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ECONOMIC ASSESSMENT

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ECONOMIC ASSESSMENT

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This Economic Assessment is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The Economic situation and policies of Costa Rica were reviewed by the Committee on 10 December 2015. The draft was then revised in the light of the discussions.

The Secretariat's draft report was prepared for the Committee by Mauro Pisu, Alberto Gonzalez Pandiella, Adolfo Rodriguez-Vargas under the supervision of Patrick Lenain. Mabel Gabriel provided the statistical research assistance, and Brigitte Beyeler provided the administrative support. The Economic Assessment also benefitted from contributions by Bert Brys, Daniel Blume, Antonio Capobianco, Mabel Gabriel, Isabell Koske, Chandima Mendis, Ryan Parmenter, Dirk Pilat, Horacio Levy, Shruti Singh and Federico Villalobos.

This is the first Economic Assessment of Costa Rica.

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BASIC STATISTICS OF COSTA RICA, 2014

(Numbers in parentheses refer to the OECD average)*

LAND, PEOPLE AND ELECTORAL CYCLE				
Population (million)	4.8		Population density per km ²	93.1 (34.9)
Under 15 (%)	22.7	(18.1)	Life expectancy (years, 2013) ^a	80.0 (80.5)
Over 65 (%)	8.6	(16.0)	Men	77.8 (77.8)
Foreign-born (%, 2011)	8.4		Women	82.2 (83.1)
Latest 5-year average growth (%)	1.2	(0.6)	Latest general election	February 2014
ECONOMY				
Gross domestic product (GDP)			Value added shares (%) ^a	
In current prices (billion USD)	49.7		Primary sector	11.4 (2.6)
In current prices (billion CRC)	26 678		Industry including construction	29.8 (26.5)
Latest 5-year average real growth (%)	4.3	(1.9)	Services	58.8 (71.0)
Per capita (000 USD PPP)	14.9	(39.0)		
GENERAL GOVERNMENT				
Per cent of GDP				
Expenditure ^a	30.7	(42.0)	Gross financial debt ^a	39.7 (112.6)
Revenue ^a	26.1	(37.8)	Net financial debt ^a	(69.5)
EXTERNAL ACCOUNTS				
Exchange rate (CRC per USD)	537		Main exports (% of total merchandise exports, 2013)	
PPP exchange rate (USA = 1)	376		Food and live animals	31.9
In per cent of GDP			Machinery and transport equipment	29.3
Exports of goods and services	35.0	(53.7)	Miscellaneous manufactured articles	17.4
Imports of goods and services	37.2	(49.6)	Main imports (% of total merchandise imports, 2013)	
Current account balance	-4.3	(0.0)	Machinery and transport equipment	36.0
Net international investment position	-43.7		Manufactured goods	15.0
			Chemicals and related products, n.e.s.	14.0
LABOUR MARKET, SKILLS AND INNOVATION				
Employment rate for 15-64 year-olds (%)	61.7	(65.7)	Unemployment rate, Labour Force Survey (age 15 and over) (%)	9.6 (7.3)
Men	75.2	(73.6)	Youth (age 15-24, %)	25.1 (15.0)
Women	48.0	(57.9)	Long-term unemployed (1 year and over, %, 2013)	1.0 (2.5)
Participation rate for 15-64 year-olds (%)	68.4	(71.2)	Tertiary educational attainment 25-64 year-olds (%) ^a	18.4 (33.3)
Average hours worked per year	2 216	(1 770)	Gross domestic expenditure on R&D (% of GDP, 2011) ^a	0.5 (2.4)
ENVIRONMENT				
Total primary energy supply per capita (toe, 2013)	1.0	(4.1)	CO ₂ emissions from fuel combustion per capita (tonnes, 2013)	1.5 (9.6)
Renewables (%, 2013)	51.0	(9.1)	Municipal waste per capita (tonnes, 2012)	0.4 (0.5)
Fine particulate matter concentration (urban, PM ₁₀ , µg/m ³ , 2011) ^c	48.4	(28.0)		
SOCIETY				
Income inequality (Gini coefficient, 2015) ^{b, e}	0.487	(0.308)	Ratio of incomes of the top 10% vs. Bottom 10% (2015) ^{b, e}	32.3 (9.6)
Relative poverty rate (%) ^{b, e}	22.1	(10.9)	Education outcomes (PISA score, 2012) ^b	
Median disposable household income (000 USD PPP) ^b		(21.9)	Reading	441 (496)
Public and private spending (% of GDP)			Mathematics	407 (494)
Health care (2013) ^a	9.9	(9.0)	Science	429 (501)
Pensions ^c	5.7	(8.7)	Share of women in parliament (%, September 2015)	33.3 (27.7)
Education (primary, secondary, post sec. non tertiary, 2013) ^{c, d}	4.6	(3.9)		

Better life index: www.oecdbetterlifeindex.org

* Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

a) 2013 for the OECD aggregate.

b) 2012 for the OECD aggregate.

c) 2011 for the OECD aggregate.

d) Refers to government expenditure.

e) Preliminary data for Costa Rica.

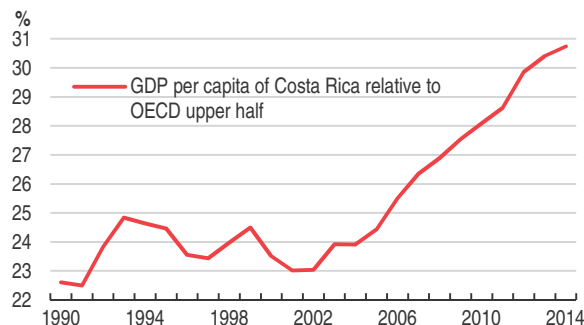
Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund, Inter-Parliamentary Union, United Nations, Costa Rican Ministry of Finance, Tourism Institute, Central Bank of Costa Rica and National Institute for Statistics and Censuses (INEC).

Executive summary

- *Costa Rica's economic, social and environmental achievements are impressive*
- *Budgetary problems have emerged*
- *Policy and institutional reforms will contribute to stronger and more inclusive growth*

Costa Rica's economic, social and environmental achievements are impressive

GDP per capita is increasing



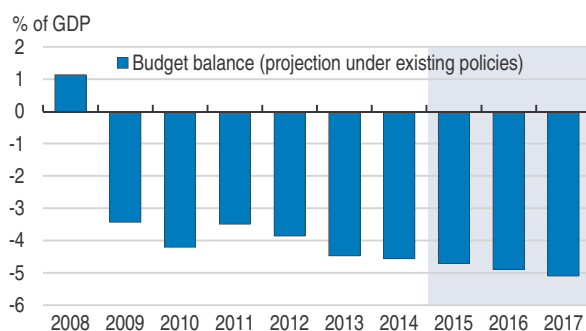
Source: OECD, National Accounts Database and World Bank, World Development Indicators.

StatLink <http://dx.doi.org/10.1787/888933318370>

Costa Rica succeeds in combining rising living standards with sustainable use of natural resources. Incomes per capita have nearly doubled in real terms over the past three decades. Almost universal access to health care, education and pensions has been achieved. Careful management of natural resources has emphasised the protection of forest and the development of renewable energy sources, providing foundations for the strong eco-tourism industry. As a result, the well-being of most Costa Ricans is high, as attested by long life expectancy, poverty rates low by Latin American standards and above-average perceptions of life satisfaction.

It is urgent to restore fiscal sustainability

Budgetary problems are persisting



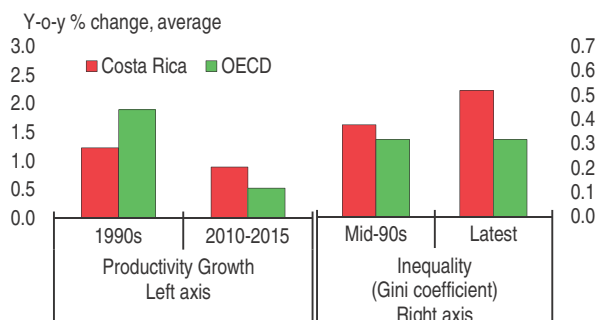
Source: Ministry of Finance of Costa Rica and OECD Economic Outlook 98 Database.

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The public deficit and debt have risen since the start of the 2009 global crisis. Rating agencies have downgraded Costa Rica's debt to below-investment grade and its country risk spread has risen. To restore the fiscal balance it is urgent to raise more tax revenue and curb spending, notably the fast-increasing public-sector wage bill. Improving the fiscal framework by enhancing its transparency and predictability, and reinforcing central government control over public finances would strengthen public-finance management.

Policy and institutional reforms will contribute to stronger and more inclusive growth

Inequality is rising and productivity growth slowing down



Source: OECD, Economic Outlook 98 Database; OECD, Income Distribution Database; Estado de la Nación.

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Despite strong performance, socioeconomic challenges remain. Policy reforms and institutional changes could put Costa Rica on a path of stronger and more inclusive growth. The main priority is to improve the framework of competition policy and state-owned enterprises' governance. Productivity would be enhanced by promoting innovation, access to finance and transport infrastructure. Such reforms need to go hand in hand with making Costa Rica a more inclusive society, especially for women, by improving the quality of education and enhancing the effectiveness of cash transfers in reducing poverty, thus expanding opportunities and sharing prosperity more widely.

MAIN CHALLENGES	KEY RECOMMENDATIONS FOR 2016-17
Restore fiscal sustainability and enhance monetary credibility	
Tax revenues are low and spending is rising fast, pushing public debt to high levels. The public administration is highly fragmented and the Ministry of Finance has limited control over total public expenditure	Cut the central government deficit by 2% of GDP during 2016-17 and an additional 1.5% thereafter by approving and implementing the proposed tax reform, combatting tax evasion, eliminating tax exemptions without an economic or social rationale, and curbing expenditure growth.
The central bank's independence in the conduct of monetary policy can be improved	Introduce a medium-term fiscal framework with a clear and verifiable expenditure rule. Improve public spending efficiency by strengthening the authority of the Ministry of Finance to control overall public-sector expenditure and introducing performance-based budgeting.
Banking-sector competition and financial systemic risks remain concerns	Strengthen the effectiveness of monetary policy to achieve price stability with appropriate institutional reforms, especially by delinking the designation of the President of the Central Bank from the political cycle, and improving accountability rules such as clear motives for his/her dismissal. Establish a deposit-insurance scheme covering all banks to help level the playing field in the banking sector, accelerate the adoption of Basel III principles, and release publicly the results of banks' stress tests.
Make growth more inclusive, especially for informal workers and women	
The labour-market gender gaps are high	Increase the supply of publicly-funded childcare services to facilitate women participation in the labour market.
The minimum wage structure is very complex. One out of three workers is being paid below the minimum wage	Simplify the minimum wage structure and enforce compliance with the law.
The share of informal employment is high by OECD standards and increasing	Adopt a comprehensive strategy to reduce high labour market informality by strengthening enforcement, reducing administrative burdens to entrepreneurship, and enabling the poor to become formal workers.
Spending on education is high, but outcomes are poor. Repetition and drop-out rates are high	Establish better educational outcomes as the main policy target, with special emphasis on improving the performance of disadvantaged students and schools. Develop an apprenticeship system that closely involves employers.
Adopt policy and institutional reforms to boost productivity growth	
Competition is weak and the role of state-owned enterprises is pervasive in many sectors	Give the competition commission more independence and eliminate anti-trust exemptions. Improve the corporate governance of state-owned banks and enterprises by adopting the <i>OECD Guidelines on Corporate Governance of State-Owned Enterprises</i> .
Low productivity growth and barriers to entrepreneurship are hampering income convergence	Strengthen the institutional design to align policies to boost productivity, improve the business environment and reduce barriers to entrepreneurship.
Transport infrastructure is deficient due to a complex institutional setting	Streamline the institutional and legal framework of public-work agencies to achieve better policy design and execution in transport and other infrastructure sectors.

Assessment and recommendations

- *Recent macroeconomic development and short term prospects*
- *Overhauling the Costa Rican fiscal policy framework*
- *Public debt is rising*
- *Monetary policy is moving towards inflation targeting but financial dollarisation remains high*
- *Promoting inclusive and sustainable growth in Costa Rica*
- *Boosting potential output growth and productivity while protecting the environment*

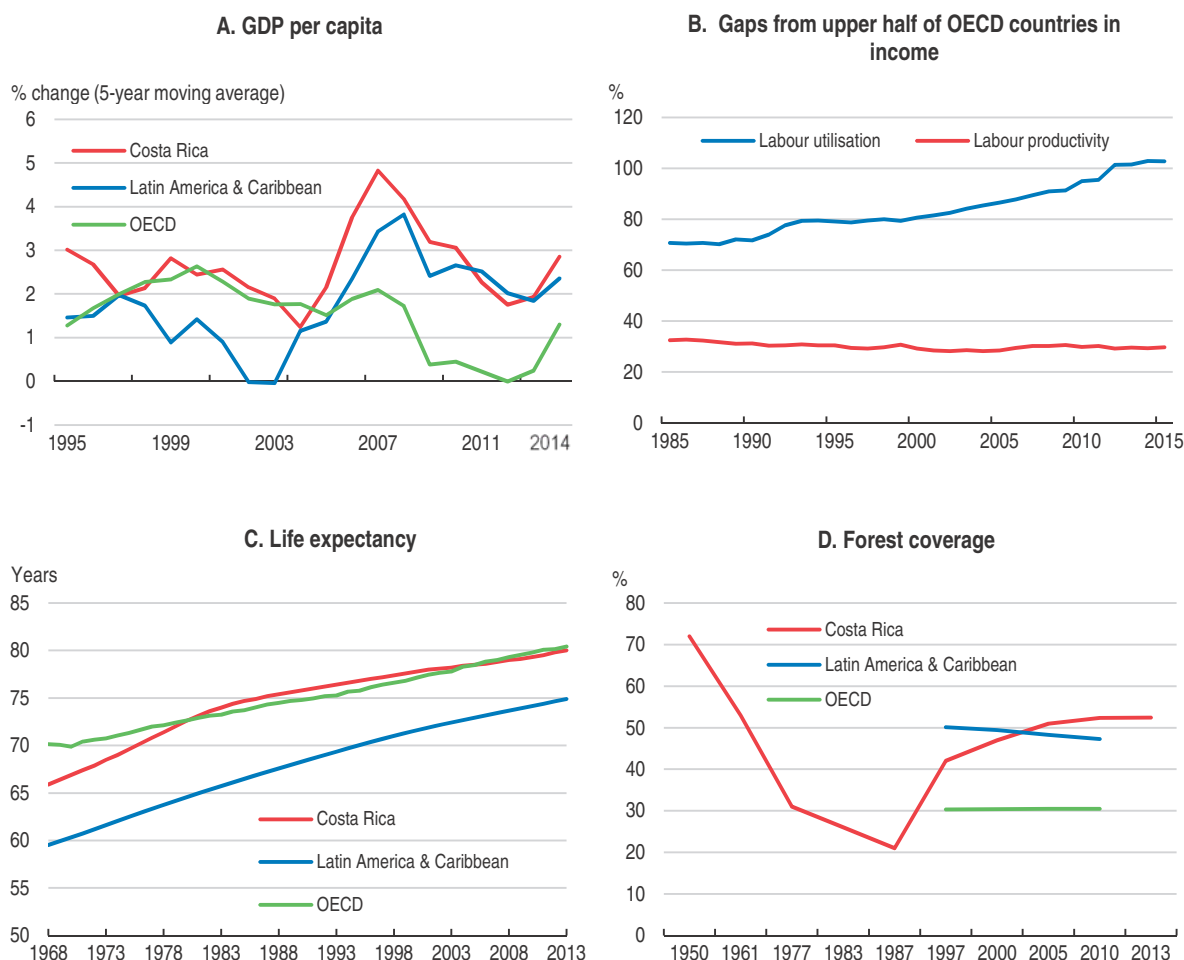
Costa Rica's strong performance combines rising living standards and a sustainable use of natural resources. In the past three decades, real GDP per capita has nearly doubled (Figure 1), as the economy has evolved from a rural and agriculture-based economy to one with high value-added industries linked into global value chains. The process of opening up to international trade and attracting foreign direct investment (FDI) that started in early 1980s has diversified the country's production structure, boosted exports and labour force utilisation (Figure 1).

Virtually universal health care, pension and primary education systems have led to relatively low infant mortality, long life expectancy (close to 80 years) and low poverty by Latin American standards. Costa Rica has also built a world-renowned green trademark and a strong eco-tourism industry based on wise management of natural resources focusing on forest protection and renewable energy sources. These successes are reflected in well-being indicators, which are comparable or even above the OECD average in several dimensions (Figure 2). Costa Ricans' life satisfaction is high when compared to OECD countries (Figure 3). Costa Rica ranks also above the OECD average in the community dimension, indicating a high quality social support network. It ranks similar to the OECD average in health and environment. By contrast, education stands out for its large gap with OECD countries.

However, challenges have emerged in Costa Rica's development process. Intel's recent decision to replace its manufacturing plant by an R&D centre suggests that Costa Rica should keep up its structural reforms to shift from labour-intensive sectors toward more knowledge-intensive activities. Also, while export-oriented firms are dynamic and innovative due to inward FDI and well-developed links with global value chains, domestic firms concentrate on low value-added activities, employ unskilled workers and often operate in the informal economy, which account for about 40% of total employment. Spillovers from FDI to local firms are negligible and the country's overall productivity growth has been disappointing. During the recent financial crisis, fiscal problems have resurfaced, with fast-rising public deficit and debt, calling the fiscal sustainability of current policies into question. As a result, in 2014 rating agencies downgraded Costa Rica's debt to below-investment grade.

This first *Economic Assessment of Costa Rica* argues that the government should focus on:

- Boosting productivity to avoid the middle-income trap and undertaking structural reforms focussing specifically on competition, corporate governance of state-owned enterprises, innovation, education, access to finance and transport infrastructure.
- Making Costa Rica more inclusive by improving social policies, the quality of education, and reducing informality, thereby expanding opportunities and sharing prosperity across all Costa Ricans, especially women.
- Strengthening the institutional framework, notably reducing fragmentation; it is crucial to enhance the Ministry of Finance's control over public finances and deficit reduction.

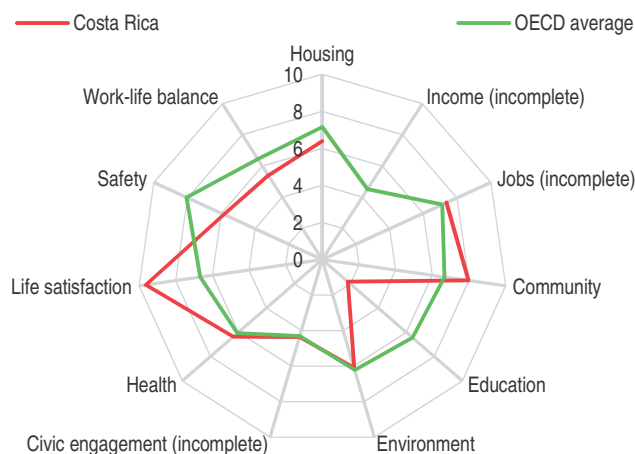
Figure 1. **Costa Rica's economic, social and environmental track record is strong**

Note: Panel A: Annual growth of GDP per capita at PPP, constant 2011 international USD (5-year moving average). Panel B: OECD calculations based on The Conference Board Total Economy Database™. Panel C: Life expectancy at birth for all population. Panel D: Latin America & Caribbean (all income levels) and OECD members data comes from the World Bank, World Development Indicators; forest area data refers to land under natural or planted stands of trees of at least 5 meters in situ, whether productive or not, and excludes tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens. For Costa Rica, data comes from the Ministry of Environment, Energy and Telecommunications of Costa Rica; forest coverage refers to some form of forest such as mature forest, secondary forest, deciduous forest, etc.

