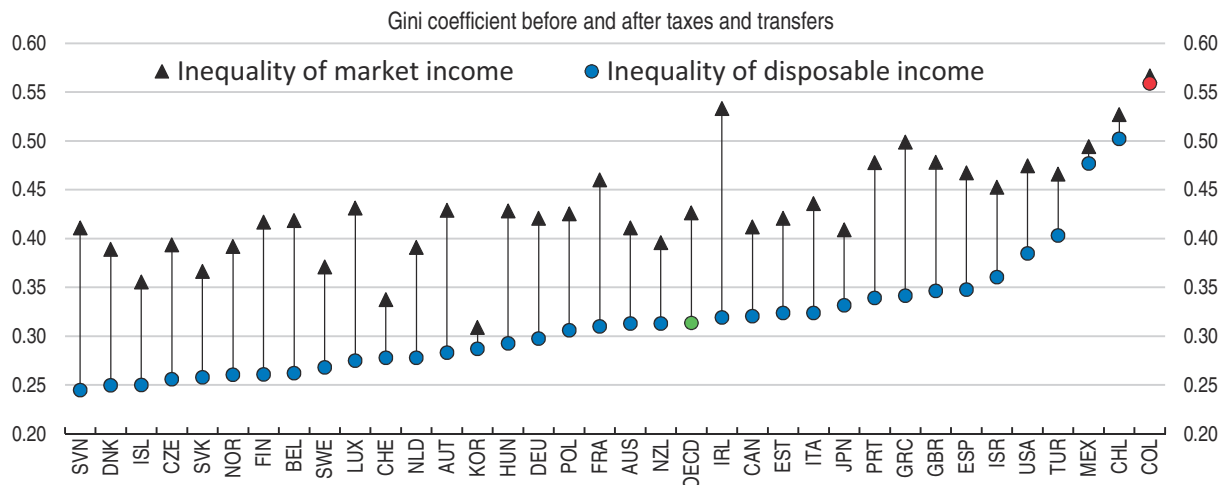

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Figure 11. **The tax system does not distribute enough**



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.

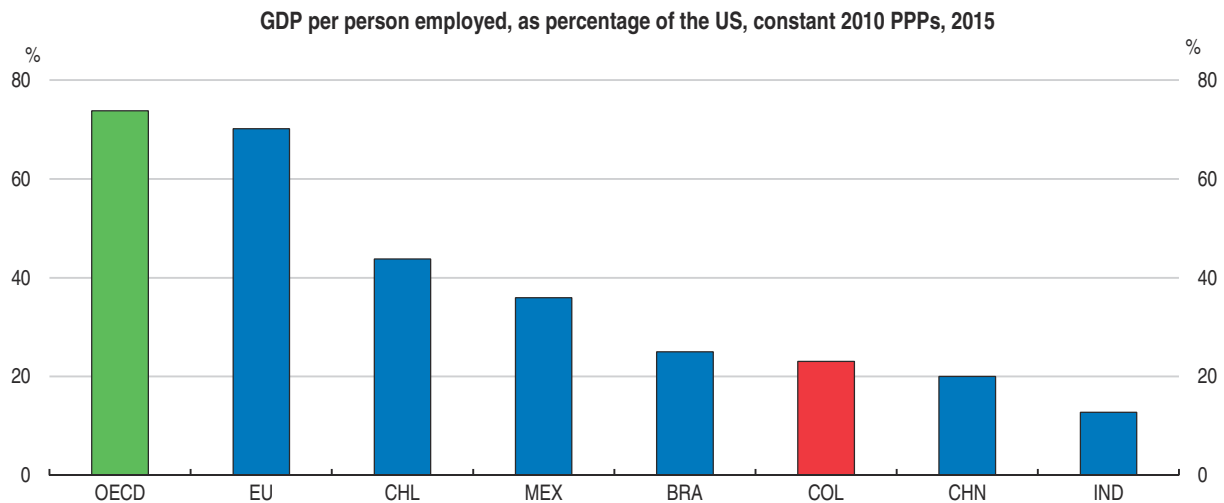
Table 3. Past OECD recommendations on monetary and fiscal policy

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**

Source: OECD, *Productivity Statistics Database*.

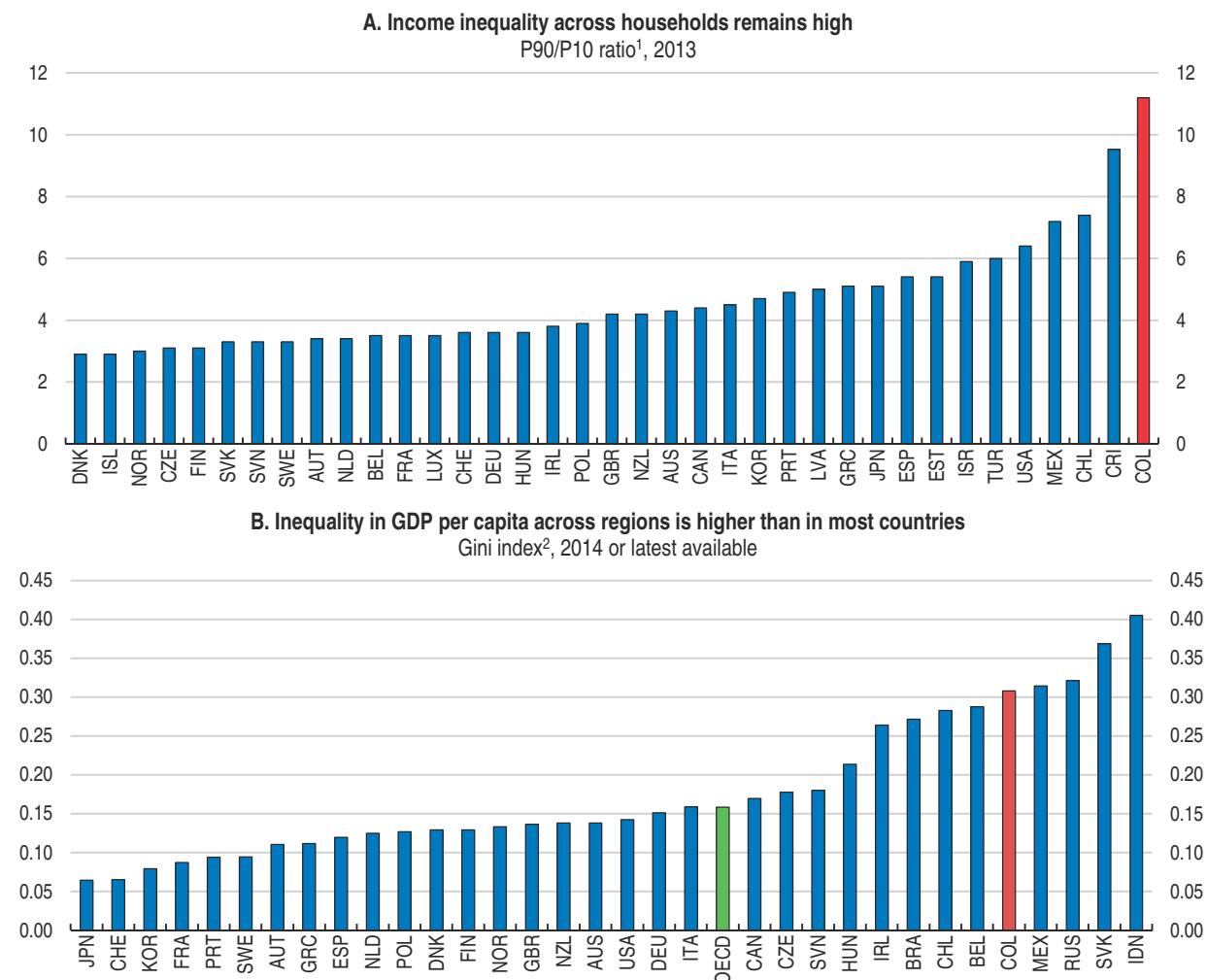
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indigenous communities) and reduce economic performance (OECD, 2008, OECD, 2011, Ferreira et al., 2014). High inequality also raises political challenges as it damages social cohesion. Finally, it can raise protectionist and anti-globalisation sentiment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