Source: OECD Health Statistics 2015; World Bank, World Development Indicators; The Conference Board Total Economy Database™; and, Ministry of Environment, Energy and Telecommunications of Costa Rica.

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Figure 2. Well-being indicators are comparable with OECD average
Better Life Index approximation (preliminary and incomplete)

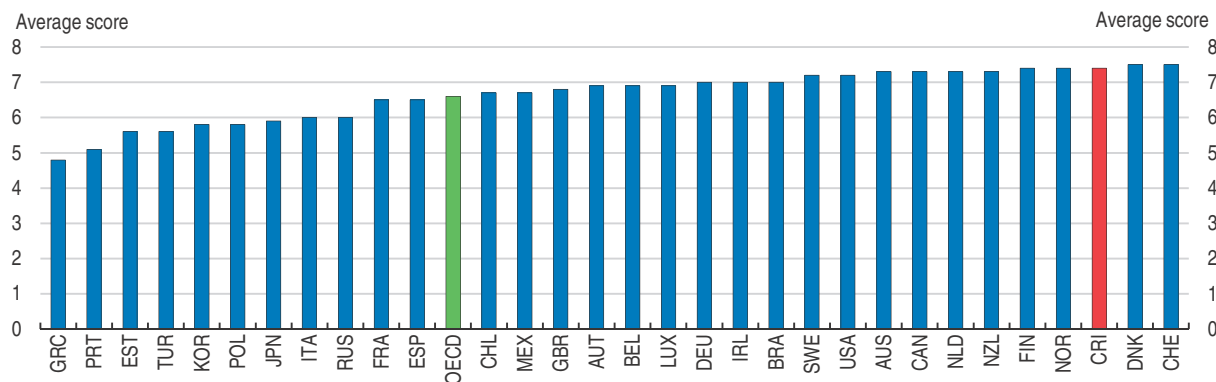


Note: Each well-being dimension is measured by one to four indicators taken from the OECD Better Life Index set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 (worst) according to the following formula: (indicator value – minimum value) / (maximum value – minimum value) x 10.

Source: For Costa Rica: National Institute of Statistics and Censuses (INEC); National Electoral Tribunal (TSE); and Gallup (2015), Gallup World Poll Database. For OECD average: OECD Better Life Index Database.

StatLink <http://dx.doi.org/10.1787/888933318411>

Figure 3. Life satisfaction is high
Life satisfaction, average score 2014



Note: The reference year is 2014 for all countries with the exception of 2013 for Chile. The indicator considers people's evaluation of their life as a whole. It is a weighted-sum of different response categories based on people's rates of their current life relative to the best and worst possible lives for them on a scale from 0 to 10, using the Cantril Ladder (known also as the "Self-Anchoring Striving Scale").

Source: OECD Better Life Index – Edition 2015 Database and Gallup World Poll Database (Gallup, 2015).

StatLink <http://dx.doi.org/10.1787/888933318424>

Table 1. Key indicators
2014 or most recent year available

Indicator	Costa Rica	Latin America and Caribbean average	Costa Rica ranking (the lower the value means that the country is better ranked or smaller in terms of surface and population)		
			World	OECD plus Costa Rica	Latin America and Caribbean
Country size					
Surface area (1 000 km2)	51	601	127	26	19
Population (1 000)	4 938	18 279	118	29	18
Labour force (1 000)	2 348	9 913	116	30	18
GDP at PPP (current billion USD)	71	264	83	31	14
External trade (billion USD)	36	88	98	34	12
Indicators of development					
GDP per capita at PPP (current USD)	14 374	13 867	82	35	14
Gini coefficient (0-1 scale)	0.487	0.490		34	9
S90/S10 income decile share	32.3	28		35	
Female labour force participation rate (%)	51	57	138	33	23
Share of women in parliament (%)	39	20	18	9	4
Human development index	0.76	0.72	68	33	11

Note: Latin America and Caribbean (all income levels, as per the World Bank, except for seven countries for which there are no recent data such as Aruba, Cayman Islands, Curacao, St. Martin, Turks and Caicos, Virgin Islands) average is unweighted and based on the number of countries with available data for each indicator. World includes around 215 countries, although data sometimes is not available for all of them. Regarding Costa Rica ranking, the lower the value the better ranked the country. External trade is the sum of exports and imports of goods and services (current USD). Gini coefficient refers to Gini (disposable income, post taxes and transfers); data for OECD and Costa Rica comes from OECD Income Distribution Database (IDD), provisional estimate for Costa Rica for 2015; for Latin America and Caribbean, it comes from World Bank World Development Indicators. The S90/S10 ratio is the share of all income received by the top decile divided by the share of the first, or the ratio of the average income of the top decile to that of the first. Preliminary data for Costa Rica for 2015. Female labour force participation rate refers to the % of female population ages 15-64 (modeled ILO estimate). Human Development Index is a composite index measuring average achievement in three basic dimensions of human development – a long and healthy life, knowledge and a decent standard of living. The index measured on a scale from 0+ lowest to 1+ highest possible value. Source: World Bank, World Development Indicators; OECD Income Distribution Database (IDD); ENAHO 2012, and UNDP Human Development Reports, Table 1: Human Development Index and its components.

Recent macroeconomic development and short term prospects

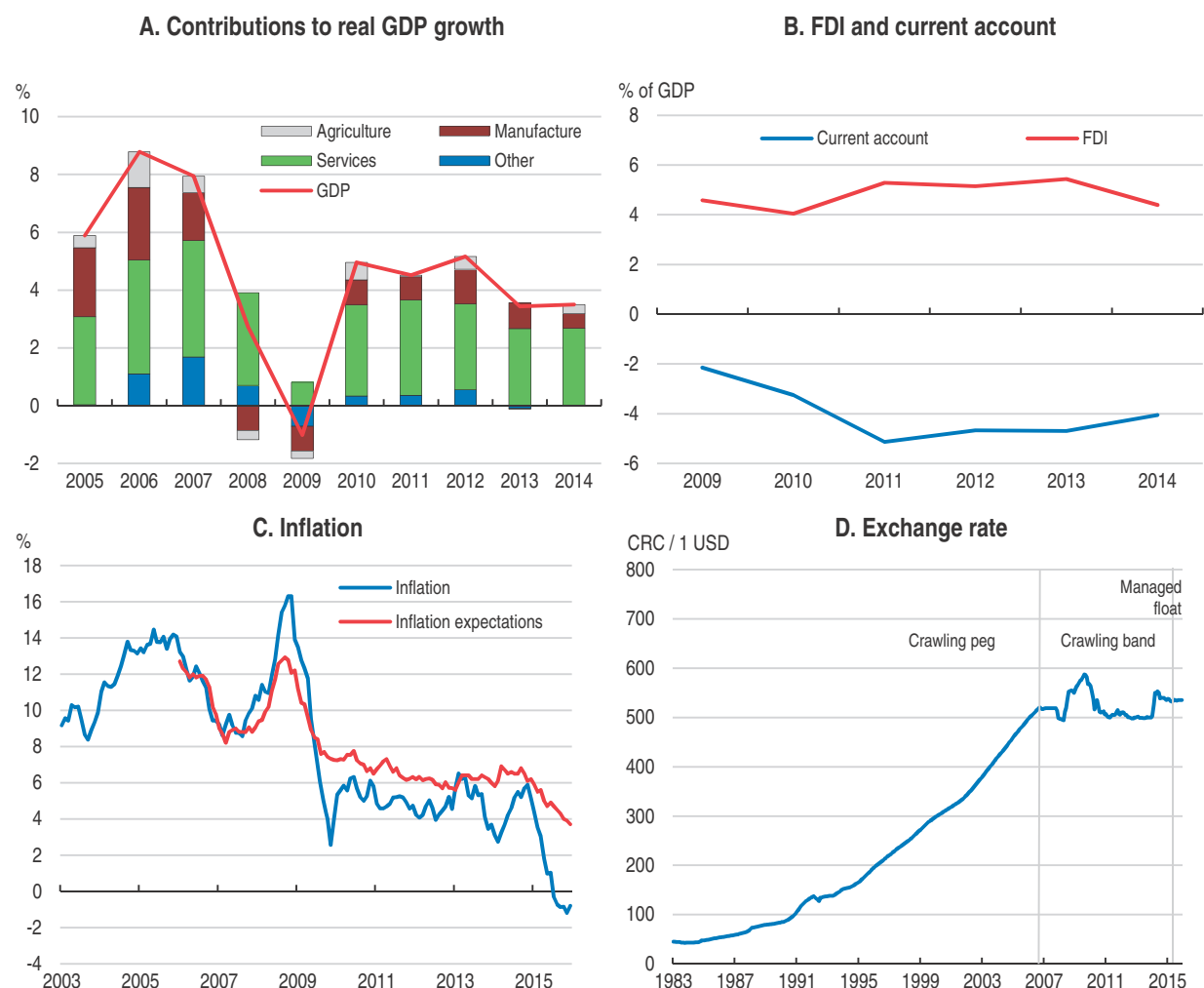
The economy is recovering from a sharp slowdown

The 2009 global crisis hit Costa Rica and the economy went into recession, with GDP slowing from about 7.5% over 2005-07 period to -1% in 2009 (Figure 4). The rebound was rapid, but growth has since been less buoyant than before the crisis and the labour market remains weak, with high unemployment and rising informality. Inflation has been on a declining trend since 2009 and even turned negative in mid-2015, reflecting falling commodity prices, spare capacity in the economy and exchange-rate appreciation. Besides, inflation expectations have declined, albeit less markedly.

GDP growth is estimated to have fallen below 3% in 2015, mainly on account of the Intel plant closure and its significant impact on exports. The El Niño phenomenon also hit agriculture. Low inflation has boosted households' purchasing power, buttressing private consumption. Public infrastructure investments are also supporting activity. With the economy slowing down and inflation sharply lower, the central bank (BCCR) has adopted a supportive monetary policy stance. It cut the benchmark interest rate from 5.25% in January 2015 to 1.75% in January 2016, well below the nominal neutral interest rate of 4.6% – as estimated by an expectation-augmented dynamic Taylor rule, as in Magud and Tsounta (2012).

Activity is set to accelerate in 2016-17, as global growth and export markets gain momentum gradually. Unemployment is likely to remain above 9%. Inflation has

Figure 4. The crisis has left lingering effects



Note: Panel C: Inflation expectations are one year ahead.

Source: Central Bank of Costa Rica; National Institute of Statistics and Censuses (INEC); Inter-institutional Foreign Direct Investment Group.

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undershot the previous central bank target range of 3-5%, owing to low oil prices and the stability of the exchange rate. In January 2016, the central bank lowered the inflation target range to 2-4%, reflecting persistently low inflation and in line with inflation developments in main trading partners. Inflation is projected to gradually move to the new target range as the economy strengthens. The expected gradual normalisation of US monetary policy might result in lower capital inflows and currency depreciation.

As Costa Rica is a small open economy, shocks to its trading partners, notably the United States, will have an important impact on growth, though its limited exposure to China (5% of exports) protects it from the import decline of that country. Terms of trade improved in 2015, and further declines in energy prices would raise incomes and growth. On the downside, the normalisation of US monetary policy could put pressure on the exchange rate, causing tensions in the financial system and, as the private's sector is highly dollarised, hurting consumption and investment. Failure to implement the proposed fiscal reform (see below) would result in deficit and debt increases, calling the

fiscal sustainability of current policies into question. In addition, Costa Rica could face large shocks whose effects are difficult to assess and that, for this reason, have not been factored into the projection (Box 1). On the positive side, Costa Rica is well protected by the high level of international reserves held by the Central Bank (about USD 8 billion, 15% of GDP) and by the favourable currency composition of sovereign debt (about two thirds of central government debt is denominated in domestic currency).

Table 2. Macroeconomic indicators and projections

Annual percentage change, volume (1991 prices)

	2011	2012	2013	2014	2015	2016	2017
	Current prices, billions CRC	Percentage change, volume (1991 prices)					
GDP	20 852	5.2	3.4	3.5	2.9	4.1	4.2
Private consumption	13 596	4.2	3.3	3.9	4.4	4.4	4.5
Government consumption	3 731	1.0	2.8	3.5	3.1	2.1	2.0
Gross fixed capital formation	4 168	8.0	12.3	4.5	8.3	6.1	4.3
Final domestic demand	21 495	4.8	5.5	4.0	5.1	4.4	4.0
Stockbuilding ¹	396	0.1	-2.7	-1.7	1.4	-0.2	0.0
Total domestic demand	21 891	4.8	2.6	2.4	6.5	4.2	4.0
Exports of goods and services	7 759	9.3	3.6	-1.7	-8.2	4.6	5.7
Imports of goods and services	8 798	8.7	2.1	-4.0	-2.0	4.9	5.4
Net exports ¹	(1 039)	0.4	0.9	1.2	-3.3	-0.1	0.1
Other indicators							
Unemployment rate ²	-	10.2	9.4	9.6	9.5	9.3	9.2
Consumer price index ³	-	4.5	5.2	4.5	0.8	1.5	2.4
Current account balance ⁴	-	-5.3	-5.0	-4.9	-4.0	-4.0	-3.9
General government financial balance ^{4, 5}	-	-3.9	-4.5	-4.6	-4.7	-4.9	-5.1
General government debt ⁴	-	35.6	36.6	39.7	43.7	45.3	46.6

1 Contribution to changes in real GDP, actual amount in the first column.

2 Average of quarterly data.

3 Annual average per cent change.

4 As a percentage of GDP.

5 Based on information included in the budget law for 2015. It does not include the effect of tax reforms bills currently under discussion in the Parliament.

Source: OECD (2015a), OECD Economic Outlook 98 Database (updated).

Box 1. Main vulnerabilities surrounding Costa Rican economy's prospects

Uncertainty	Possible outcome
Environmental risks and natural disasters	Changing weather patterns, such as stronger El Niño phenomenon and global warming in general, could disrupt agricultural production and related manufacturing activities. Severe earthquakes would affect infrastructure and other constructions.
International economic developments	Disruptions in international financial markets might put pressure on the exchange rate, causing tensions in the banking system as the private sector's debt is highly dollarised.
FDI flows	A sudden stop in FDI flows, due to international market turbulence and incapacity to tackle infrastructure and education bottlenecks, will hurt prospects to climb the value added chain and slow considerably or stop the convergence process in GDP per capita.
Access to international sovereign bond markets	Failure to introduce fiscal consolidation measures would result in the budget deficit rising to higher levels, with the risk of foreign investors stopping to buy Costa Rican sovereign bonds.
Reform process	Continued fragmentation in the Legislative Assembly might make the timely approval of comprehensive reforms difficult.

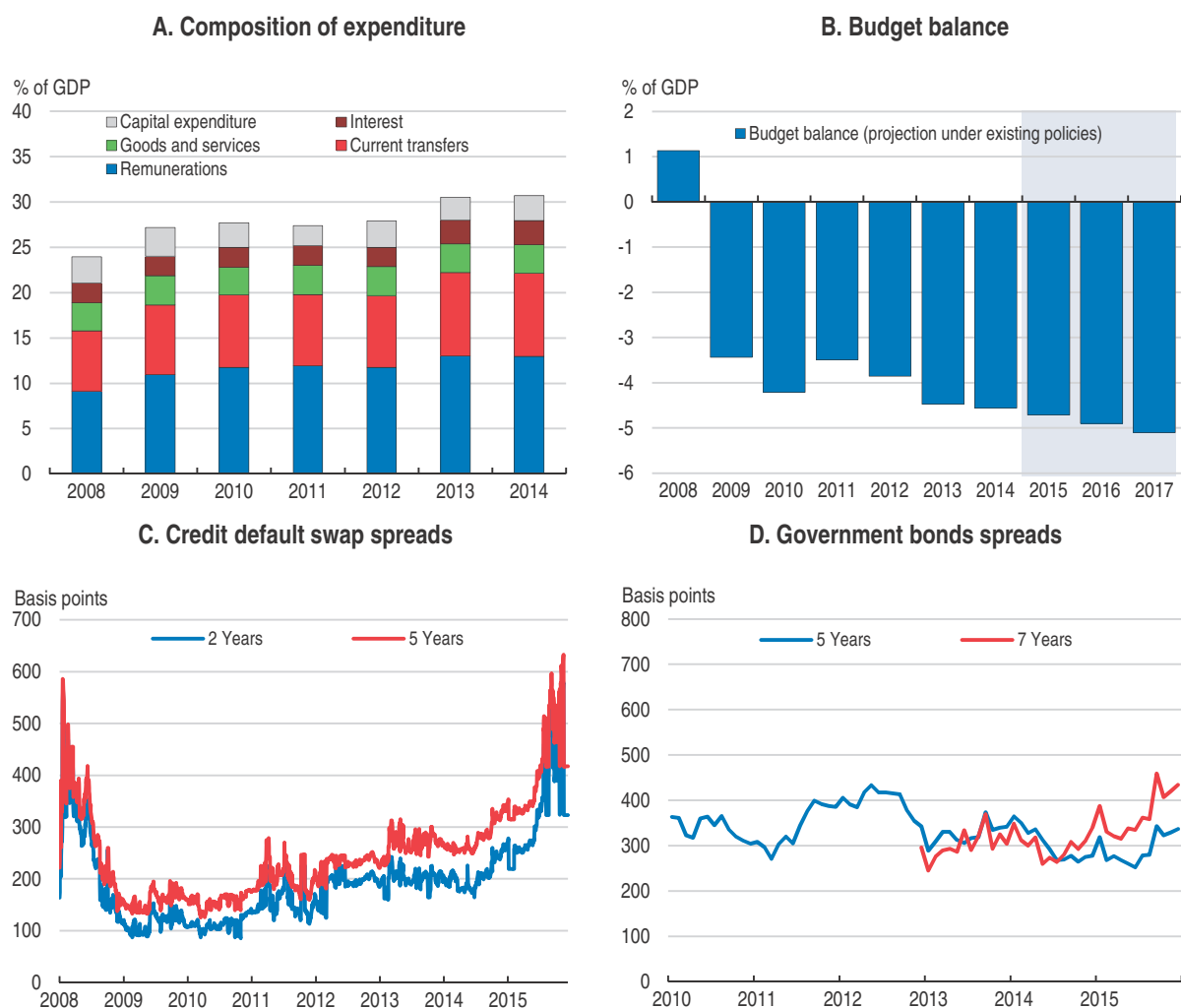
The government has proposed a wide-ranging tax reform to start tackling fiscal problems

The general government budget deficit is expected to reach 4.7% of GDP in 2015, from a slight surplus in 2008, and to exceed 5% of GDP in 2017, based on existing policies. The rise in the public deficit is mostly attributable to increases in government spending, due largely to the fast rising public-sector wage bill (Figure 5). Public debt has grown rapidly from 28% of GDP in 2009 to more than 40% in 2015 and the ratio of debt to tax revenue has increased from 1.3 to 1.7 times over the same period. Credit default swaps spreads have increased and agencies have lowered Costa Rica's credit rating below investment grade, although government bond spreads are at the same level as in 2012.