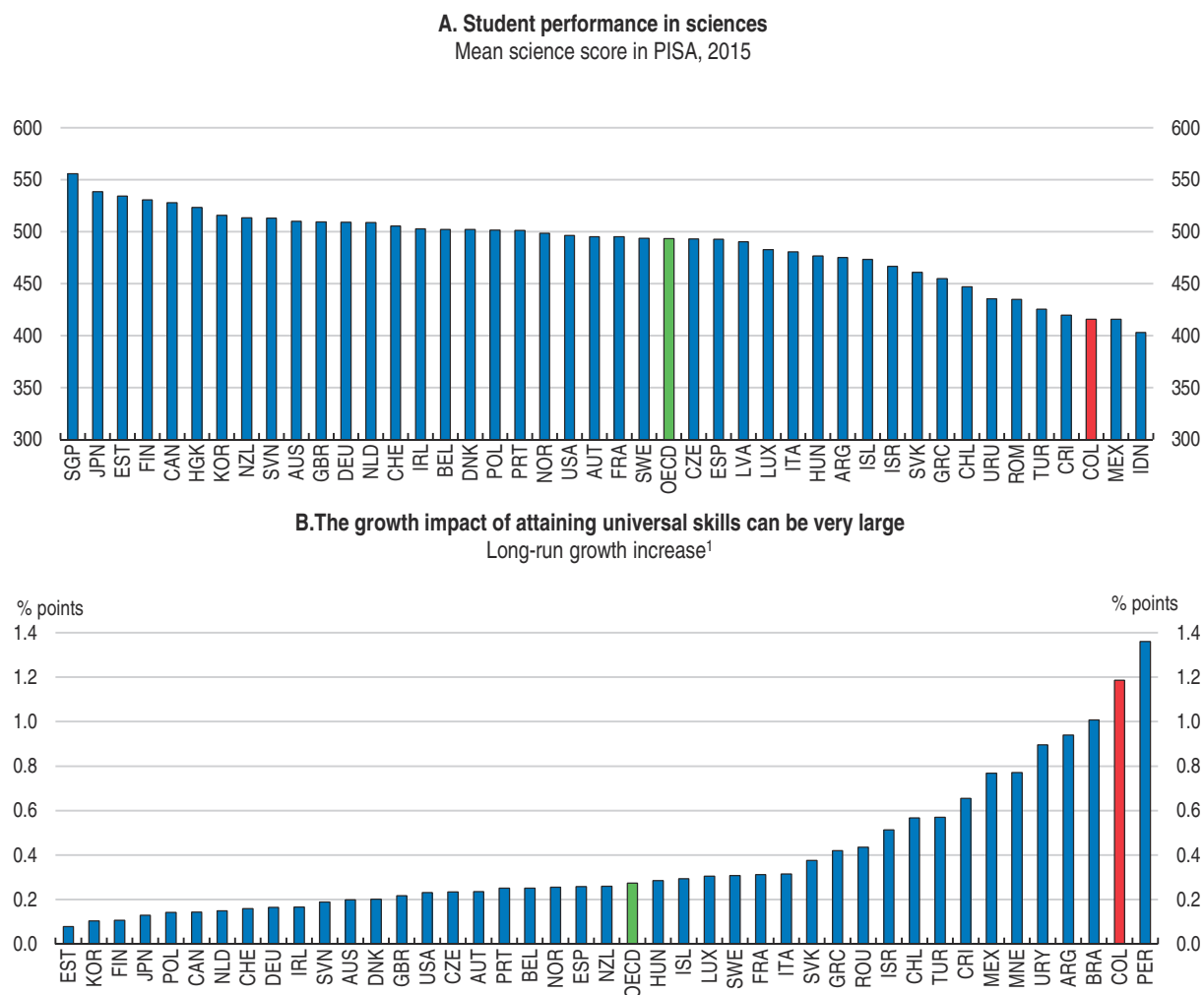
Education and skills development play a key role in making growth more inclusive and raising productivity. The inability of individuals from poor socio-economic backgrounds to access quality education (thus developing their human capital) causes a perpetuation of income inequality, lowering economic 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.

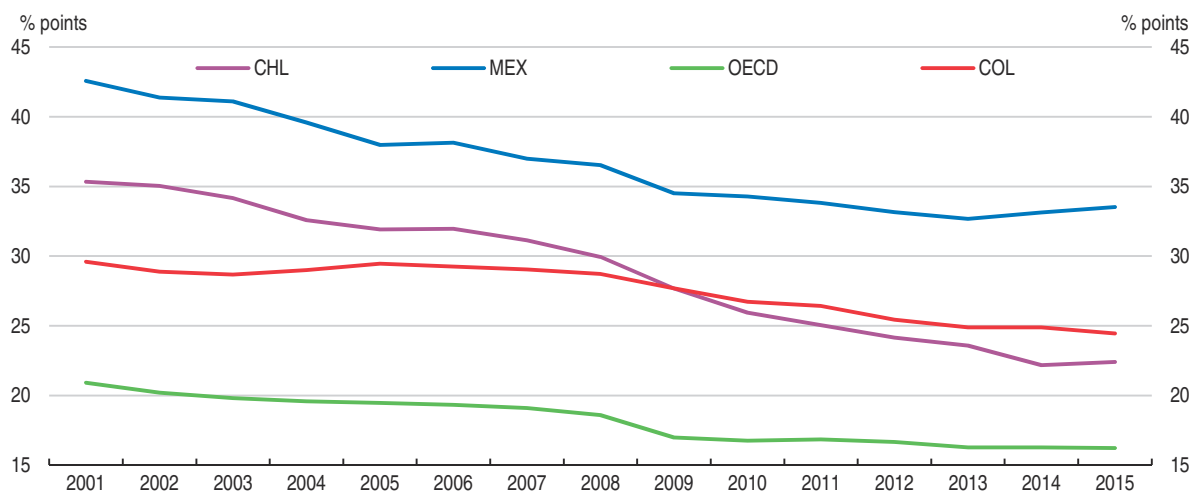
Increased public support should be provided to the regions that are lagging behind in order to raise the quality of primary education. Regions receiving more public support per student have better test outcomes (Olaberria and Heras Recuero, 2017). A national curriculum framework for school education 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.

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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 (*Consejería 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.

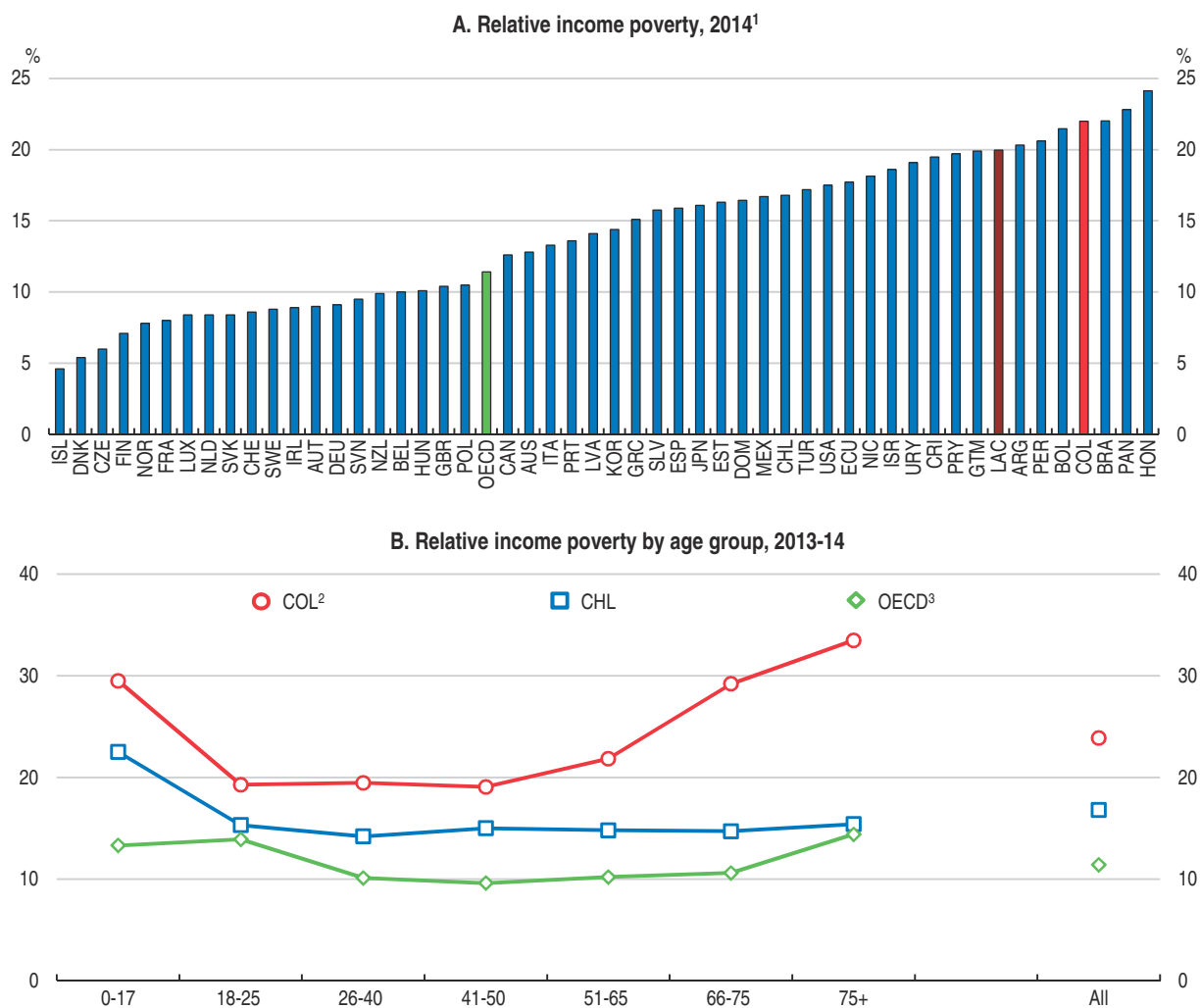
However, additional efforts are required to close or reduce the gender gaps. Colombia should increase investment in active labour-market policies to reduce the gender gap in labour market participation. For example, the unemployment rate among women at 12% is much higher than for men at 7% pointing to 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**

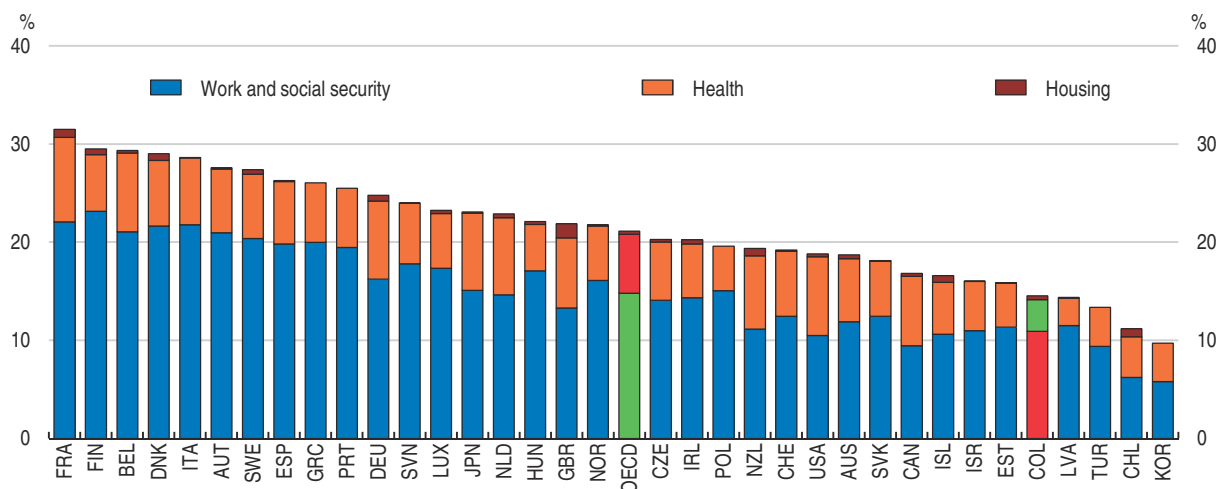
1. Relative poverty rates after taxes and transfers (threshold of 50% of the median income). LAC average does not include Chile and Mexico.
  2. For Colombia, data refer to 2011.
  3. Average of 33 OECD member countries.
- Source: OECD (2016a).