The government is aware of the fiscal challenge and since 2014 has sought to reduce the growth of current non-interest expenditure. Spending restraints and tax reform are necessary. The government is working to bring the budget back to a medium-term sustainable path. The central government budget deficit increased from 5.7% of GDP

Figure 5. The fiscal outlook is challenging

General government, % of GDP at market prices



Note: Credit default swaps refer to two-year and five-year senior debt, mid-rate spreads. Costa Rica government bonds spread is relative to US government bonds.

Source: Ministry of Finance of Costa Rica; OECD (2015a), OECD Economic Outlook 98 Database; Thomson Reuters; and Bloomberg.

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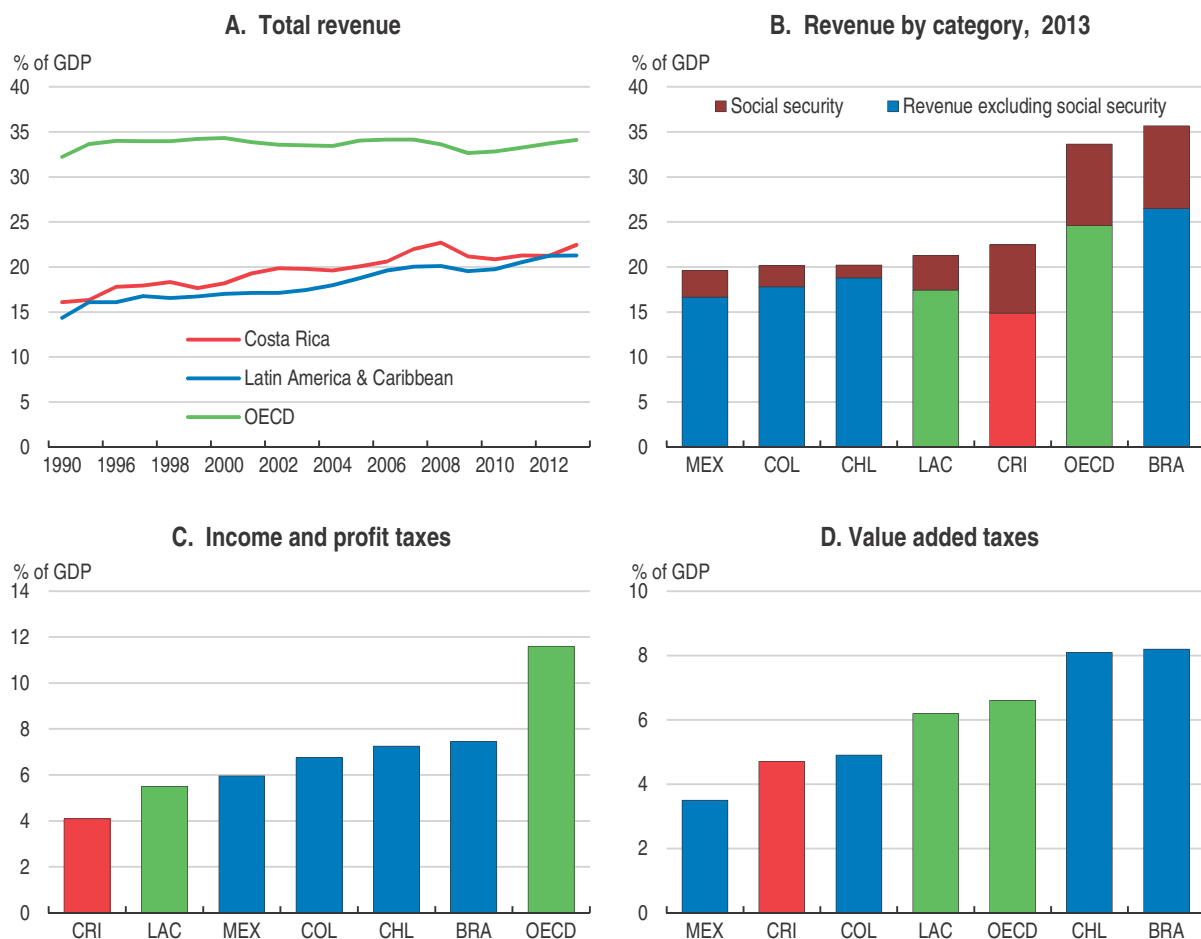
in 2014 to about 6% of GDP in 2015, partially an account of rising interest payments, which have reached 2.8% GDP. The budget approved by Congress for 2016 implies that the deficit might increase further in the absence of new measures. The package of tax reforms envisaged by the government, as discussed below, together with stricter expenditure control by the Ministry of Finance, if legislated and implemented, would lead to a deficit reduction of about 2% of GDP during 2016-17.

Tax revenue is close to the Latin American average but substantially lower than in OECD countries (Figure 6). The overall fiscal system is overly reliant on social security contributions, which account for about 34% of total government revenue, against 18% in Latin American and 27% among OECD countries. The contributions of income taxes and VAT are lower than in other Latin America countries and, especially, OECD countries because of tax evasion, a narrow tax base and low marginal tax rates. The current standard VAT rate is 13%, considerably below the 19.1% average rate for OECD countries. A large amount of personal income is not taxed since the tax-free threshold is around twice the average wage in the private sector – much higher than OECD countries and comparable Latin America countries such as Mexico and Chile.

To start tackling the fiscal problems, the Government has proposed two bills to increase revenue by about 2% of GDP. Most of the increase, about 1.3% of GDP, is to come from the introduction of a full-fledged VAT system; around 0.6% of GDP from income tax reforms, and the rest from a revision of taxes on sales of property. According to the government, these bills should increase overall revenue by 1.56% of GDP during the first year after their approval, by another 0.45% in the second year, and another 0.08% in the third. The reform is consistent with OECD evidence showing that broadening tax bases and relying more on VAT reduce the detrimental effects of higher taxes on economic growth and employment (OECD, 2008; OECD, 2010b).

The proposed VAT bill will broaden the base to include most services, which are currently exempt, and increase the rate from 13% to 14% in the first year and to 15% in the second year. While broadening the tax base, the VAT bill still contains numerous exemptions and reduced rates. VAT exemptions benefit mostly well-off taxpayers (Barreix, 2014) and complicate tax administration; for these reasons they should be repealed, especially as the bill also introduces an innovative VAT refund system to compensate the poorest 40% households. The VAT refund system is a positive step as, if implemented correctly, will drastically reduce the regressivity of the VAT reform. The proposed VAT reform will not have a significant impact on inequality, but it is expected to lower the poverty rate by about 3 percentage points.

The government also proposes to introduce two new top brackets in the personal income tax, with rates of 20% and 25%, at 5 and 10 times the average income, which would slightly raise the progressivity of the personal income tax (Figure 7). However, average tax rates would remain very low and the tax-free threshold would still be high. As a reference, while on average for OECD countries a worker earning the average wage pays 25.5% of her gross wages in personal income tax and social security contributions, in Costa Rica that figure would not be reached even at 10 times the average wage. Besides, in Costa Rica the income-tax-free threshold is almost twice the average wage – against about 0.3 times the average wage in OECD countries on average. As a result, only around 14% of Costa Rican wage earners pay any income tax. Income taxes could generate more revenue by lowering the tax-free threshold and bringing more households in the tax net.

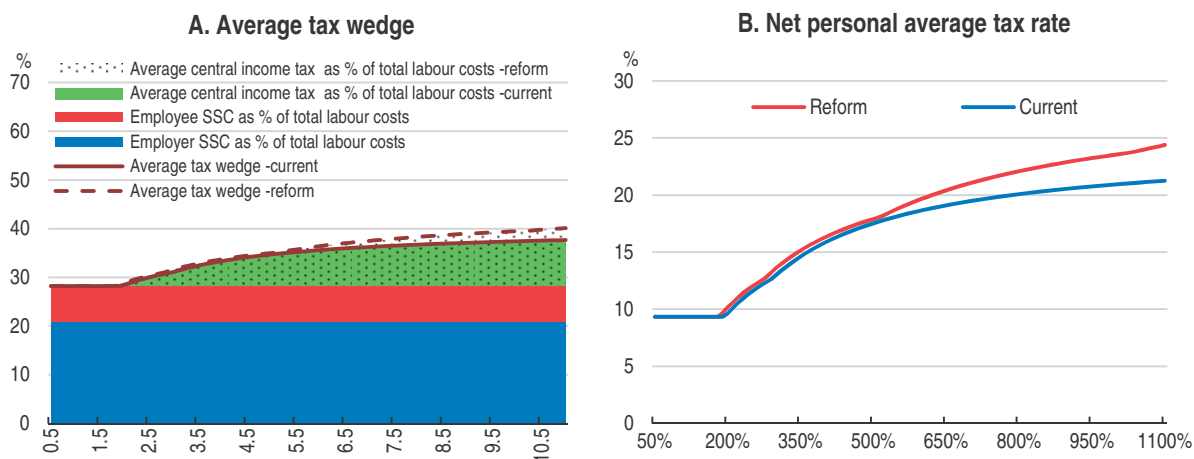
Figure 6. **Fiscal revenue in Costa Rica is lower than in OECD countries**

Note: Data expressed as percent of GDP at market prices. OECD is an unweighted average of 2012 data for member countries. LAC is an unweighted average of 20 Latin America & Caribbean countries. Chile and Mexico are also part of the OECD group. Panel A: OECD data for 2013 calculated by applying the unweighted average percentage change for 2013 in the 30 countries providing data for that year to the overall. Panel B: Mexico and OECD data for 2012. Panel C: OECD average for 2013 estimated by applying the unweighted average percentage change for 2013 in the 31 countries providing data for that year to the OECD average for 2012. Panel D: OECD data up to 2012. Source: OECD (2015d), OECD Revenue Statistics; IDB/CIAT (2015), *Latin America and the Caribbean Fiscal Burden Database, 1990-2013*.

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The government should reassess the usefulness of the numerous tax expenditures, which reduced government revenue by almost 6% of GDP in 2013 (Ministerio de Hacienda, 2014b). Currently there are more than 1 200 tax expenditures. Only about one-fifth of exemptions have a time limit and nearly half are badly defined (Estado de la Nación, 2014). The government has proposed to eliminate some of these tax exemptions by taxing capital gains and profit remittances to foreign shareholders at a flat rate of 15%. However, some entities would remain exempt from income taxes, such as large cooperatives in the agricultural sector. Comprehensive evaluation of tax exemptions and expenditures, such as what the export promotion agency recently conducted (PROCOMER, 2015), should be used more widely to inform decisions.

The corporate income tax rate will be kept at 30% but the tax schedule for SMEs will switch from two brackets (10 and 20%) to four (from 10 to 25%). Although the change in how the tax brackets' thresholds are determined (from gross income to profits) is welcome, overall the reform will increase the complexity of the tax system by raising the number of

Figure 7. **The tax reform will raise the progressivity of the personal income tax by little**

Note: Data for 2015 Q2. The tax wedge is the difference between labour costs to the employer and the net take-home pay of the employee expressed as percentage of total labour costs (gross wages plus employer social security contributions); the net personal average tax rate is computed as the personal income tax and employee social contributions expressed as a percentage of gross wage earnings (OECD, 2015e). The average wage used as CRC 407 857 per month, computed for workers in sectors B to N of the International Standard Industrial Classification revision 4, data provided by INEC from ECE survey.

Source: Estimation based on OECD (2015e), *OECD Taxing Wages Model*.

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tax rates. Multiple tax rates result in unequal treatment of similar taxpayers and curtail SMEs' growth (OECD, 2015j). Evidence from OECD countries indicate that preferential tax treatments for SMEs are not likely to be justified; eliminating or reducing them could free resources for cuts in the statutory corporate tax rates (OECD, 2010b). Moving to two corporate tax rates – one for larger companies one for SMEs – or, even better, to a single one might be a simpler and more efficient way to raise revenue.

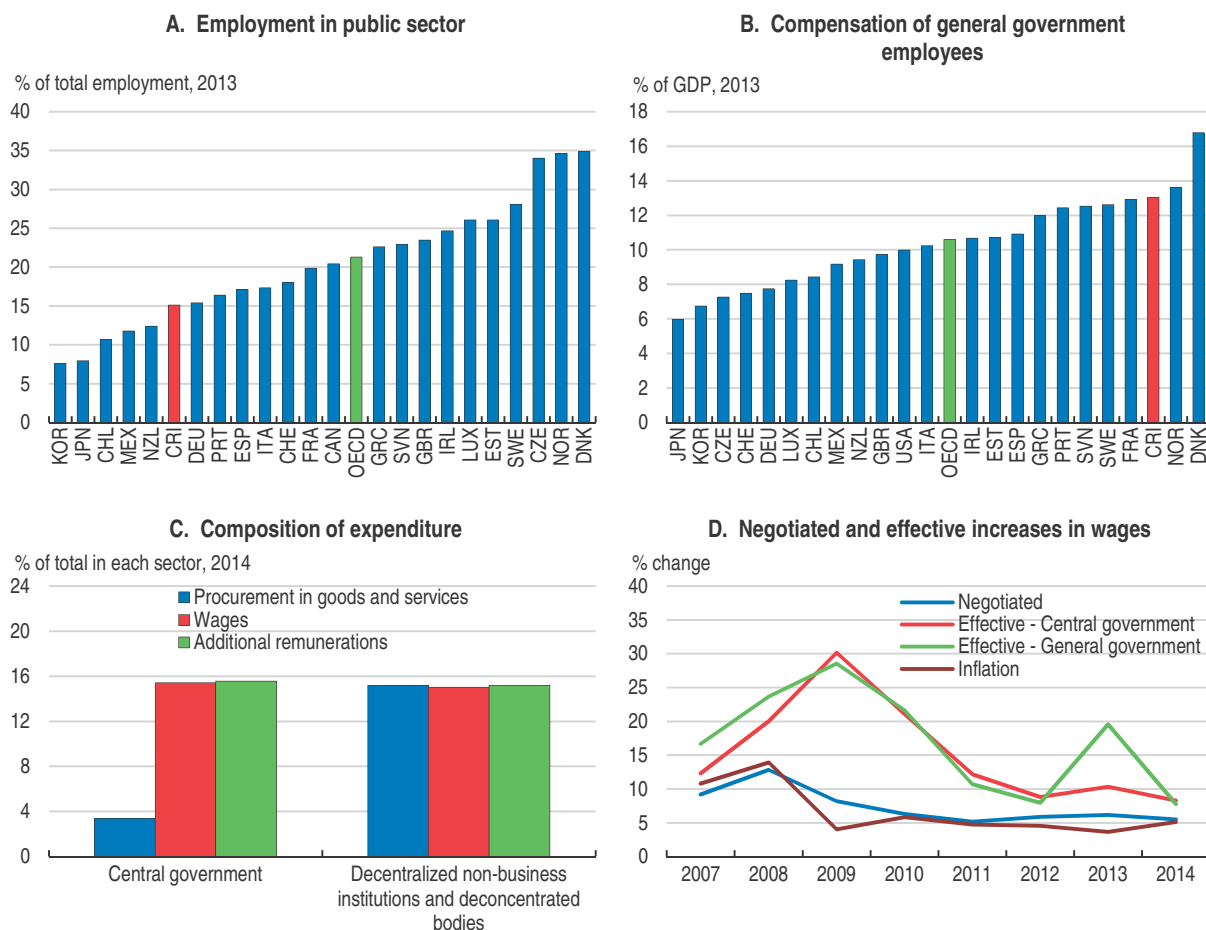
Another important aspect of the reform enhances the administrative and punitive capacities of the tax administration, which is warranted given that tax evasion in Costa Rica amounts to around 8% of GDP (Ministerio de Hacienda, 2013). Brys (forthcoming) presents in detail remaining aspects of the tax system and reform.

In the medium-term, Costa Rica would greatly benefit from a rebalancing of the tax mix. Shifting taxation away from social security contributions towards less distortive or more progressive taxes – such as VAT, or income and property taxes – would have a positive effect on stimulating growth and formal employment in addition to reducing inequality and poverty (more below).

Public employment reform is urgent to control the public sector wage bill

Costa Rica's public-sector wage bill as a share of GDP is higher than in most OECD countries, even though its public employment share is among the lowest, and public-sector wages account for a large share of total government expenditure (Figure 8). Also the public-private sector wage difference is large especially for low-skilled employees and for employees of public-sector agencies outside the central government (Figure 9).

Reforming public-sector employment to improve the quality of public services as well as to control the growth in the public sector wage bill is urgent. Reforms of the public employment regime should centre on simplifying and making more transparent the

Figure 8. **Public employment is low and the wage bill high**

Source: OECD (2015n), *OECD Government at a Glance 2015*; National Institute of Statistics and Censuses (INEC); Ministry of Finance; Comptroller General Office; official diary *La Gaceta of Costa Rica*.

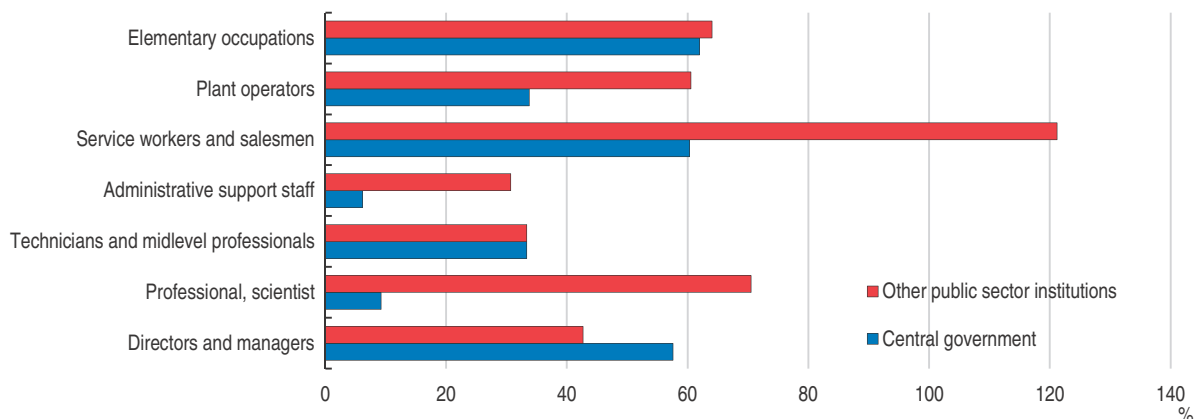
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different remuneration schemes across the whole public sector. Last September, the Government created a Joint Commission formed by legislators, representatives from the executive, trade unions and private sector to address three issues: quality of public services, remuneration systems of the public sector and sustainability of pension regimes. The Government has also taken action to re-negotiate abusive clauses on collective labor agreements, particularly in state-owned enterprises. More efficient and fair management of compensation should also tie salary increases to performance evaluation and not just to seniority. In this matter, the Government presented to the Legislative Assembly a bill that limits the pay increases for the whole public sector and also establishes a new performance management system.