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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*, *Más 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 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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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**

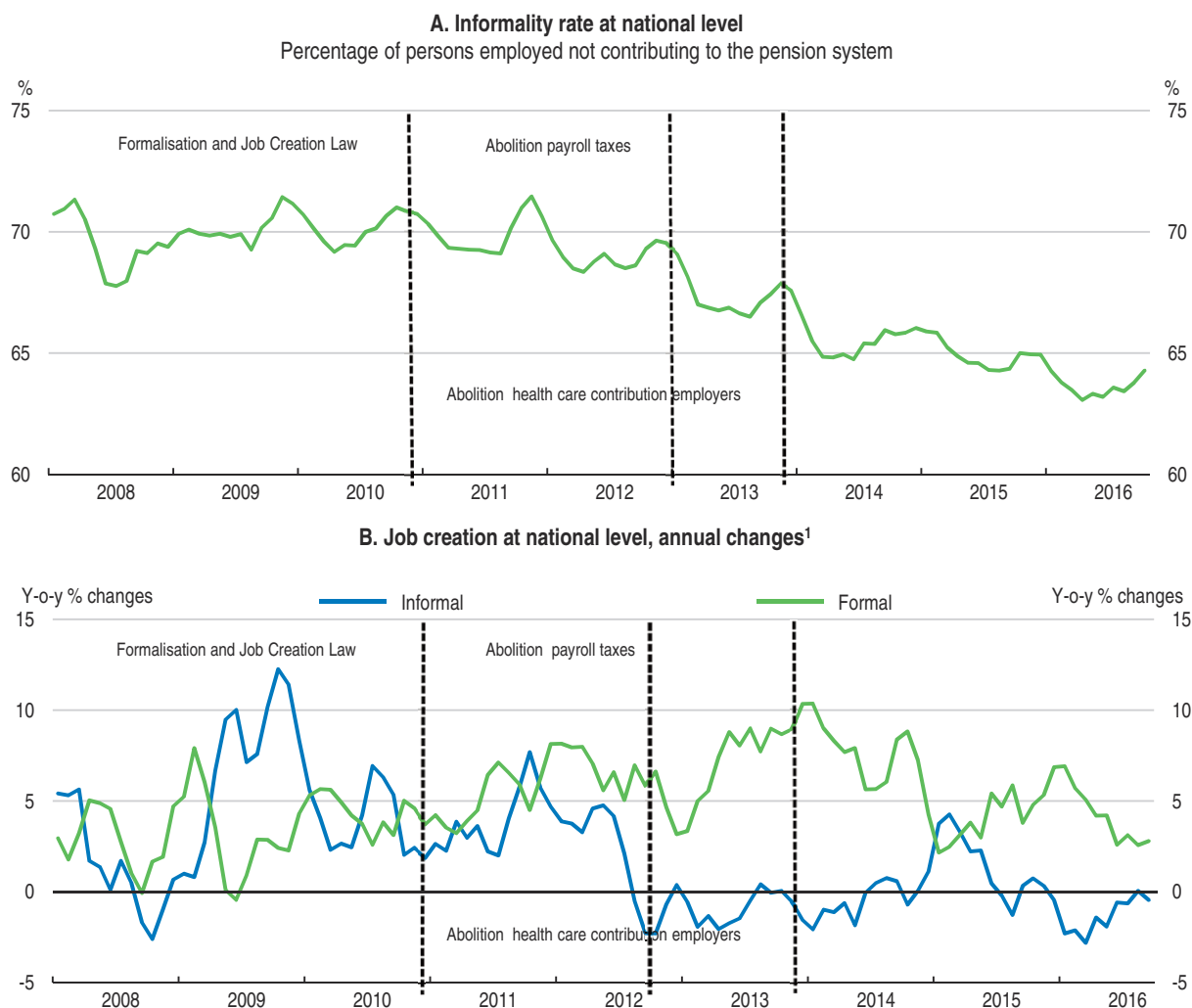
Main recommendations	Actions taken since the 2015 Survey
Thoroughly reform the pension system to reduce old-age poverty and inequality. Expand eligibility of the <i>Beneficios Económicos Periódicos</i> programme.	No thorough action taken.  In September 2016, new incentives were introduced among the affiliates in order to increase the number of savers. Part of the revenue of the single tax for SMEs ( <i>monotributo</i> ), 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.

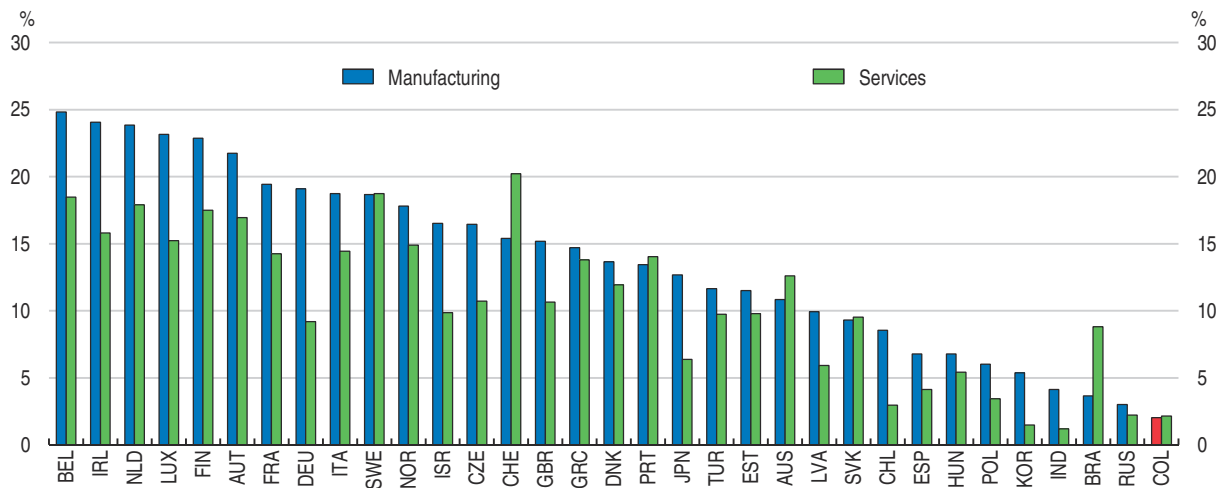
Source: OECD calculation based on GEIH data sourced from DANE.