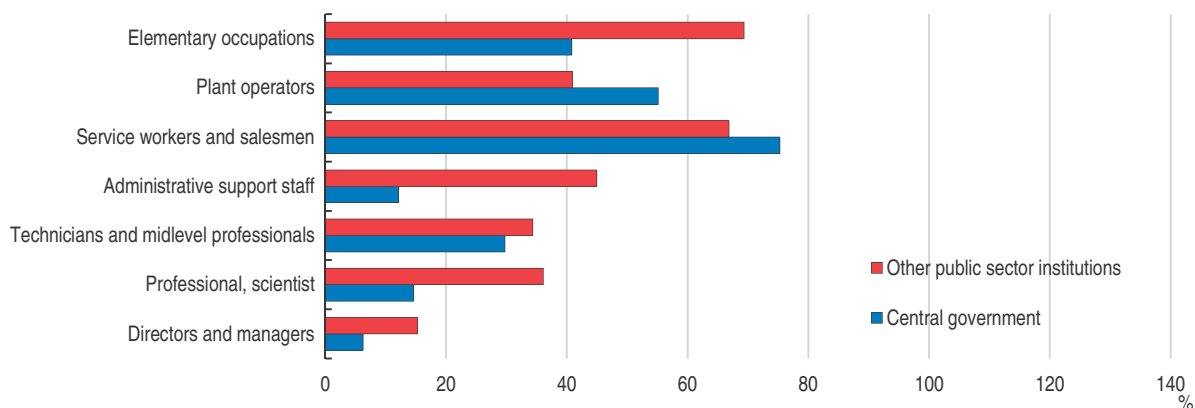
Controlling the public-sector wage bill is made difficult by a highly fragmented public employment regime. Remuneration in the public sector comprises a base salary and several additional remunerations; the Civil Service Regime alone has close to 190 additional types of remuneration (MIDEPLAN, 2012) and other public employment regimes, such as those of agencies outside the central government, state-owned enterprises, the Supreme Court of Justice and the Legislative Assembly, have also several additional types of remuneration. Additional remunerations are so high they often are

Figure 9. The public-private sector wage gap is large
 % difference relative to private sector, total gross income average

A. 2010



B. 2014



Source: OECD calculations based on ENAHO.

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above base salaries. The heterogeneity of pay schemes generates distortions and inequalities as positions with similar requirements have dissimilar pay, which also hampers workers' mobility (CGR, 2009; Academia de Centroamérica, 2014).

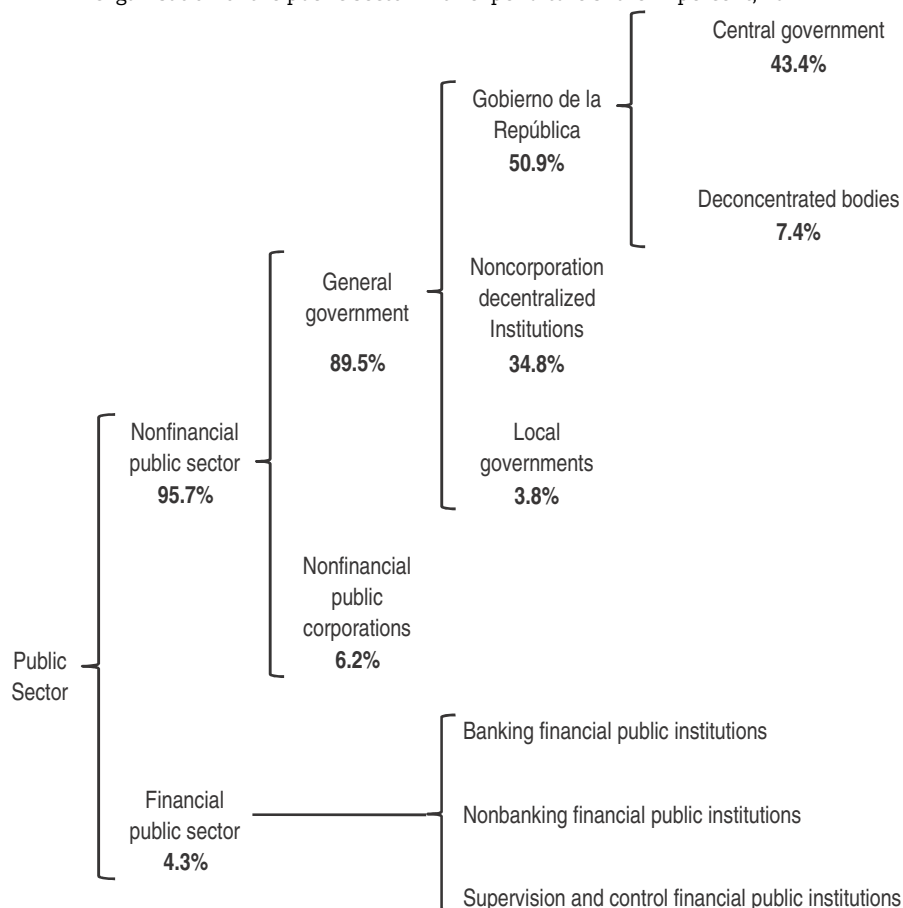
Overhauling the Costa Rican fiscal policy framework

Costa Rica's public sector is highly fragmented, resulting in the Legislative Assembly approving less than half of total public sector expenditure (Figure 10). Spending not subject to parliamentary approval includes agencies with some degree of autonomy, namely "deconcentrated" and decentralised institutions and public corporations. The yearly budgets of these institutions, as those of the public corporations, do not have to be approved by the Legislative Assembly but by the Comptroller General, and approval is from a legal rather than a policy standpoint. In addition, there is no effective mechanism to ensure that these agencies' objectives are aligned with those of the central government

(OECD, 2015f). Strengthening the control of the Ministry of Finance over public-sector expenditure is therefore necessary to durably improve public-finance management and rationalise transfers to public-sector agencies outside the central government.

Figure 10. The public sector of Costa Rica is highly fragmented

Organisation of the public sector with expenditure share in percent, 2014



Source: Ministerio de Hacienda (2014a), Ministerio de Hacienda (2014c).

Reducing mandated spending and revenue earmarking would make the budgetary process more flexible in responding to unexpected shocks. In 2014, around 70% of central government expenditure was mandated by constitutional and other legal provisions (Table 3); This, plus, debt servicing, leave only about 17% of the Central Government's budget for discretionary spending. Such extensive use of revenue earmarking and mandated spending contrasts with the principles OECD Recommendation on Budgetary Governance and should be reduced (OECD, 2015b). Reducing budget rigidities could be complemented with the introduction of performance budgeting that would enable to allocate and revise spending based on output targets. Performance budgeting could strengthen incentives to raise public spending efficiency but these should be balanced by the risk of making the yearly budget overly complex and the difficulties in defining unambiguous targets (OECD, 2015l).

The Ministry of Finance publishes annually a "Medium-term fiscal and budgetary framework", but this does not enforce boundaries for spending (OECD, 2015c). The

Table 3. **Costa Rica's central government budget is excessively rigid**
2014

Total budget expenditure	100.0%
Constitutional and legal mandates	69.0%
Debt service	14.1%
Others	16.9%

Note: Others include procurement of goods and services, capital spending, transfers to "de-concentrated" agencies and wages other than education and the judiciary.

Source: OECD calculations based on Ministerio de Hacienda (2014).

constitution contains provisions for implementing a sustainable fiscal policy that are consistent with the OECD *Principles of Budgetary Governance*, but to date these remain unheeded. A fiscal rule is currently being designed in collaboration with the IADB and the World Bank. Introducing an explicit spending rule would enable more effective control of current government spending. Drastically increasing the share of total public expenditure under the oversight of the Ministry of Finance, as highlighted before, is also a pre-requisite to implement an effective expenditure rule. OECD countries provide several examples of expenditure rules as, in 2012, 21 out of 34 members had one (OECD, 2013b; OECD, 2014b).

Public debt is rising

Increased deficits have resulted in rising public debt. The proposed fiscal reform will be just enough to stabilise the debt-to-GDP ratio, but not if growth turned out to be below the historical average (Figure 11). Hence, additional fiscal measures will be necessary to reduce the debt ratio or stabilise it at current levels if growth turned out less than assumed (Figure 11). Moreover, as a small open economy subject to shocks, Costa Rica should build up precautionary fiscal buffers, which calls for prudent debt levels.

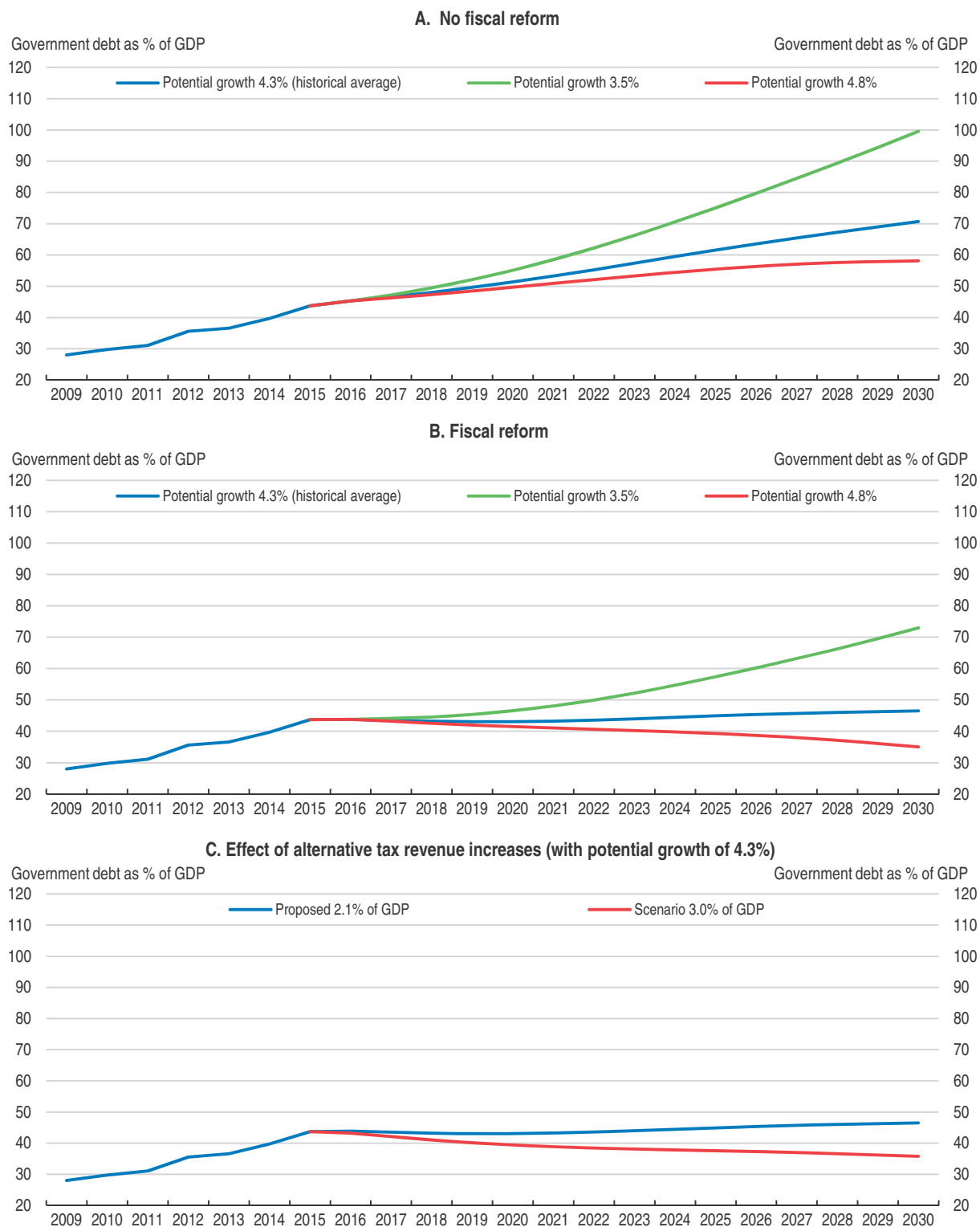
Enhancing public debt management institutions would also improve debt sustainability. In Costa Rica, debt management is split between two agencies of the Ministry of Finance (Mendis, forthcoming). A single agency tasked with both cash and debt management would improve the understanding of debt vulnerabilities, lower costs, help to develop deeper markets for domestic debt and increase resilience to external shocks (Mendis, forthcoming).

Monetary policy is moving towards inflation targeting but financial dollarisation remains high

Over the past decade, the monetary policy framework has gradually been moving towards inflation targeting, which has strengthened the overall macroeconomic policy framework. This move should be accompanied by strengthening the effectiveness of monetary policy to achieve price stability through appropriate institutional reforms. More specifically, delinking the designation of the President of the Executive Board from the political cycle, introducing clear motives and rules for his/her dismissal and depoliticising the composition of the Executive Board would enhance the operational independence of the BCCR. Empirical evidence indicates that operational and procedural independence of central banks is associated with lower and more stable inflation (e.g. Crowe and Meade, 2008).

Together with the ongoing shift to inflation targeting, Costa Rica has moved from a crawling peg regime to an exchange-rate crawling band and then to a managed float since early 2015. Evidence suggests that this has reduced the pass-through of exchange rate movements to core inflation (Figure 12). The BCCR continues to intervene in the exchange

Figure 11. Debt sustainability hinges on fiscal reform



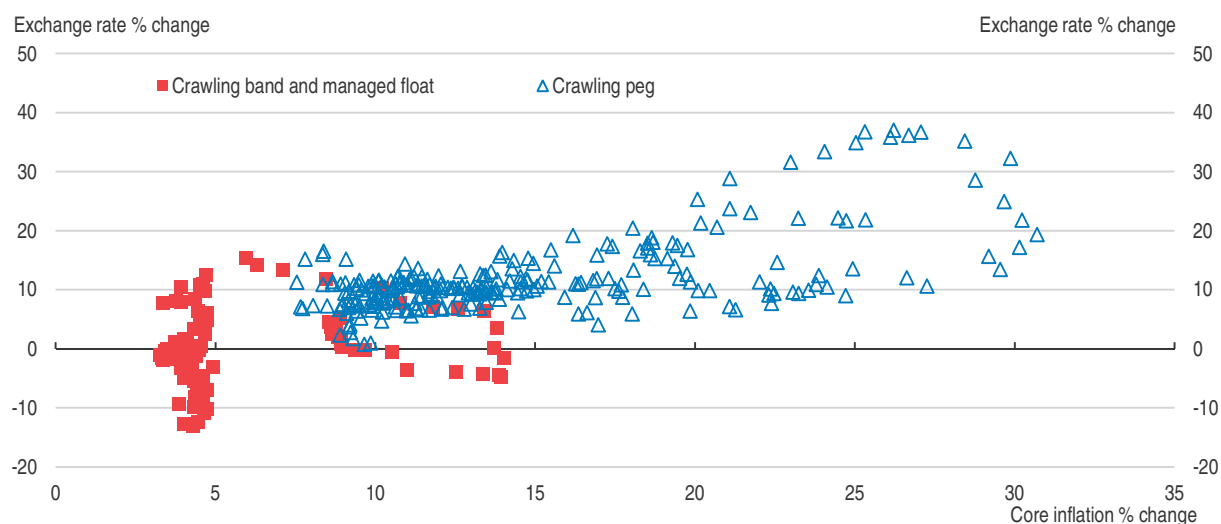
Note: All estimations assume a fiscal multiplier of 0.3 (IMF, 2015a), and expenditure growing at the same pace as nominal GDP. The proposed reform is assumed to be approved in 2016 and increase revenue by 2.1 percentage points of GDP over 3 years. Expenditure is assumed to grow by 9% in nominal terms, roughly equal to nominal GDP, and stabilise at around 31% of GDP. Alternative scenarios increase revenue by 2.5% and 3% of GDP over three years.

Source: OECD calculations.

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market, so as to avoid large fluctuations in the exchange rate, which could be destabilising in a highly-dollarised banking system (Ostry, Ghosh and Chamon, 2012). However, the BCCR does not seek to influence the level of the exchange rate, leaving its determination to market fundamentals. Evidence shows that exchange-rate interventions have reduced exchange-rate volatility (Figure 13). Nonetheless, this transitional regime involving foreign exchange interventions should not be allowed to last longer than necessary, since permitting the currency to float more freely will induce agents to incorporate exchange rate risk in their decisions, thus lowering dollarisation. Costa Rica would be well served by a fully-fledged inflation targeting regime, accompanied by a free float, as successfully experienced by other Latin American countries such as Mexico, Colombia, and Chile.

Figure 12. **The transition towards inflation targeting has lowered the exchange rate pass-through**



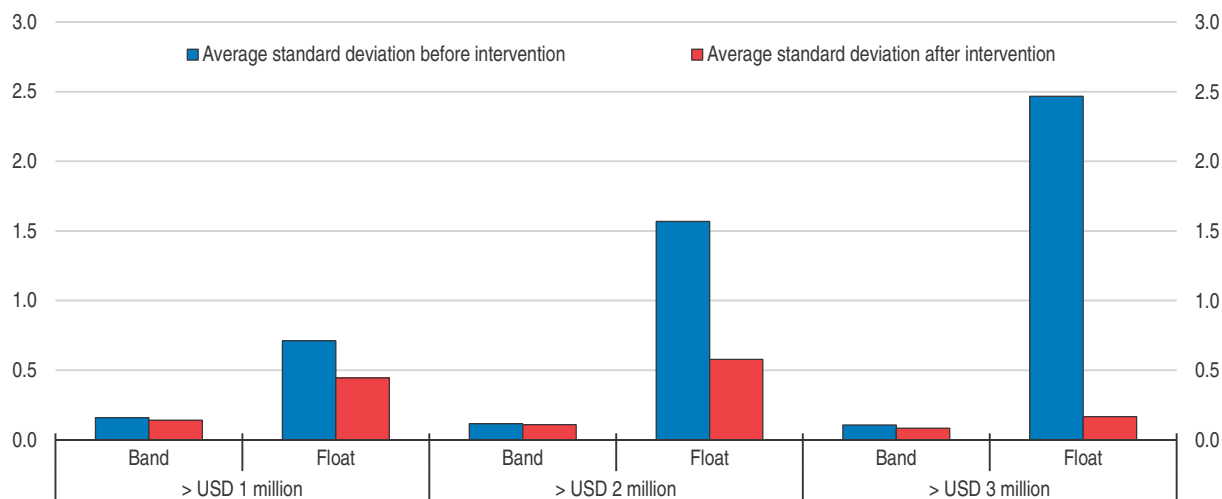
Note: Graph shows the 12-month core inflation against the exchange rate 12-month per cent change 6 months before, for the crawling peg period (January 1985 to November 2006) and a the crawling band and managed float regimes (November 2006 onwards).

Source: Central Bank of Costa Rica.

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Costa Rica's financial system is highly dollarised, especially bank loans, which constitutes a significant vulnerability (Figure 14). Financial dollarisation increases the likelihood of crises after a depreciation of the local currency. It is also associated with slower and more volatile output growth and less stable demand for money and usually entails low financial depth (Levy-Yeyati, 2006). So far, the shift to a managed float, which should in principle raise the perception of currency risk, has not reduced the level of dollarisation (Figure 14). Nonetheless, this should eventually happen as families and businesses start pricing exchange rate risks (ise and Levy-Yeyati, 2003; IMF, 2015b). Experience from other Latin American countries indicates that the adoption of a floating exchange rate contributes to a decline in foreign currency-denominated liabilities with a lag of three years from the change in exchange rate regime (Kamil, 2006).