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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/ino-stats.htm](http://www.oecd.org/sti/ino-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**

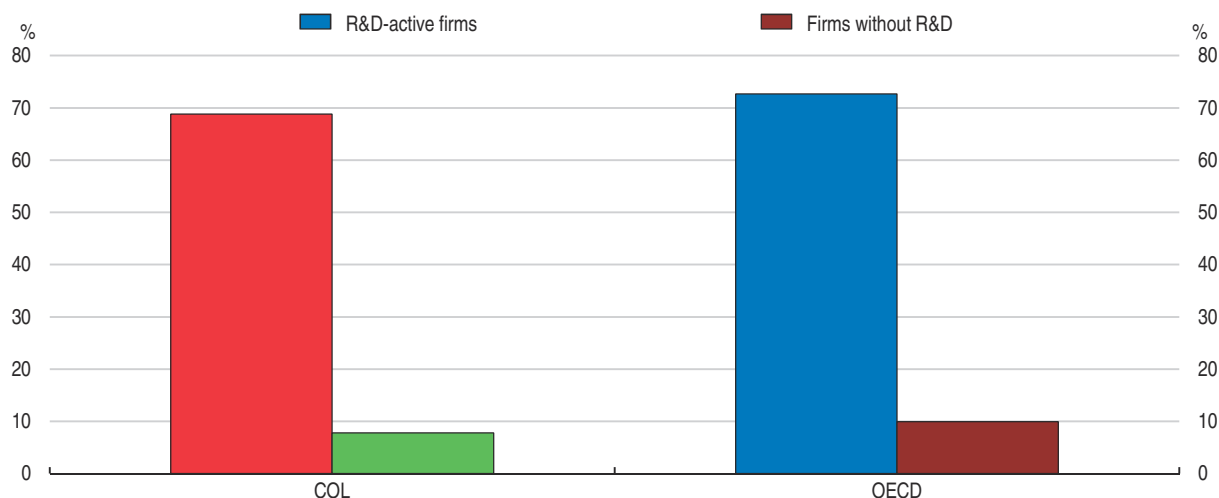
The improvements in the educational system should be complemented with better innovation policies to generate knowledge-based capital, which makes a key contribution to productivity and competitiveness. Productivity enhancements are shaped by firms' ability to innovate or adopt new innovations made by 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&amp;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.

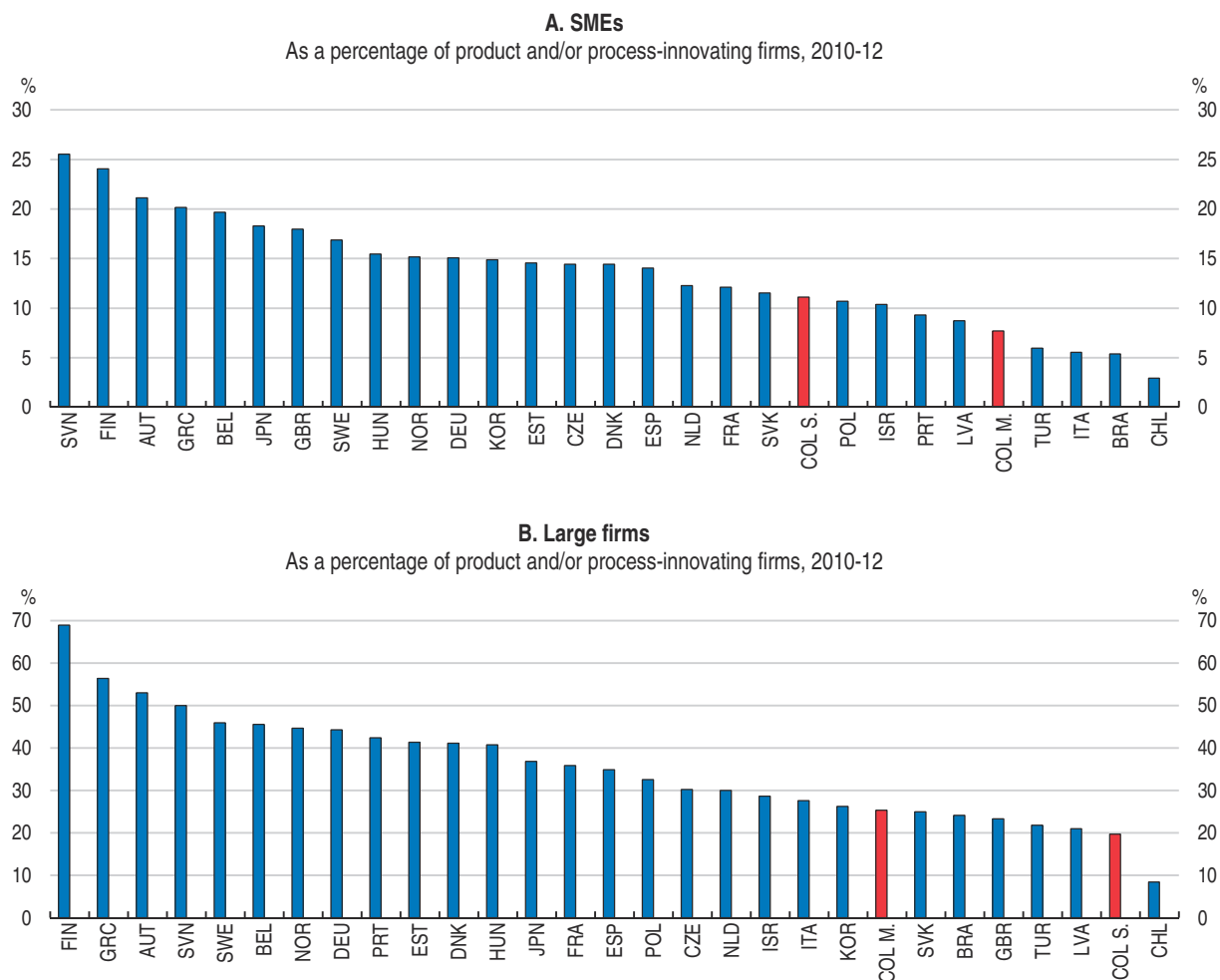
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increases catch-up with frontier firms (Brown et al., 2013). Reducing the high costs of patent application and providing more support by removing constraints on public funding of R&D in enterprises can foster innovation by helping companies to incorporate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

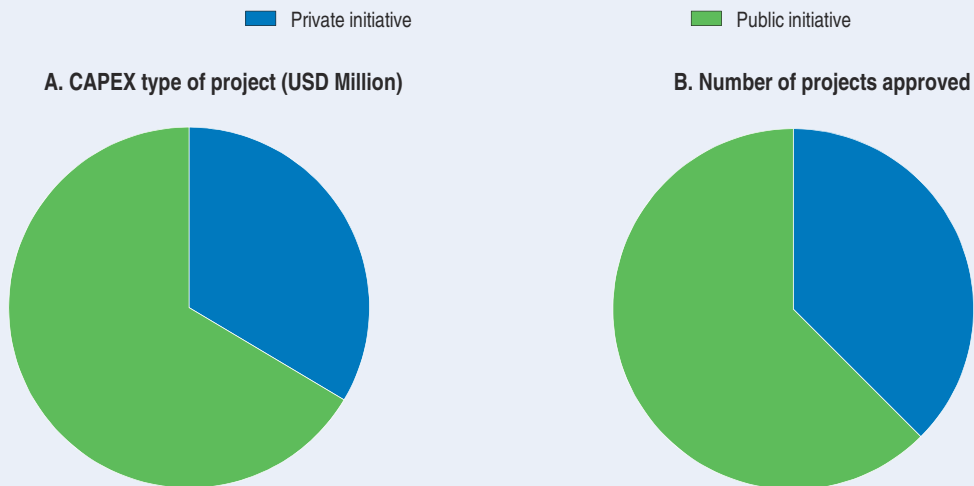
With aggregate capital expenditures of USD 15 billion, the 4G concession program is the most ambitious infrastructure development initiative in Colombia's history (Figure 22). As of December 2016, 32 projects through PPP schemes have been approved and 21 of them have already received financing. 20 of 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.