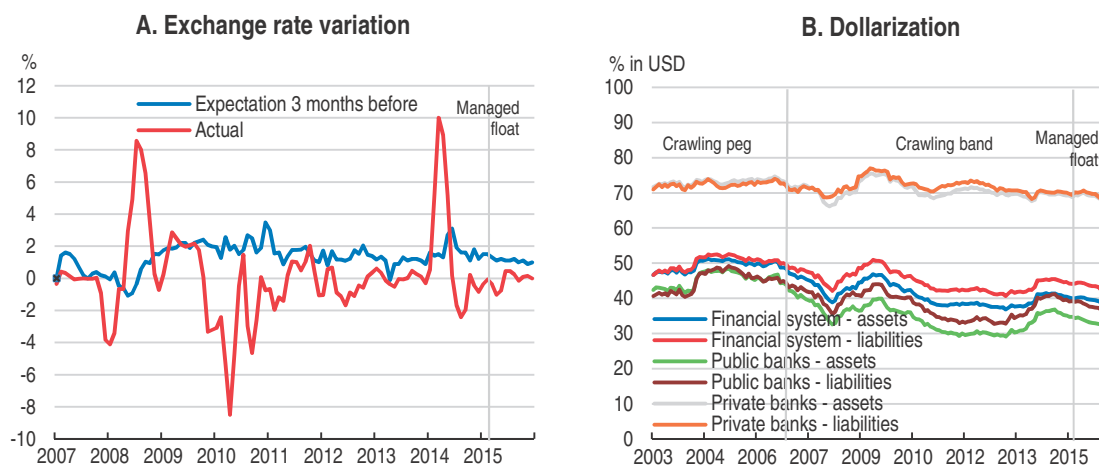
To speed up de-dollarisation, in early 2015 the Central Bank imposed a 15% reserve requirements for all foreign funding in the financial system. This requirement should be maintained and if necessary increased. Also, the BCCR and SUGEF, the banking regulator, need to incentivise the use of derivatives to manage exchange rate risks. The basic regulatory framework of derivative instruments is already in place. Authorities should

Figure 13. **Central bank's interventions lower foreign exchange rate volatility**

Note: Standard deviations of the average exchange rate in the Monex foreign exchange market computed over 3-hour periods before and after Central Bank interventions. The crawling band exchange rate system operated from October 2006 to February 2015, when a managed-float regime was formally adopted.

Source: OECD calculations and Central Bank of Costa Rica.

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Figure 14. **Exchange rate expectations have been stable and financial dollarisation is still high**

Note: Panel B: Percentage of liabilities/assets in USD.

Source: Central Bank of Costa Rica; General Superintendence of Financial Institutions (SUGEF) of Costa Rica.

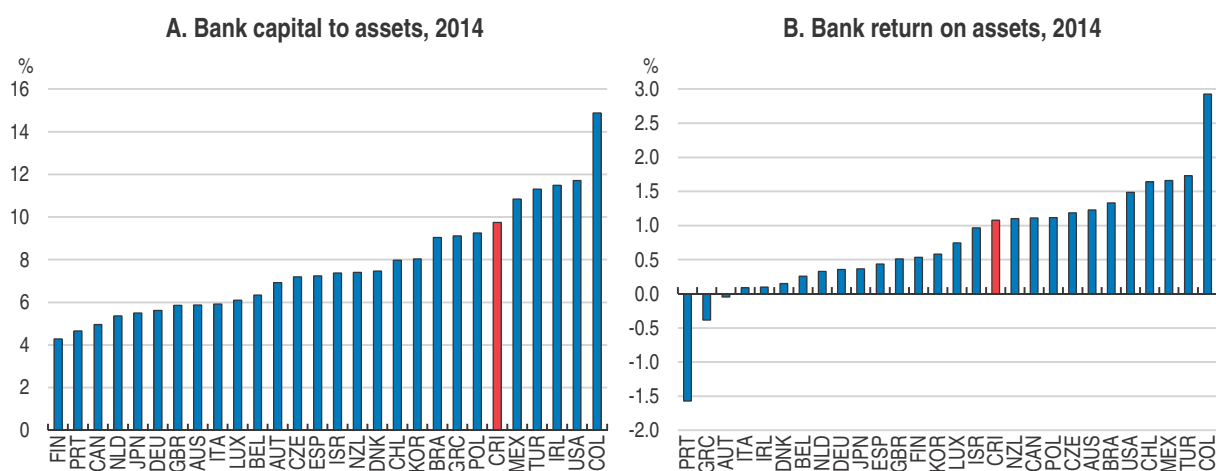
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press for the issuance of more standardised derivative contracts to be traded in organised markets, instead of over the counter, and with lower minimum requirements, which presently are too high for SMEs.

Apart from dollarisation, the banking sector appears solid by standard metrics. Banks' capital-to-asset ratios have remained above the regulatory benchmark of 10% and capital mainly comprises Tier 1 instruments (Basel I) (Figure 15). The liquidity profile is strong, despite a rising loan-to-deposit ratio that leads to the use of foreign funding instead of deposits, and Basel III standards are being progressively adopted. Actions are needed to

reinforce the macro-prudential framework and bring it closer to current practices in OECD countries, where recent initiatives have concentrated on credit and capital measures (OECD, 2013a). In Costa Rica, accelerating the adoption of Basel III principles, publishing the results of the stress tests carried out by the SUGEF would increase transparency and foster market discipline; establishing a bank resolution regime and using tools such as capital surcharges for systemic institutions, loan-to-value ratio and capital buffers would make the system more robust. Moreover, regarding the attributions and resources of SUGEF, bank supervisors should be granted additional legal protection and regulation should be amended to allow SUGEF to conduct supervision of banking groups on a consolidated basis and its funding scheme, heavily dependent on the Central Bank, should be aligned with international standards and rely on charges on regulated institutions.

Figure 15. **Banks' capital-to-asset ratios are higher than in peer countries**



Note: Panel B: 2013 for Germany. The return on assets (ROA) measures banks' profitability relative to their total assets.

Source: IMF Global Financial Stability Report, Financial Soundness Indicators (FSI) Tables, April 2015.

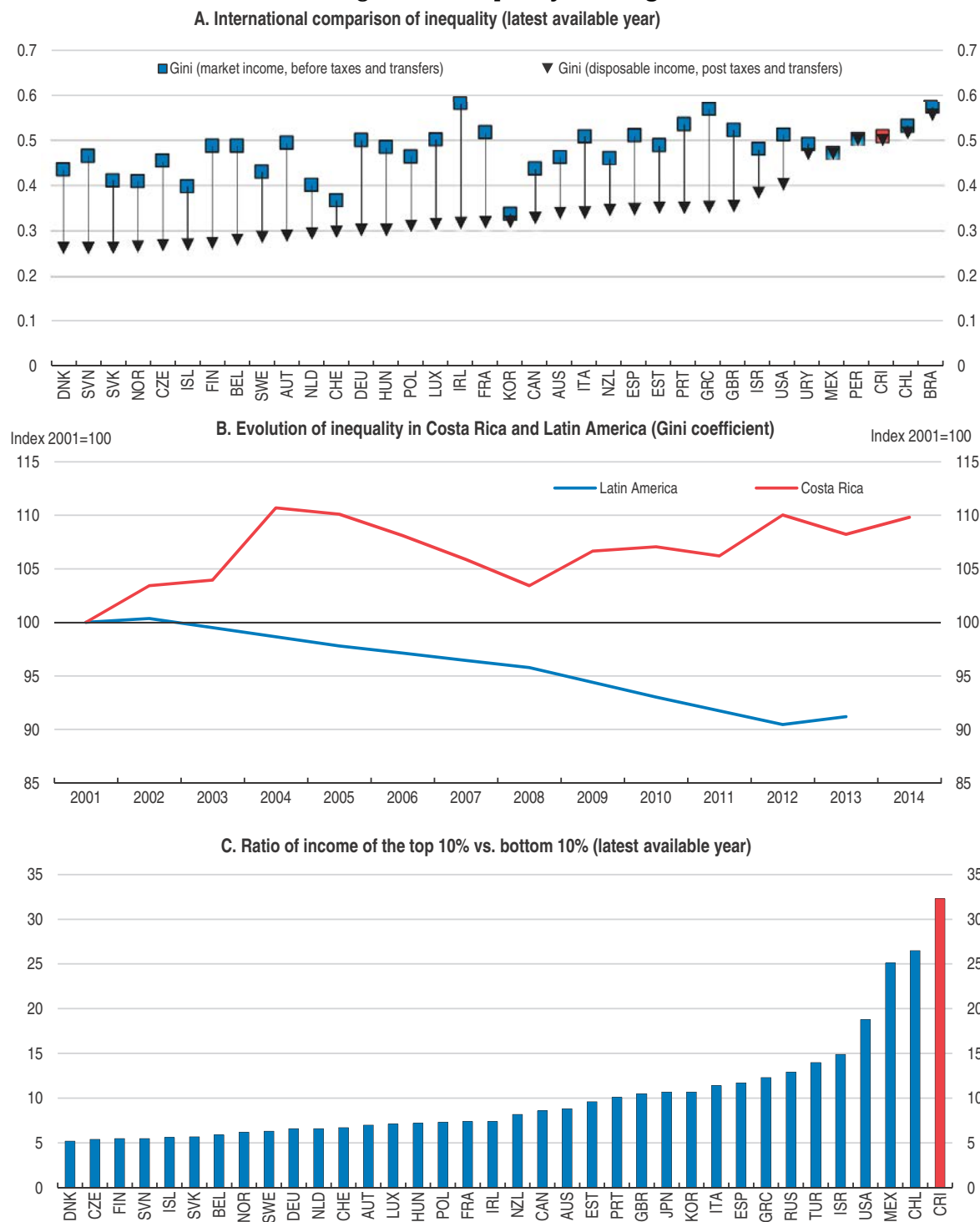
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Promoting inclusive and sustainable growth in Costa Rica

Costa Rica stands out among Latin American countries in several social dimensions: poverty rates are among the lowest in Latin America; life expectancy has improved markedly; and subjective well-being is relatively high (Gallup, 2015). Nevertheless, a number of crucial challenges have emerged that should be promptly tackled.

Inequality has increased since the mid-1990s (Figure 16, panel B) to high levels by OECD standards (Figure 16, panel A). This is in stark contrast with many other Latin American economies, which have recently made significant progress in reducing inequality and poverty. Households at the top of the income distribution get a large share of national income: the top 10% gets 32 times the average income of the bottom 10%, compared to an OECD average of 10 times (Figure 16, panel C). Interestingly, rising public-sector salaries made the largest contribution to inequality between 2010 and 2014 (Table 4 and Gabriel and Gonzalez Pandiella, forthcoming), particularly salaries of qualified workers in public agencies outside central government.

Costa Rica's ability to lower income inequality through taxes is small. Direct taxes contribute to redistribution less than in other countries in the region (Sauma and Trejos, 2014), as Costa Rica raises more revenue from social security contributions and less from

Figure 16. Inequality is rising

Note: Panel A: Provisional estimates for Costa Rica for 2015. Data for Uruguay, Peru, and Brasil is based in per capita concept while data for OECD countries and Costa Rica is based in equivalised income. Panel B: Latin America data refers to a simple average and has been interpolated based on data published by ECLAC-CEPALSTAT, *Social Indicators and Statistics Database*. Costa Rica data comes from Estado de la Nación. Due to methodological differences, the level of the underlying Gini coefficients in this panel is not fully comparable with Panel A. Panel C: Provisional estimate for Costa Rica for 2015.

Source: OECD Income Distribution Database (IDD); Lustig et al. (2013); ECLAC-CEPALSTAT, *Social Indicators and Statistics Database*; Estado de la Nación, *Compendio de Indicadores Sociales* (2015).

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personal and corporate income taxes than most countries in Latin American (OECD, 2015d) and the OECD. At the same time, the progressivity of the personal income tax is weak, and the income threshold below which no personal income tax is paid is high. Taxes on capital income at the personal level are also relatively low in Costa Rica, and tax evasion of liberal professions is large (Brys, forthcoming).

Table 4. **Relative contribution of each source of income to total inequality**

	2010	2011	2012	2013	2014	Average 2010-14
Relative contribution of different sources (%)	100	100	100	100	100	100
Qualified public sector employee salaries	31.2	32.5	29.7	31.0	31.1	31.1
<i>Central government</i>	12.3	13.8	13.1	14.5	14.6	13.6
<i>Other public agencies</i>	18.9	18.7	16.6	16.5	16.5	17.4
Unqualified public sector employee salaries	1.5	1.7	1.3	1.5	1.5	1.5
Qualified private sector employee salaries	26.0	26.6	28.0	28.2	30.2	27.8
Unqualified private sector employee salaries	3.6	3.7	3.4	2.6	3.6	3.4
Other employees salaries (e.g. domestic service)	0.6	0.7	1.0	0.3	0.2	0.5
Professionals and tech. self-employed business income	5.5	4.0	3.8	6.2	3.4	4.6
Others self-employed business income	3.4	3.7	5.5	3.9	2.8	3.9
Employers business income	8.6	10.1	8.6	9.3	10.4	9.4
Capital income	11.0	9.4	10.3	9.0	9.1	9.7
Contributory pensions	8.5	7.8	8.0	8.0	8.1	8.1
State transfers	-0.8	-0.7	-0.7	-0.8	-0.9	-0.8
Other transfers (private and non-monetary)	1.0	0.6	1.1	0.7	0.8	0.8

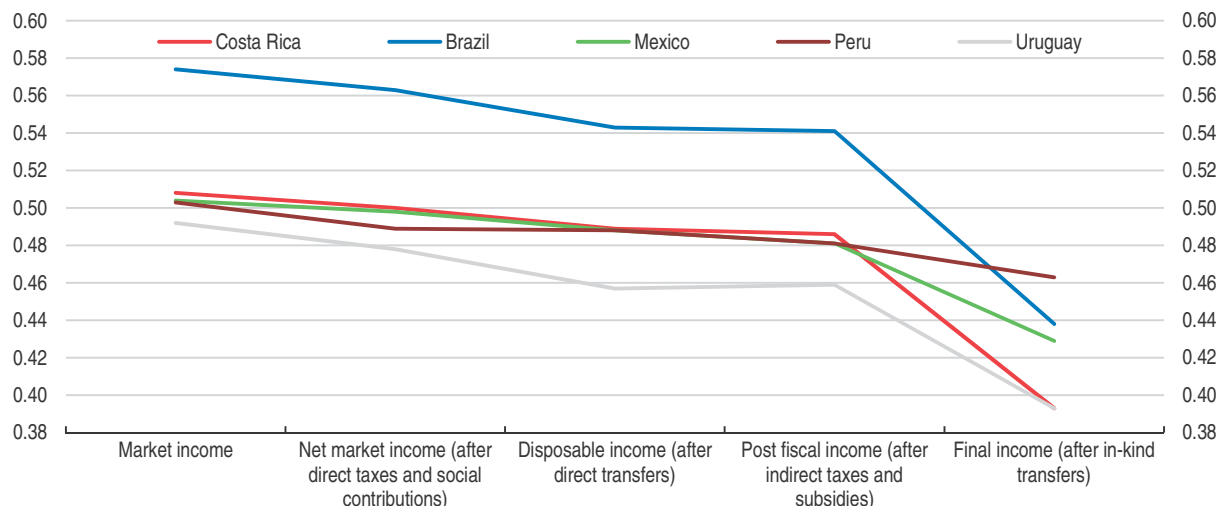
Note: These calculations are based on the income categories reported in ENAHO, which includes contributory pensions, non-contributory pensions and transfers provided by IMAS. This is in line with Sauma and Trejos (2014), Lustig et al. (2013), Estado de la Nación (2014) and Trejos and Oviedo (2012). The underlying GINI coefficient is based on the per capita income concept and therefore is slightly different from those based on the equivalised income concept such as those reported in Figure 16 (panel A) and Figure 1.2 (panel A).

Source: Gabriel and Gonzalez Pandiella (forthcoming).

By contrast, transfers in kind (education or health) are effective in reducing inequality (Figure 17). Anti-poverty cash transfers are also effective, though they could be better targeted as a quarter of the social benefits provided by FODESAF (Family Allowances Fund) – the main government mechanism to finance social assistance and fight poverty – goes to middle and high income households (Table 5).

Poverty has remained largely unchanged over the last two decades. In 2015, it reached 22% of households, according to national definitions of poverty, while extreme poverty affected 7% of households (INEC, 2015a). Structural reform to address institutional fragmentation and lack of coordination in social policy is needed to reduce poverty. At present, different institutions offer similar schemes using different eligibility criteria and different registries of beneficiaries. Moving towards a unified framework, based on a single list of beneficiaries, would contribute to better targeting and lower leakages. Efforts in that direction have started. For example, IMAS, the institute for social assistance, has integrated its information systems with those of other social assistance programs, and the budget for the creation of a national registry of beneficiaries has recently been approved. In a tight fiscal context, it is important to evaluate social programmes and to focus resources on those that are effective and to scale down those that are not. Evaluation would also help to establish targets for government agencies, which is also needed to improve government efficiency. IMAS is also gradually executing *Puente al Desarrollo*, a strategy to reduce extreme

Figure 17. **Transfers in-kind reduce inequality**
GINI coefficients of different types of income, 2010



Source: Sauma and Trejos (2014a) and Lustig et al. (2013).