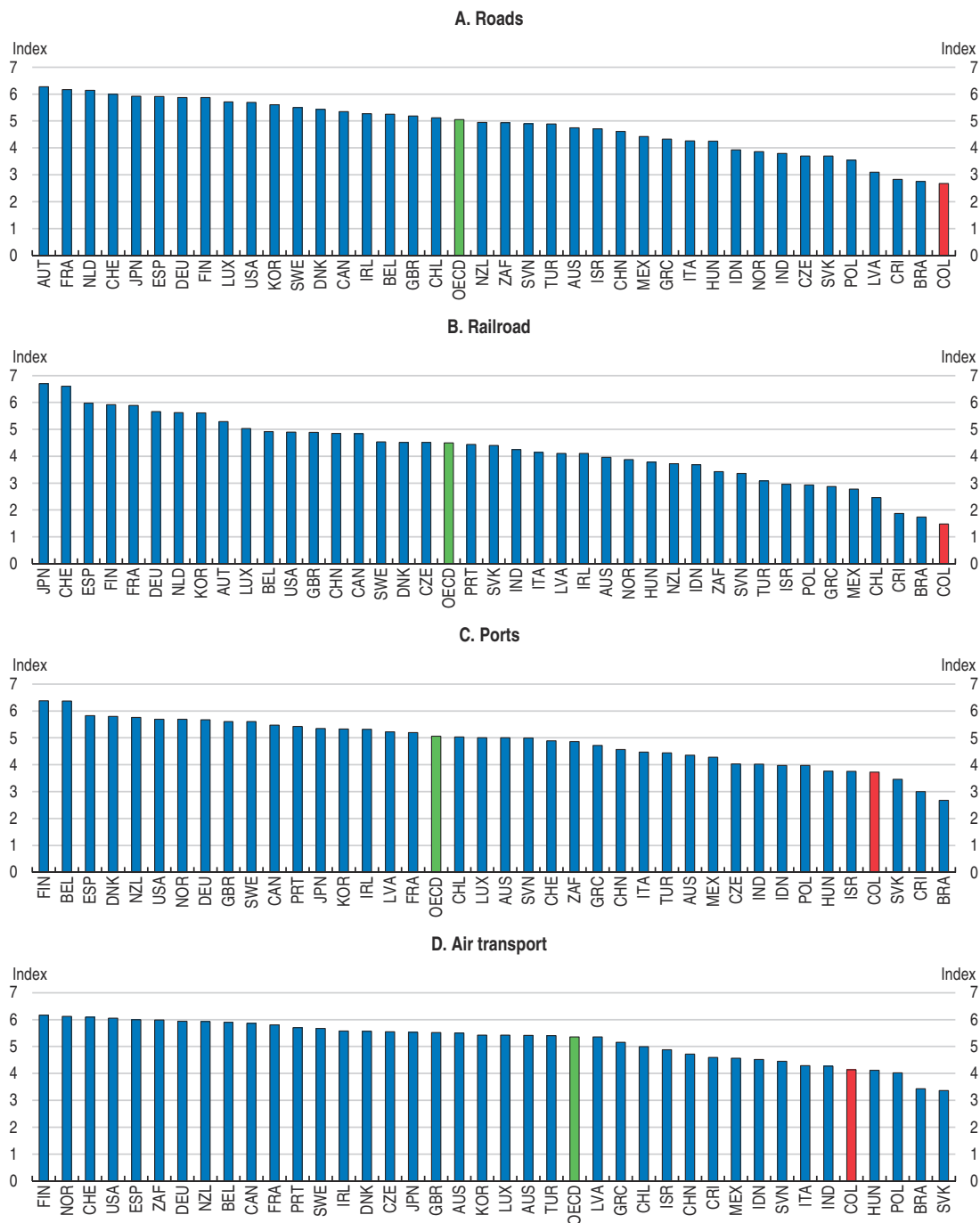
Colombia also has a mechanism for contingency management: The National Contingency Fund. Whenever a risk is allocated to the public sector in a concession/PPP agreement, a risk valuation is conducted by the Ministry of Finance to assess the probable impact of the contingency. Different methodologies 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).

### 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<sub>2</sub> emission per GDP. As a result, it also has significantly lower CO<sub>2</sub> emissions per capita than average. Other greenhouse gases (GHG), mainly from agriculture, contribute as much as CO<sub>2</sub> to total GHG emissions, a larger contribution than for most countries. National estimates for absorption of CO<sub>2</sub> 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 Medellín –, 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).