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Table 5. **Distribution of beneficiaries of social programmes by income quintile**
% of beneficiaries in each income quintile (2013)

Programme	Income quintiles				
	I	II	III and IV	V	
Youth centres (Centros infantiles)	57	25	18	0	100
School meals	42	27	28	4	100
School scholarships (Avancemos)	49	29	21	1	100
Non-contributory pensions	64	15	19	2	100
Family welfare centre (Promoción y bienestar familiar)	50	28	21	1	100
Family housing fund (Bono familiar vivienda)	30	23	39	8	100
Insured on the account of the state	70	16	14	1	100
Total Fodesaf	51	25	22	2	100

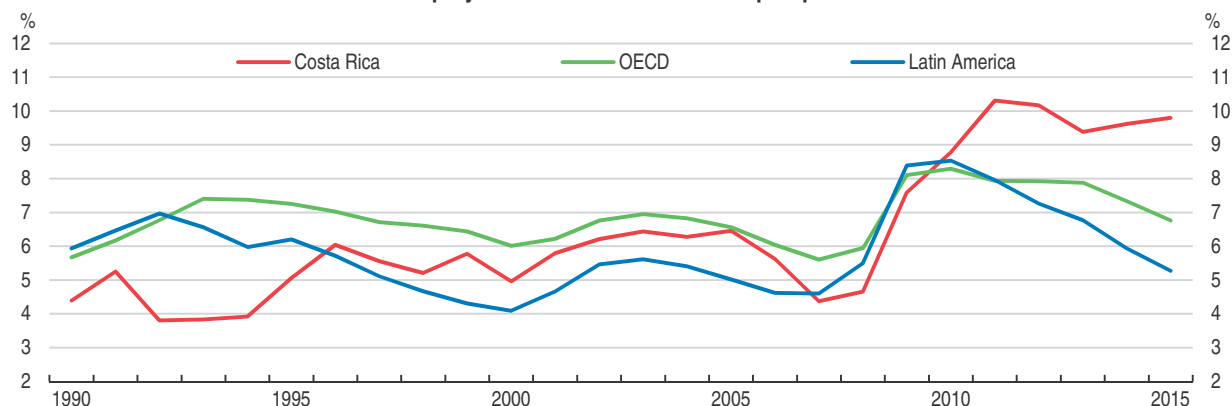
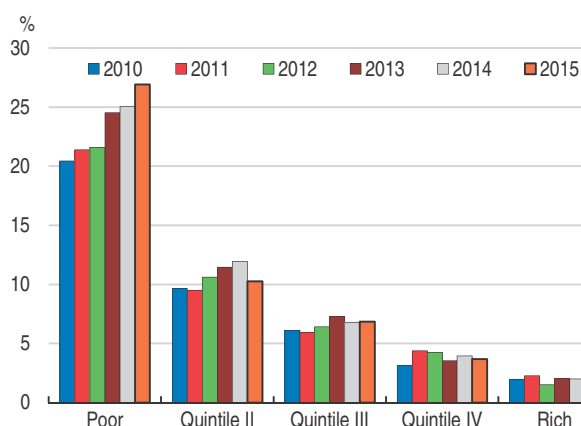
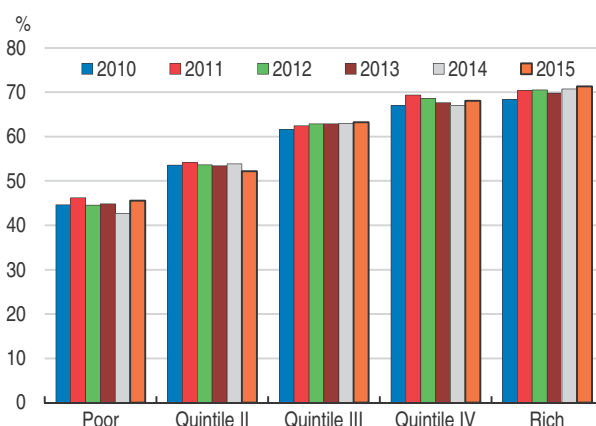
Source: Estado de la Nación (2014).

poverty, and has also started the compilation of social maps, which help to geographically monitor and target efforts, and of a multidimensional poverty index (INEC, 2015b).

Making the labour market more inclusive

With growth remaining slow since the crisis, labour-market indicators have deteriorated (Figure 18). Women face higher unemployment rates and their labour market participation is especially low, with only slightly over half of working-age women participating in the labour market (Figure 19). Youth unemployment reaches 24%. All this highlights the need to put in place targeted policies to make the labour market more inclusive.

The informal sector is smaller than in other countries in the region, but high by OECD standards (Figure 20, panel A). Contrary to many Latin America countries, informality has been increasing rapidly (Figure 20, panel B) and now exceeds 45% of total employment. This reflects weak economic growth, resulting in slow job creation in manufacturing

Figure 18. **Unemployment is high and hits the poor hard****A. Unemployment rates in international perspective****B. Unemployment rate by income quintile****C. Participation rate by income quintile**

Note: Panel A: Unemployment rate data for Costa Rica before 2010 comes from ENAHO and after 2010 from Encuesta Continua de Empleo. Both series are not comparable.

Source: OECD (2015a), OECD Economic Outlook 98 Database; INEC, Encuesta Continua de Empleo y Encuesta Nacional de Hogares.

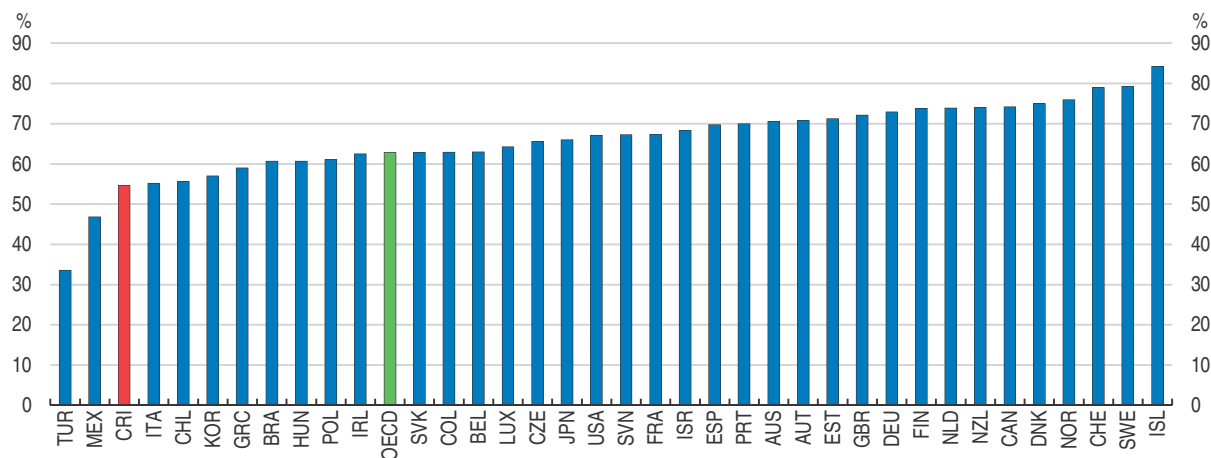
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(where the informality is lower) and by a rise in employment in agriculture, and especially, domestic work services (where the informality rate is higher). The Costa Rican labour market is also characterised by duality: traditional sectors employ low-skilled and low-paid workers with precarious contracts, while exporting industries, such as those operating in the free trade zones, employ high-skill individuals and offer new job opportunities. The ongoing shift away from traditional and labour-intensive activities into higher value added activities has increased demand for high-skilled labour and contributed to a rising skill mismatch. This has translated into a rising high skills wage premium and structural unemployment rate, thus exacerbating income inequality.

Costa Rica faces four fundamental challenges to make its labour market more inclusive: improving the quality of the education system (see below); improving incentives for employers and workers to stay in or move to the formal economy; facilitating the acquisition of new skills by unemployed workers; and raising women's participation in the labour market.

Figure 19. **Female labour market participation is low**

Women labour force participation rate (age 15 to 64), 2014



Note: Data for Brazil is 2013.

Source: OECD, Labour Force Statistics Database.

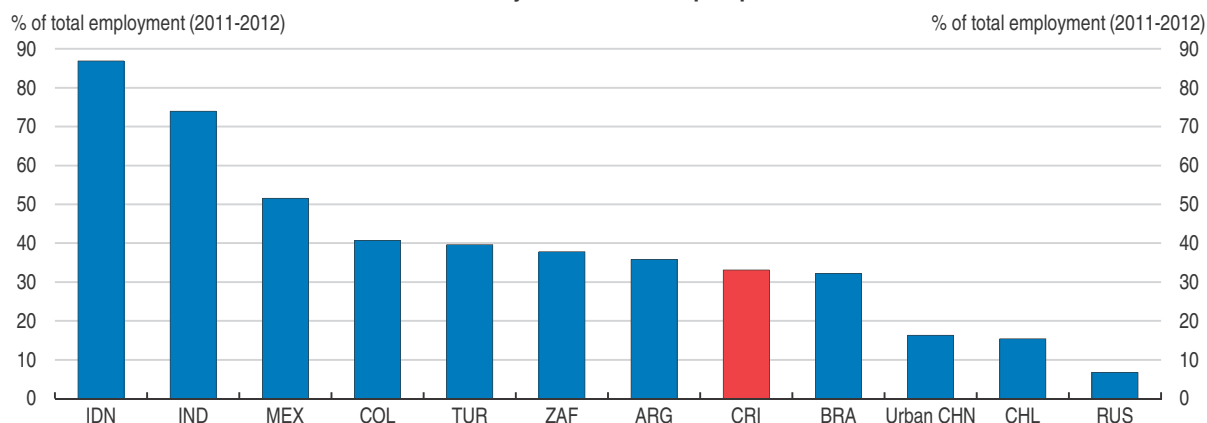
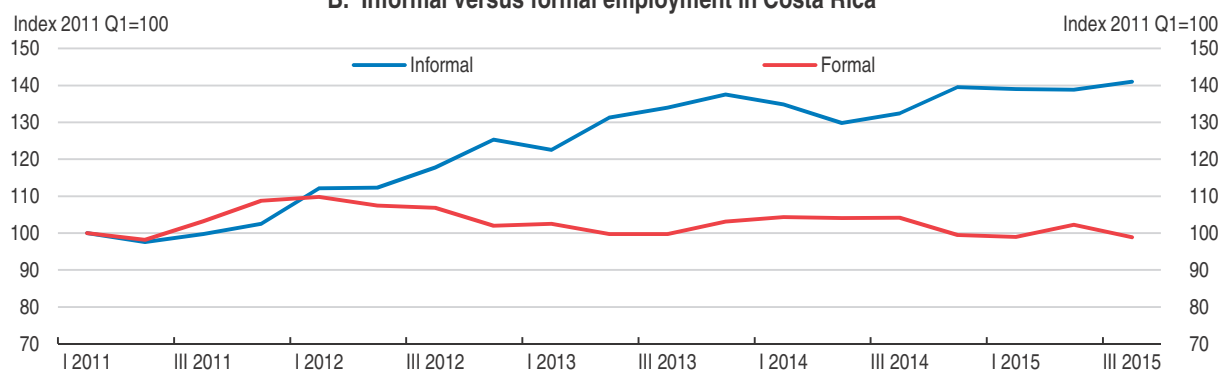
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Boosting employment in the formal sector

Reducing informality requires a comprehensive strategy, with actions covering multiple dimensions such as fiscal, labour market, social policies, education or business regulations. Reducing non-wage labour costs, simplifying some labour market policies, improving training and education, strengthening enforcement, and adapting business registrations procedures to the needs of micro and small firms will help to boost formal employment. Several studies (e.g. Ramirez-Alfaro, 2010) show that high employer social security contributions are the main obstacle for a business to become formal. The total social security contributions rate is 36%, of which 26 percentage points are borne by employers (Figure 21) and the rest by employees. Out of the total contribution, the social security actually receives 23.5% of the salary as the rest is used to finance other institutions, such as public banks, or social programmes.

In the medium-term, a gradual reduction of social security contributions would help to raise formal employment. Across-the-board cuts in social security contributions are easier to implement and administer but could imply losses of fiscal revenues. Targeted cuts may be more difficult to administer but would contribute to broaden the tax base. Experiences of countries that have introduced targeted cuts in employer social security contributions suggest that they can be effective in increasing formal employment and cost-effective if they are targeted at those accounting for the bulk of the non-employed or informal employment (IMF, 2014). Costa Rica could then focus on those sectors of the economy where informality is rampant, such as agriculture, construction and domestic work services that account for 60% of all informal employment. The government should also avoid using social security contributions to fund public banks or antipoverty programmes, but use other more progressive taxes instead, and fight domestic and international tax evasion, as these are less distortive ways to raise revenue.

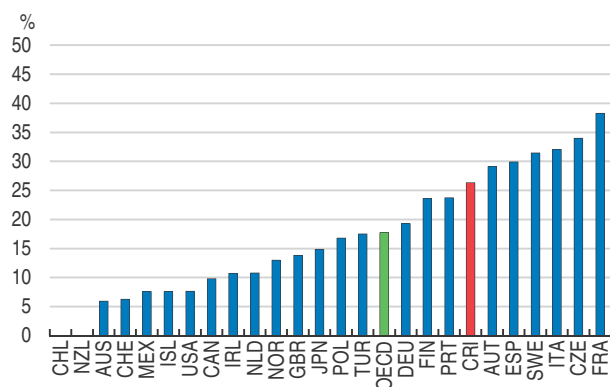
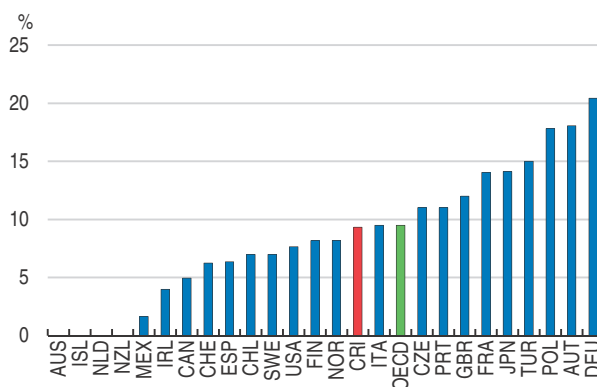
While the level of the minimum wage is not excessively high in Costa Rica relative to other countries in Latin American, its structure is complex. There are more than two

Figure 20. **Informal employment is increasing****A. Informality in international perspective****B. Informal versus formal employment in Costa Rica**

Note: Informality is defined to include: i) employees who do not pay social contribution, except for Colombia where contract status is used; and ii) self-employed who do not pay social contributions (Brazil, Chile, China, India, Indonesia, Turkey) or whose business is not registered (Argentina, Colombia, Costa Rica, Mexico, South Africa). The figures for China are for 2008 and 2009. All figures for Indonesia are for 2007.

Source: OECD (2015c), *OECD Employment Outlook*; INEC, Encuesta Continua de Empleo (ECE) 2015.

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Figure 21. **Employer social security contributions are high****A. Employer social security contributions rate****B. Employee social security contributions rate**

Source: OECD, Tax Database and Caja Costarricense de Seguro Social.

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hundred minimum wage categories, differing across sectors and occupations. Such a large number of minimum wages may reduce compliance and make them harder to enforce (Rani et al., 2013). Indeed, one out of three workers in Costa Rica is being paid below the minimum (Estado de la Nación, 2014). Simple minimum wage systems are most likely to improve compliance (OECD, 2015c), and therefore the number of categories should be sharply reduced. In addition, there is an urgent need to improve enforcement mechanisms.

Informality affects the less educated the most. Half of the workers with only primary education are employed in the informal sector. This suggests that providing Costa Ricans, especially those with less education, with more job-relevant skills will be fundamental to abate informality (more below). Formalising a business is also more difficult in Costa Rica than in most countries in Latin America and the OECD countries. Administrative burdens for sole proprietor firms are relatively high according to the OECD's Product Market Regulation indicators (see below), and in the World Bank's index of ease of business creation, where Costa Rica ranks 121 out of 189 countries. One of the major perceived obstacles is the difficulty and expense of obtaining a licence. OECD best practices suggest that limiting licensing to those activities where it is justified on health, safety or environmental grounds, and reducing the associated cost are important steps to curb informality. Establishing a one-stop point for issuing or accepting all notifications required to register a business would also help, especially for micro and small firms.

Helping the unemployed get back to work

As other Latin America economies, Costa Rica prioritises social programmes such as conditional cash transfers, and the provision of basic in-kind services to socio-economically disadvantaged groups. But there is no unemployment insurance scheme in Costa Rica and, in case of unemployment, workers are compensated through severance pay. Public employment services provide basic intermediation services but need to expand services, coverage and effectiveness (Mazza, 2013). Improving active labour market policies would be particularly beneficial for low-skilled workers, as they are likely to gain the most from active support and guidance concerning the skills needed to find formal employment and how to obtain those skills. Policies should be targeted on those experiencing more difficulties in finding a job. In this sense *Mi Primer empleo*, a recently launched scheme providing financial incentives to employers that hire young and female workers is welcome but should be carefully evaluated as soon as possible to ascertain its effectiveness.

Active labour market policies should encompass effective training programmes. Training programs for unemployed have been found to increase employability both in the OECD and in Latin America (Ibarrarán and Rosas, 2009), where they have been associated with higher probability of getting a formal job. For many Costa Ricans learning new skills will be the only way to take advantage of new employment opportunities. Thus, social assistance programs should include training opportunities and be made conditional on attending them. An area where Costa Rica faces significant skill shortages that could be partly addressed via retraining of unemployed workers is technical occupations. The National Learning Institute (INA), the main provider of technical training in Costa Rica, plans to develop a dual vocational track (OECD, 2015g). Such tracks should be made available to the adult low-skilled unemployed.

Increasing female labour market participation

The lack of child-care facilities in Costa Rica contributes to low female labour market participation. Public childcare is provided by *Red Nacional de cuidado*, involving IMAS, PANI (*Patronato Nacional de la Infancia*; National Children's Trust), CEN-CINAI (*Centros de Educación y Nutrición – Centros Infantiles de Atención Integral*; Education and Nutrition Centres – Children's Comprehensive Care Centers) and the Ministry of Education. Only 15% of children below three years old attend child care facilities in Costa Rica. In addition, children whose parents have a high education level are more likely to attend (Estado de la Nación, 2015). At the same time, the proportion of female-headed households has increased notably in the last 25 years (Estado de la Nación, 2014) and they face higher probability of falling into poverty. OECD evidence suggests that the availability of affordable, high-quality early childhood education and care is a key factor explaining cross-country differences in women's labour market participation (OECD, 2012b). Access to good quality child care not only encourages greater female labour supply but improves school outcomes and mitigates social inequalities (Ruhm and Waldfogel, 2011). Therefore the authorities should expand the number of places available in early childhood education for children below 4 years old, specifically targeting low income households.

Complying with labour rights

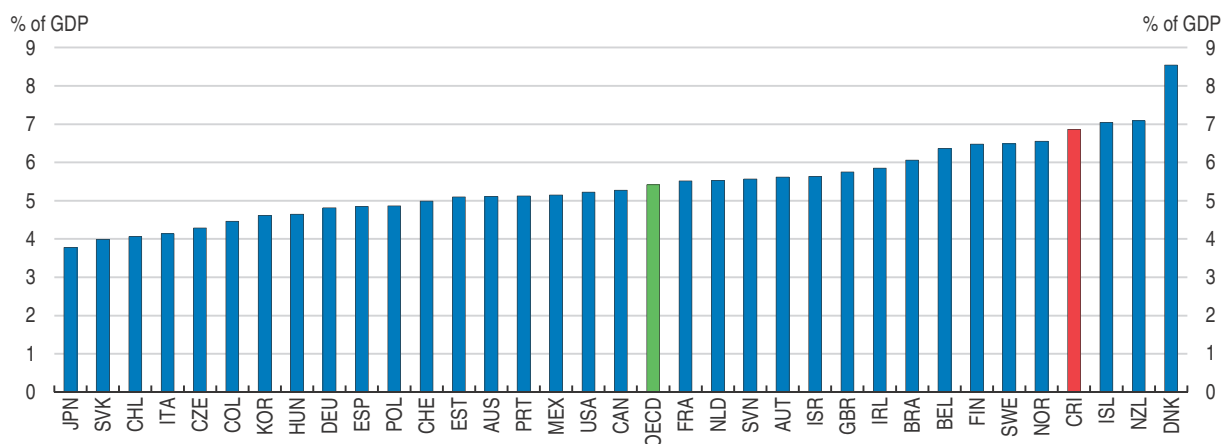
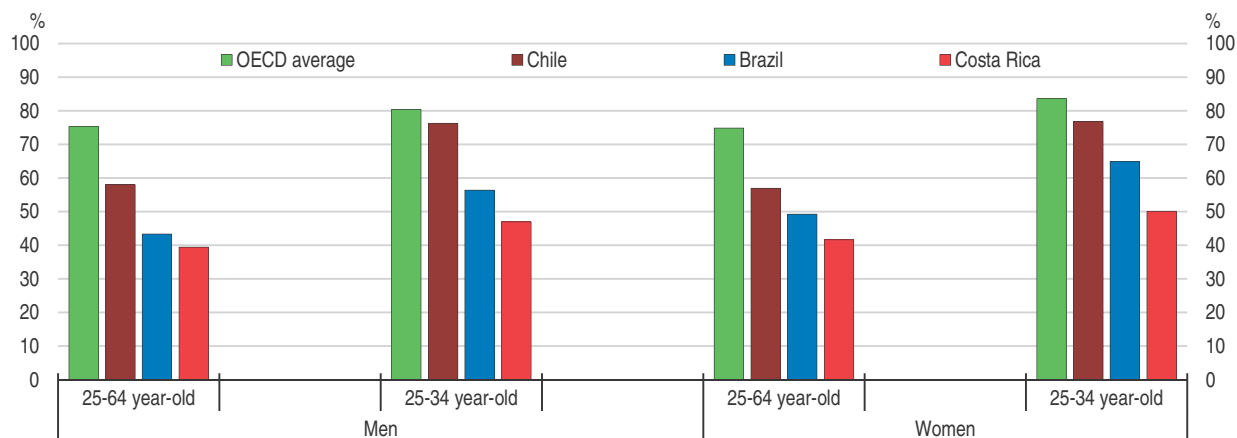
Costa Rica has made gradual progress in increasing compliance with labour rights. The number of workers not enjoying any of the labour rights recognised in the legislation, such as sick leave, holidays, overtime or social security insurance, has been falling, although it still reaches 7% of all workers (Estado de la Nación, 2014). However, one out of three workers is still being paid below the minimum wage. Vigilance should continue to ensure better compliance. Another area which requires monitoring concerns trade union rights. The number of collective agreements in the private sector is low and direct agreements with non-unionised workers are frequent. Existing laws prohibit anti-union discrimination, but enforcement has been weak. Costa Rica has attempted to promote trade union labour rights in recent years and a new law was approved in the late 2015. The new law explicitly bans any form of discrimination in the workplace, besides shortening labour related disputes, by introducing oral arguments in courts and establishing out-of-courts resolution mechanisms. However, the law still prohibits strikes in public services considered as essential – such as police but also hospitals and ports – and allows for hiring temporary staff to replace striking workers. The government should continue legal reforms so as to comply with ILO conventions and recommendations.

Improving the quality of education

Costa Rica is one of the pioneers in universal access to primary education in Latin America. Spending on education amounts to 6.9% of GDP and there is a constitutional mandate to raise it to 8%. The historical commitment to education has translated into high literacy rates and almost full enrolment in primary education. In the OECD, only some Nordic countries and New Zealand spend a higher share of GDP on education (Figure 22, panel A). Despite the high level of spending, the gap in educational outcomes with respect to OECD countries is the largest among the available well-being indicators (Figure 2). Average school attainment remains low, as only 40% of the workforce has completed secondary education (Figure 22, panel B). The results are not better for recent cohorts and are lower than in OECD and other Latin America countries such as Chile, Colombia,

Figure 22. **Spending on education is high but outcomes are low**

Latest available year

A. Total spending**B. Percentage of population with at least secondary education**

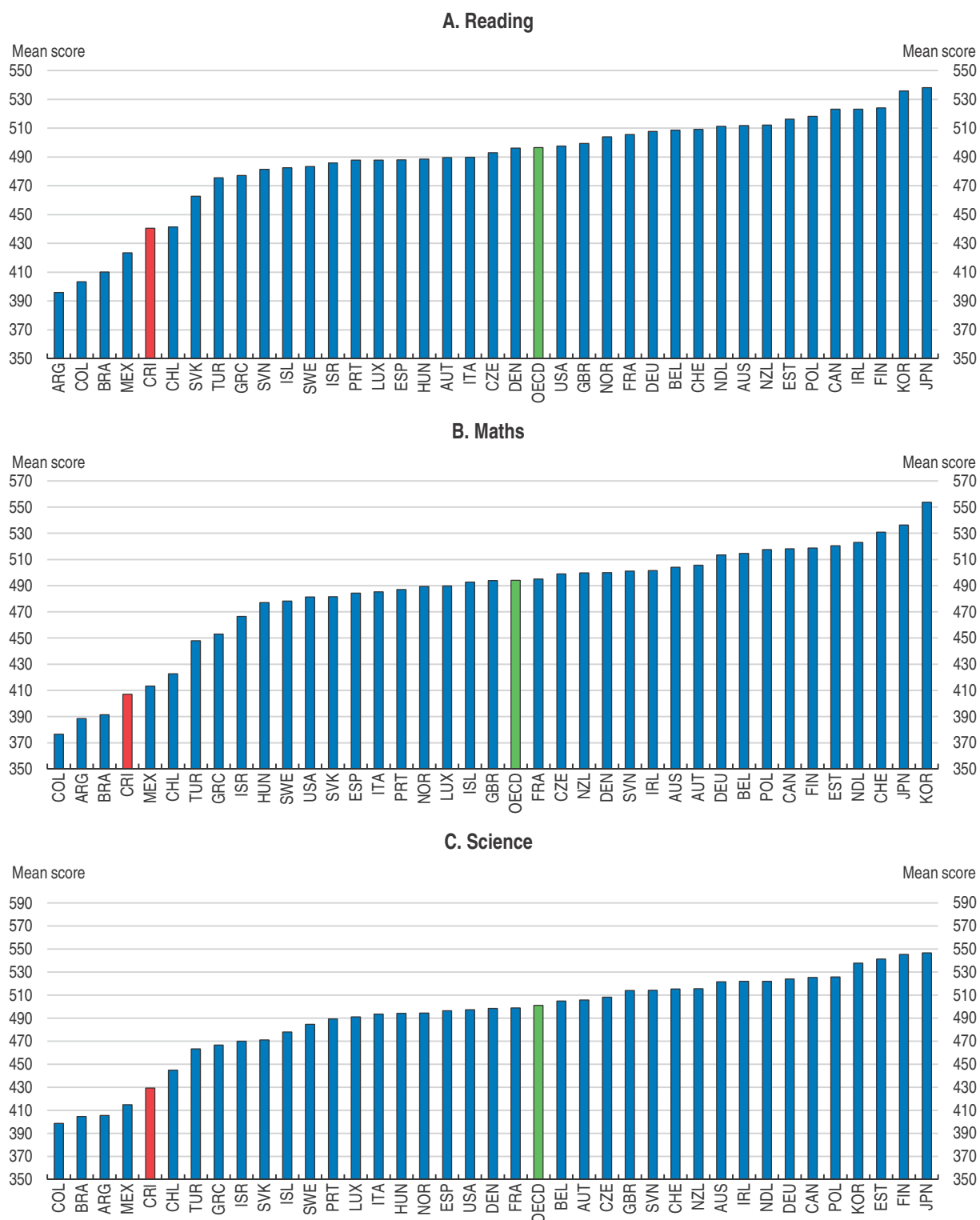
Note: Panel A: Latest year available. Year 2013 for Costa Rica and 2012 for Korea. 2011 for the rest. Panel B: Year 2014 for OECD average and Costa Rica, 2013 for Chile and Brazil.

Source: UNESCO Education Database; OECD (2015o), *Education at a Glance 2015*.

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Venezuela or Panama. The quality of education is also comparatively low according to OECD's PISA tests, which show low scores in all subjects (Figure 23).

Higher expenditure on education does not guarantee better student performance (OECD, 2012c); how money is spent is critical. High-performing systems tend to allocate resources more equitably across socio-economically advantaged and disadvantaged schools (OECD, 2013c). Thus, Costa Rica should move away from an exclusive emphasis on increasing spending as a policy target and instead establish better educational outcomes as the main target. There is also a need to improve efficiency and evaluation mechanisms, and enhance accountability across the entire education system, including universities. A significant share of recent increases in spending was dedicated to raising teachers' wages, which increased by more than 20% in real terms in the period 2009-13 (Estado de la Nación, 2015). This could be beneficial if it leads to hiring more high-quality teachers. In general, the countries that perform well in PISA attract the best students into the teaching profession by offering them higher salaries and greater professional status (OECD, 2013c).

Figure 23. **PISA scores can be improved**

Source: OECD (2014d), PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014).

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Improving teacher's professional development and harmonising their qualifications would also help to improve the quality of teaching.

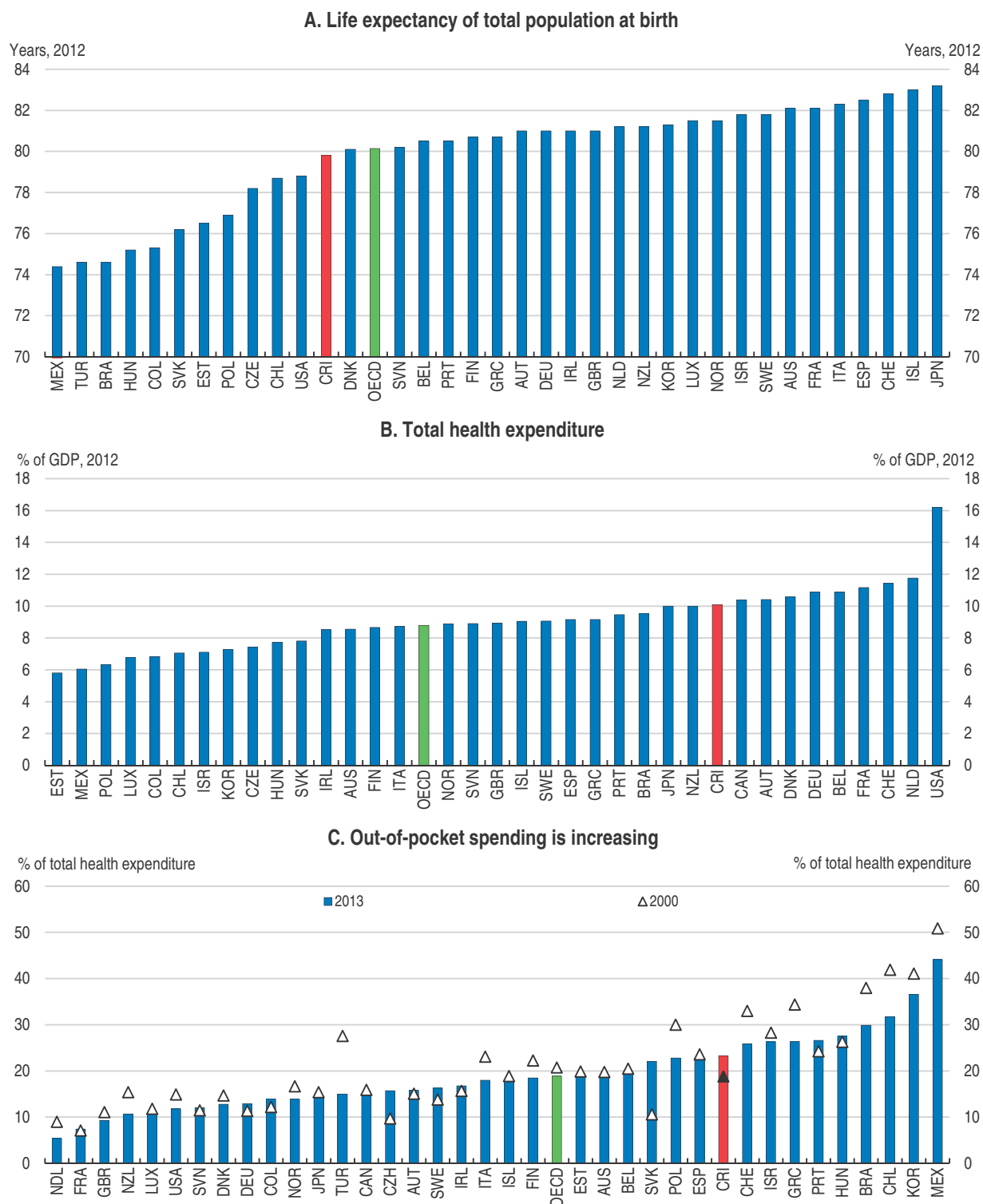
An additional challenge is to spread education benefits more fairly across the society. Gaps in the access to education depend on household income, and have widened in the last two decades (Estado de la Nación, 2014). Inequities in education outcomes start early. Many students repeat grades in lower secondary schools and end up dropping out. Focusing early and targeted support on those students with a higher risk of leaving the education system would be more efficient and yield better outcomes than grade repetition. The recently launched *Yo me apunto* programme seems a very promising initiative in this direction.

Another action that could contribute to curb drop-outs at secondary level and tackle high youth unemployment is to reinforce the vocational technical track. This has proved to be an effective tool across OECD countries to improve educational outcomes and employability, especially when vocational programmes are designed and implemented to be responsive to labour market needs. Costa Rica is in the process of discussing the implementation of a dual system in vocational education. International experience suggests that a key element for a successful development of dual education is to give employers a central role in workplace learning and to develop apprenticeship schemes (OECD, 2015g).

Increasing efficiency in the health system

Costa Rica has a long-standing commitment to provide universal health care to its entire population, which has translated into health outcomes similar to those of OECD countries (Figure 24, panel A). Health spending has continued to grow, and is now 10% of GDP, above the average in OECD countries (Figure 24, panel B). However, users still face long waiting times, out of pocket spending is raising and is now higher than the OECD average (Figure 24, panel C). This is generating inequities in access and quality of treatment, and increasing patient dissatisfaction.

Modernising the health system is a key to improving quality while preserving universal access. Performance is hampered by excessive fragmentation and outdated and dispersed information systems. Updating the information system is a crucial step to improve the management of the system with better information on performance indicators, such as unitary costs and waiting lists. In this direction, progress is underway to roll-out the single digital medical file, which will provide real time statistics and performance indicators. Resources need also to be allocated more effectively, moving away from a historical allocation towards an allocation that takes into account changing demographic patterns and disease trends. This should be accompanied by introducing diagnosis-related funding schemes, i.e. hospitals should be compensated according to patient characteristics. OECD evidence shows that diagnosis-based schemes are very effective at containing costs without prejudice to the quality of services, as they provide stronger incentives to control spending than fee-for-service schemes, which can result in service oversupply (Pisu, 2014).

Figure 24. **Out-of-pocket spending is high and increasing despite high health spending**

Source: OECD, Health Statistics Database; World Bank, World Development Indicators; WHO, Global Health Expenditure Database.

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Boosting potential output growth and productivity while protecting the environment

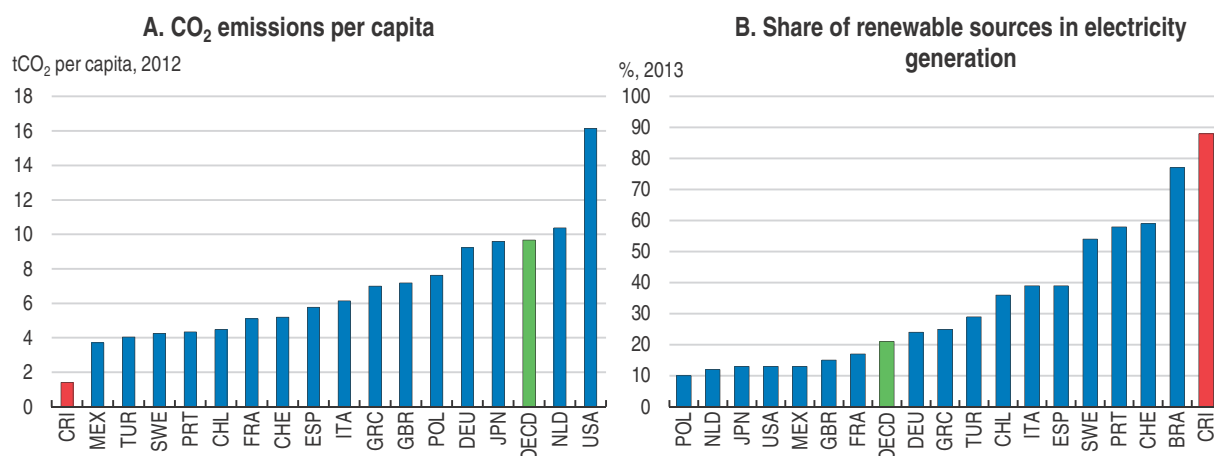
In the latest decades, Costa Rica has managed to combine rising living standards with a world-distinguished green trademark centred on forest conservation, reforestation and national parks, in addition to a sustainable use of national resources. Costa Rica is the only tropical country that has substantially reversed deforestation (World Bank, 2015). The green trademark has supported economic development as it has spawned a strong ecotourism industry, with a positive impact on incomes in rural areas (Robalino and Villalobos, 2014). In addition, tourism is an important source of foreign exchange reserves as in 2014 it accounted for more than 20% of total exports (higher than the total exports of coffee, bananas and pineapples) (ICT, 2014). To continue on this path, Costa Rica will have to tackle two intertwined challenges relating to raising productivity growth and strengthening further environmental protection in the wake of rising urbanisation and climate change.

Sustaining environmental protection to reinforce the green trademark

Costa Rica is the pioneer of Payments for Environmental Services (PES), which have allowed the country to reverse deforestation. Forest cover increased from 26% in 1983 to 52% today (World Bank, 2015). In the context of the recent climate change negotiations, Costa Rica has announced ambitious targets to decarbonise its economy while reiterating its aspiration to align its economy towards carbon neutrality by 2021 and establishing a long term goal for decarbonising its economy throughout the rest of the century. The latter encompasses a target to reduce total net emissions (i.e. taking into account CO₂ removals by forests) by 25% by 2030 compared with 2012 and other ambitious milestones for 2050 and 2100 (MINAE, 2015). Overall, the most important environmental and climate change challenges Costa Rica faces concern the impact of increasing urbanisation and emissions from the transport sector.

Costa Rica generates about 90% of its electricity from renewable sources – well above the level in OECD countries – mostly from hydropower and, to a lesser extent, geothermal sources (Figure 25). However, considering the projected rise in energy demand it is necessary to increase and diversify the energy supply from renewable sources by boosting the use of geothermal, solar, wind and biomass energy sources also with the participation of the private sector. The transport sector accounts for 70% of carbon emissions. This is explained by the persistent increase in the number and use of motor vehicles, in particular private cars, which grew by 68% from 2003 to 2014, in the context of a scarce and inefficient public transportation system. Tackling emissions from the transport sector will be crucial to make progress towards the decarbonisation target. A meaningful reduction in emissions from the transport sector will only come from more decisive steps in the design and implementation of a public transport network. Costa Rica has also put in place a number of initiatives to foster the use of clean cars and encourage that the vehicle fleet becomes more energy efficient. However, these initiatives may take a long time to deploy their effect.

Costa Rica is also a pioneer in carbon pricing. In 1997, Costa Rica enacted a tax on fossil fuels, whose revenue funds the Payments for Ecosystem Services. In 2012, it established the Domestic Voluntary Carbon Market, whereby carbon credits can be generated and exchanged among companies and individuals. Further efforts are ongoing to consolidate and expand this market accompanied by other recent initiatives, such as the creation of certificates of carbon neutrality for companies and several sectoral mitigation programmes,

Figure 25. **The high share of renewable in electricity contributes to low emissions per capita**

Source: IEA World Energy Statistics and Balances, World Indicators Database; IEA CO₂ Emissions from Fuel Combustion Statistics, Indicators for CO₂ Emissions Database.