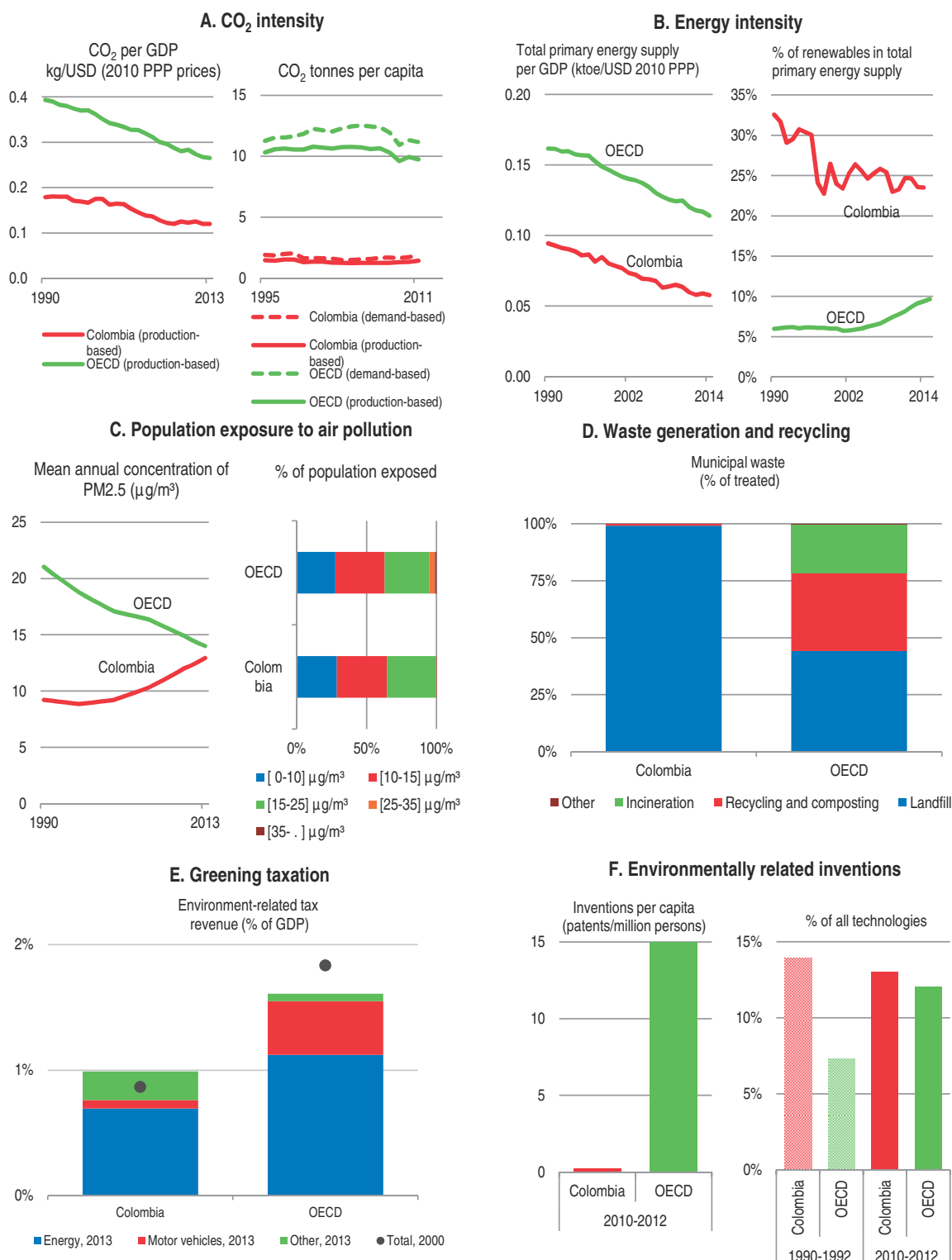
Access to clean drinking water and sanitation has been improving but is very far from universal, especially in rural areas. Between 1990 and 2010, the under-5 child mortality rate due to diarrhea fell by more than 75%, but it remains one of the major causes of child mortality. Even where wastewater is 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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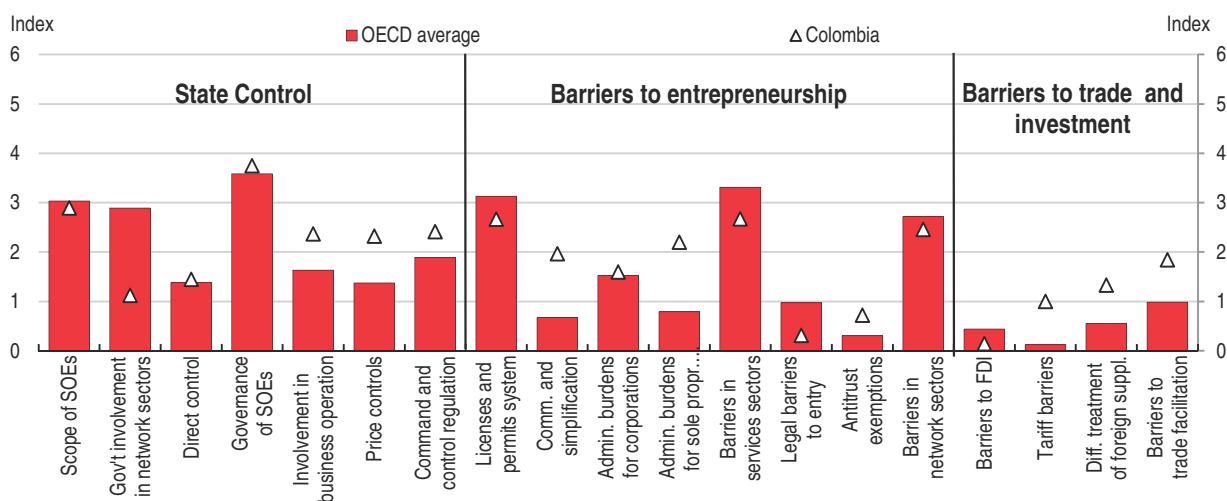
financial incentives to support cross-jurisdictional cooperation is a significant obstacle. France and Italy, for example, have put in place specific financial incentives, such as higher central government transfers, to promote inter-jurisdictional cooperation. The government might consider providing 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  $\frac{1}{4}$  to  $\frac{1}{2}$  % 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](http://www.oecd.org/eco/pmr).

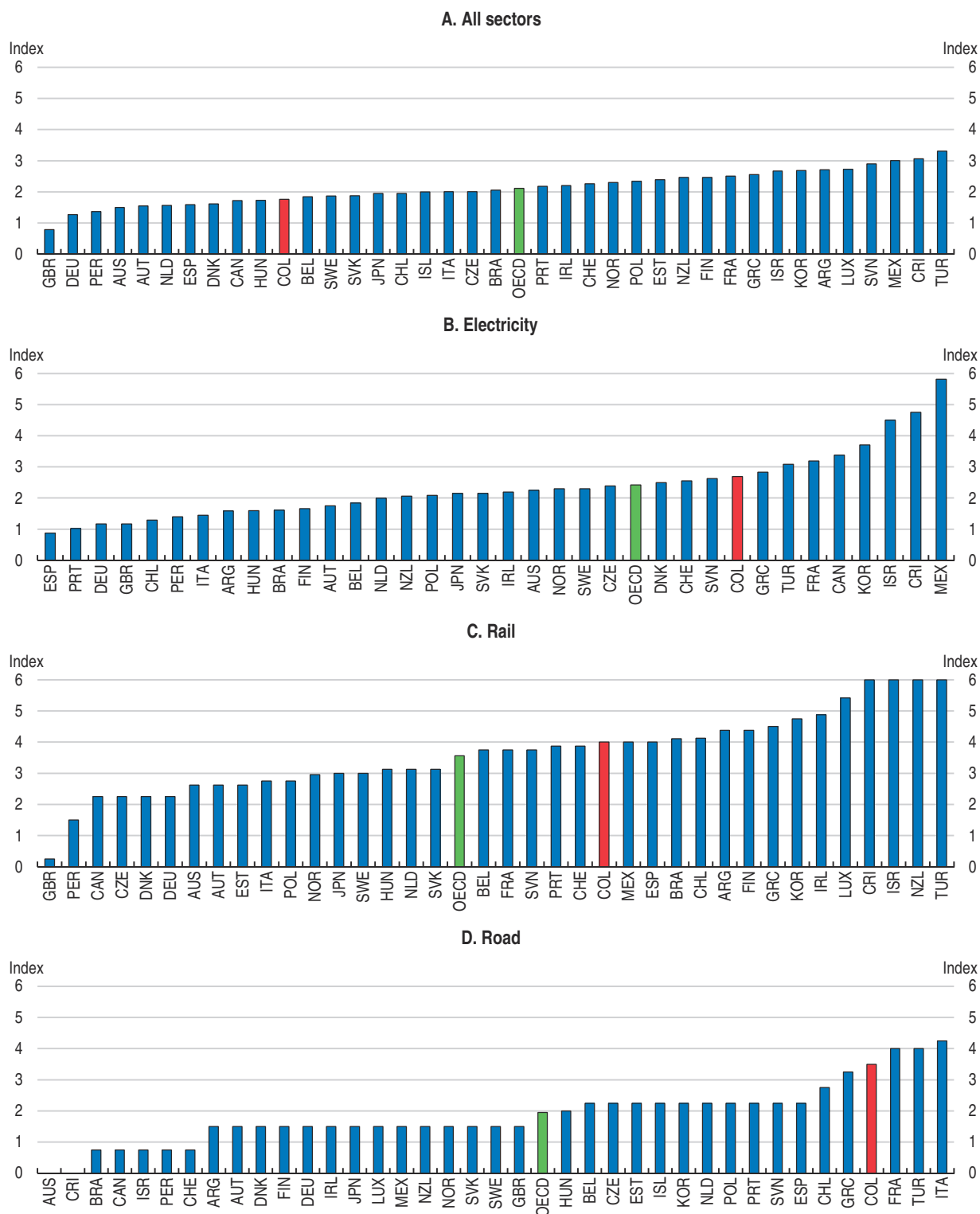
Source: OECD, Product Market Regulation Database.

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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.

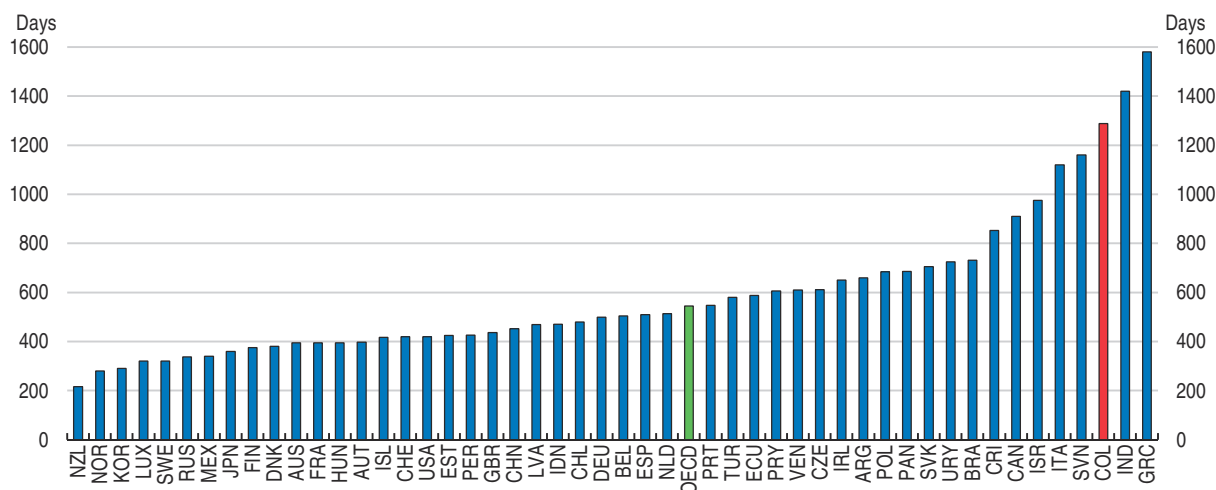
### **Improving contract enforcement and the efficiency of judicial system**

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).

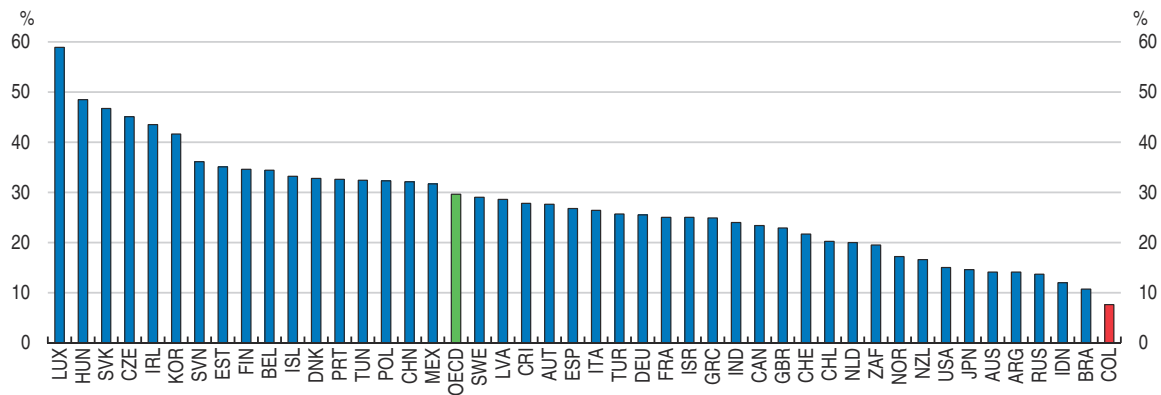
Facilitating GVC participation requires reducing the various fragmentation-related costs of production. Some of these costs accrue at the border (e.g. non-tariff barriers, costs related to customs inefficiencies) but many will accumulate long before reaching the border (e.g. costs related to infrastructure, 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).

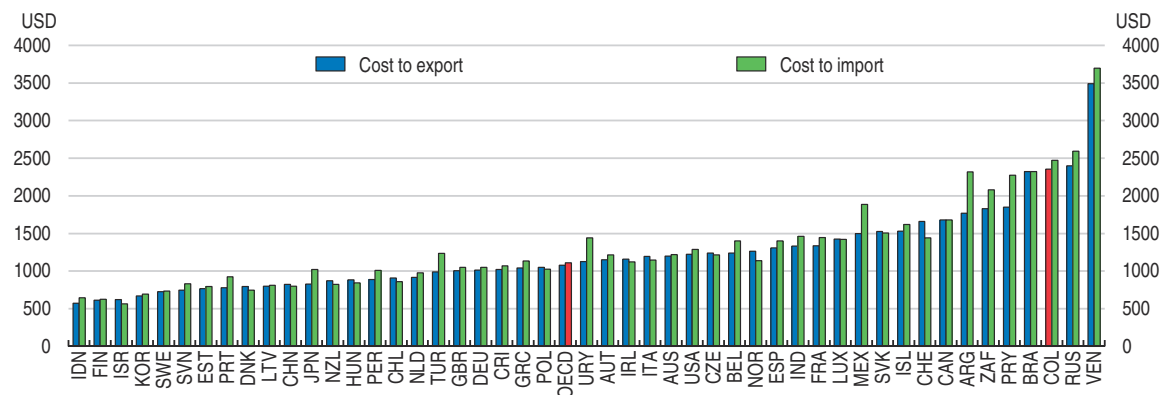
Colombia is a best performer in information availability, involvement of the trade community, simplification and harmonisation of documents and internal border agency cooperation (OECD, 2015e). It matches or exceeds the average performance of upper middle income countries in all Trade Facilitation Index (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.

StatLink  <http://dx.doi.org/10.1787/888933483587>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.



## 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.*