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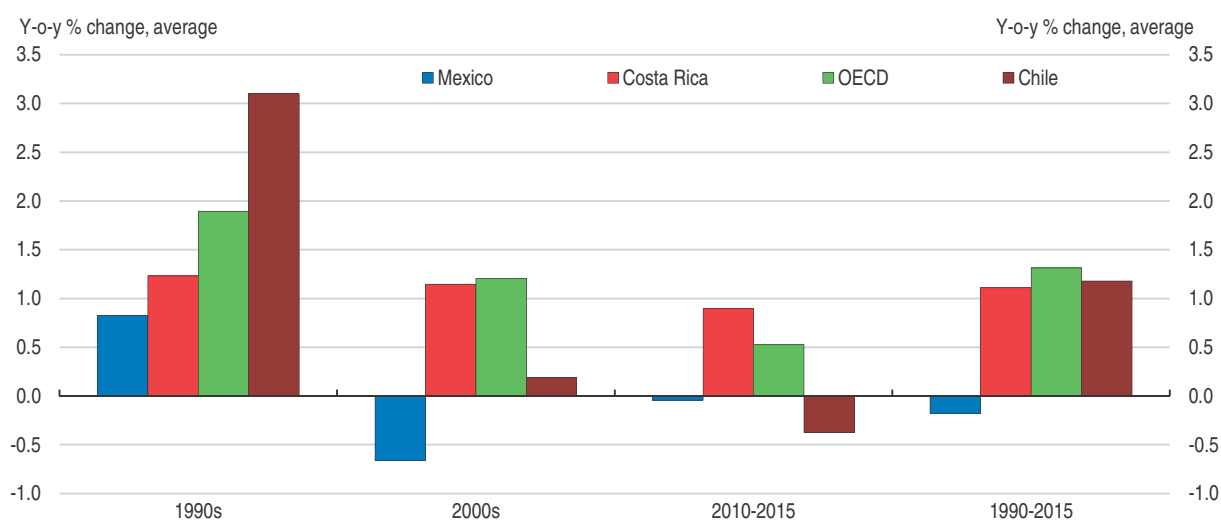
the so-called Nationally Appropriate Mitigation Actions (NAMAs). These efforts should be pursued as they will keep Costa Rica at the forefront of abatement mechanisms.

Sewage treatment and solid-waste management are other challenges originating from urbanisation. Seventy-five percent of the residential wastewater is diverted to septic tanks. Sewers are used by only 20% of the population, and only 4% of that fraction receives remedial treatment (Estado de la Nación, 2014). This is well below OECD standards and also below standards in other neighbouring countries. Of all urban wastewater collected in Costa Rica, 96% of is discharged into rivers and receiving water bodies without any treatment, generating public health risks and water contamination. To respond to these challenges, the first ever collection system in the Metropolitan Area of San José is being built. The government should aim at building additional waste-treatment plants in other regions with the aim of gradually covering 100% of water discharges.

Improving productivity will require a whole-of-government approach

Costa Rica's rising living standards over the latest decades have largely depended on rising employment while productivity has made a decreasing contribution (Figures 2 and 26). Since early 2000s, potential output growth has declined by nearly one percentage point to about 4% as employment growth has fallen (Figure 27). The slow-down in employment trend growth can be ascribed, as discussed above, to structural issues besetting the labour market and resulting in an increasing structural unemployment rate and informality, and falling participation among low-skilled workers.

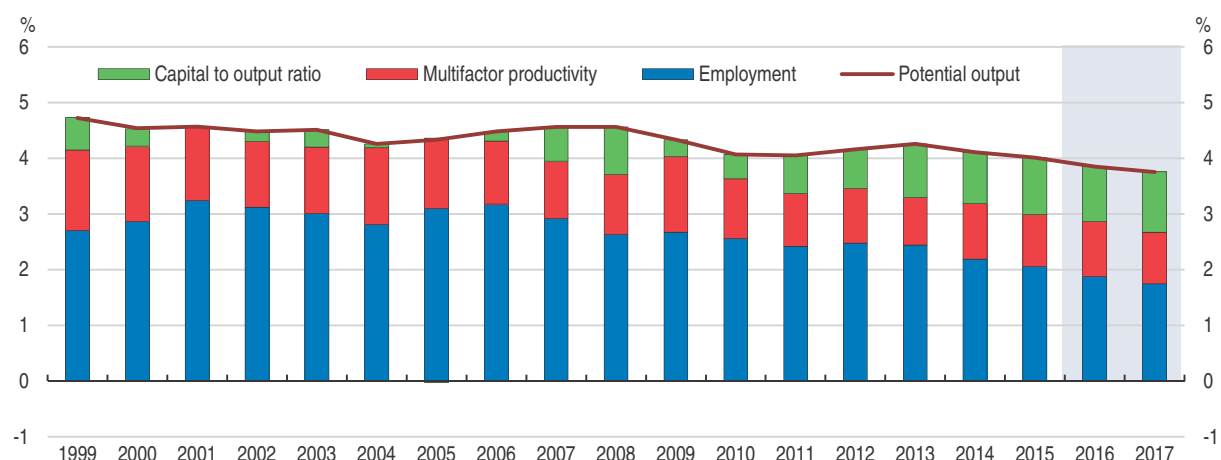
Raising productivity growth so as to sustain output growth will require measures spanning innovation, competition and transport infrastructure, in addition to improving education, as discussed above. Given this wide range of policies, it is important they are well aligned. In this respect, it is useful to develop a national strategy actively involving all stakeholders, including businesses, academia and social partners (OECD, 2015k). The government is aware of this challenge and in 2010 it established the Presidential Council on Competitiveness and Innovation (CPCI), to co-ordinate policies across institutions. It is composed of three sub-councils – Council on Competitiveness, Council on Innovation and

Figure 26. **Productivity growth is decreasing**

Note: Data for Mexico is available since 1996 and for Costa Rica since 1992. OECD corresponds to the arithmetic average of the percentage annual growth of member countries whose data is available at each year.

Source: OECD (2015a), OECD Economic Outlook 98 Database.

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Figure 27. **Employment and productivity have contributed to lower potential output growth**

Source: OECD (2015a), OECD Economic Outlook 98 Database.

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Human Talent, and Alliance for Employment and Development – with representatives from ministries and the private sector; it has the support of a small technical unit.

The establishment of the CPCI is a good development and is in line with similar initiatives in OECD countries, such as Australia, Chile, Mexico and New Zealand, which have created productivity commissions. The CPCI has managed to improve accountability and break down policy silos but so far has mainly worked as a coordinating agency. To become more effective in identifying obstacles to productivity growth and propose policy options to overcome them, CPCI should be streamlined, by

merging the three sub-councils into one, and assume a more strategic role. The technical unit should be strengthened and staffed with experts in the different areas coming from academia, the private sector and think tanks. It could be tasked to prepare and update at regular intervals long-term strategic plans to be submitted to the government and parliament for discussions and potentially approval. Other efforts to improve the coordination and implementation of policies to improve productivity are also underway and should be pursued. These include a draft law to create an agency (Agencia Costarricense de Fomento Productivo, Innovación y Valor Agregado, FOMPRODUCE) with a public-private governance structure, which will centralise funds and functions currently dispersed across several agencies, to facilitate the establishment of businesses and promote innovation.

Enhancing links between foreign and domestic firms and encouraging innovation

Costa Rica is an attractive FDI destination because of its friendly FDI regime and it ranks rather well in the OECD FDI Regulatory Restrictiveness Index (Figure 28). However there is scope to lower FDI restrictions in some sectors, such as mining and quarrying, electricity distribution, surface and maritime transport, and insurance.

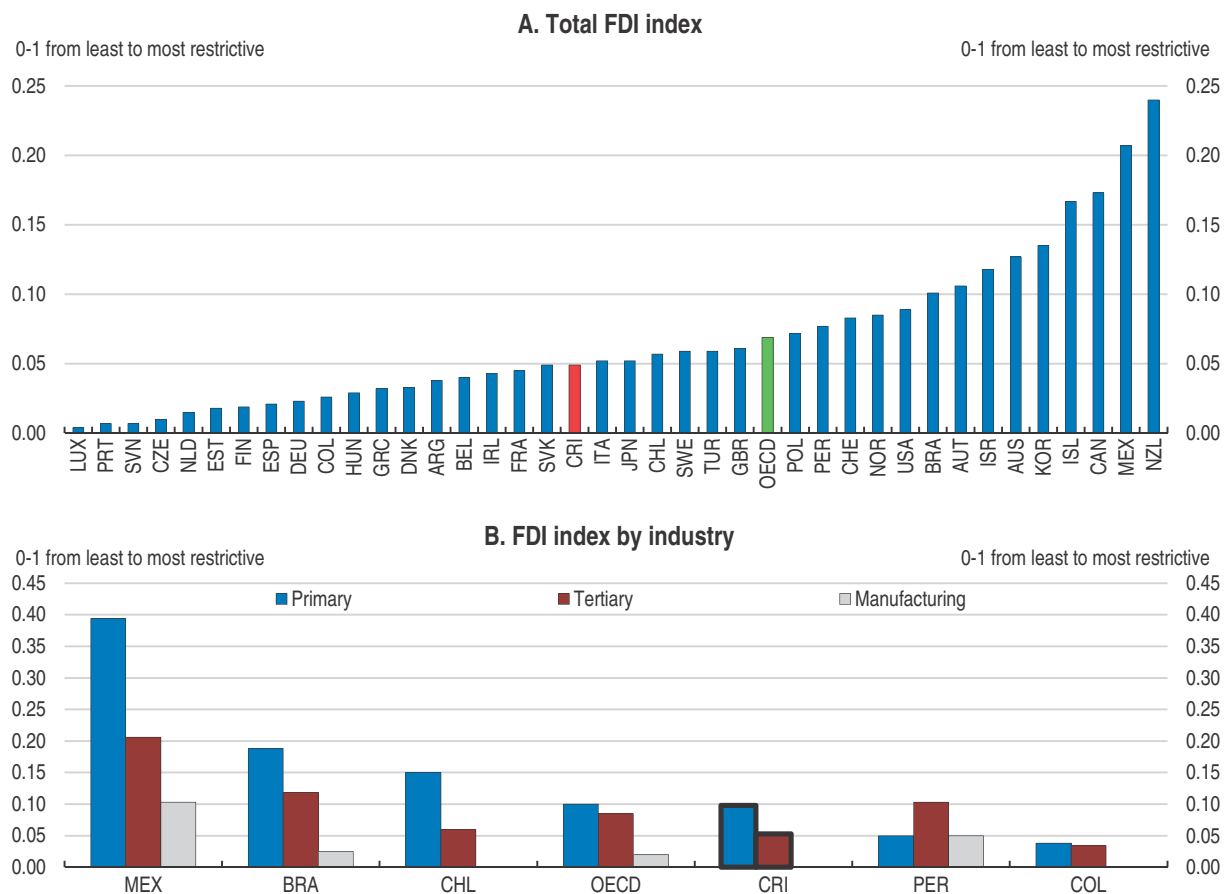
Despite large FDI inflows, links between foreign and domestic firms have remained elusive. Foreign affiliates limit their purchases from local suppliers to unsophisticated products and services, such as packaging materials, office supplies, security and food. Wages differences are also large, hampering labour mobility from foreign to domestic companies and the transfers of technologies and know-how.

Strengthening linkages between domestic and foreign firms will hinge on improving the technology, quality of products and productivity of the domestic sector. In this respect, R&D activities play a crucial role as not only they stimulate innovation but also favour technology transfers (Griffith et al., 2004; Adalet McGowan et al., 2015). Gross expenditure in R&D and the numbers of employees involved in R&D activities are substantially lower in Costa Rica than in most OECD countries (Figure 29). Business R&D spending is exceedingly low and mostly performed by foreign affiliates in free trade zones. Public research is nearly equally split between government and higher education institutions (Figure 29).

The government should focus a larger share of public R&D spending on higher education institutions as this could enhance collaboration between firms and universities, through for instance joint public-private research projects and enhancing student and faculty mobility. In many OECD countries universities have already replaced public research institutes as the main recipient of public research funds (OECD, 2014a). Close collaboration between universities and firms allows firms, especially small ones, to access universities' advanced knowledge capital, laboratories and skills, which they would not be able to afford otherwise (Adalet McGowan et al., 2015); it is also associated with more diffusion of foreign technologies (OECD, 2015k) and enhances the career prospects for graduates of technical and scientific disciplines, ultimately increasing their number and reducing skill mismatches in the labour market. To take full advantage of the knowledge being generated in universities it will be important to consolidate and scale up the Ministry of Science, Technology and Telecommunication's current efforts to work collaboratively with universities so as to connect researchers with private sector firms and fund research-based innovation projects. Given the small size of local companies, R&D tax credits would

Figure 28. **Costa Rica has an attractive FDI regime but could do even better**

2014



Note: Index ranges from zero (least restrictive regime) to one (most restrictive). The higher the value of the index, the more obstacles for inward FDI.

Source: OECD FDI Regulatory Restrictiveness Index Database.

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be a less effective way to promote innovation in Costa Rica than direct and transparent support measures – e.g. contracts, grants and awards.

Policy evaluations of current programmes to boost innovation in local SMEs (*Programa de Apoyo a la Pequeña y Mediana Empresa*, PROPYME) and establish local suppliers' links with foreign affiliates (*Proyecto de Desarrollo de Proveedores para Empresas Multinacionales de Alta Tecnología*, Costa Rica Provee) have shown encouraging results (Monge González and Rodríguez-Álvarez, 2013). The government should scale up these programmes by increasing their budget and enhancing their coordination. The effort the Ministry of Science, Technology and Telecommunications to increase funding to this sort of programmes through IADB loans is welcome. As the outcomes of aiming at boosting innovation in local companies and deepening their links with foreign affiliates are tightly intertwined, establishing a one-stop agency to better coordinate them is likely to improve their effectiveness. The establishment of the agency FOMPRODUCE, as envisaged by a draft law proposed by the government (as described above), to concentrate funds and responsibilities, of programmes concerning firms' innovation and development, in a single entity is welcome. However, programmes will need to be carefully evaluated and the

government should then commission policy evaluations on a regular basis to assess their cost effectiveness and inform future policy changes.

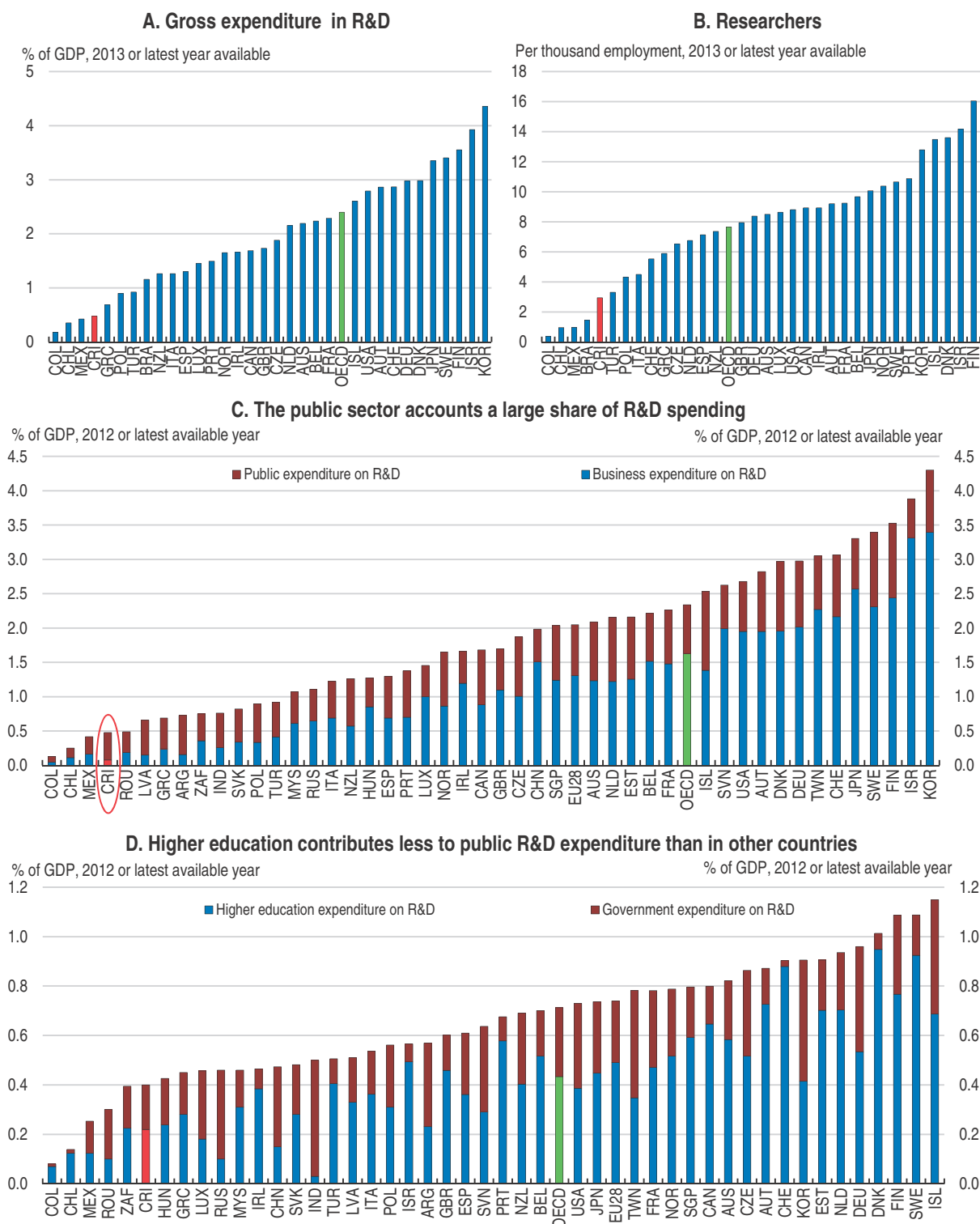
Strengthening competition and improving access to finance

According to OECD's Product Market Regulation (PMR) indicator (Koske et al. 2015), regulation in Costa Rican product markets is stringent (Figure 30). Restrictions in the form of state controls and barriers to entrepreneurship are especially high (Figure 31). State controls are particularly binding because of government involvement in network sector, poor governance of state owned enterprises and extensive price controls. High barriers to entrepreneurship are attributable to the license and permits system, administrative burdens for sole proprietors of firms, antitrust exemptions and barriers in network sectors.

Markedly reducing barriers to entrepreneurship will improve the business environment and enhance competitive pressures, in addition to reducing labour market informality. More specifically, among barriers directly hampering entrepreneurship, the license and permits system and administrative burdens for sole proprietor firms are significantly higher than the OECD average. OECD best practices indicate that establishing one-stop agencies and adopting the "silence is consent" rule can significantly lower these barriers. Over the past five years, most OECD countries have made progresses in this area by, for instance, modernising license and permits systems, streamlining administrative procedures for start-ups, simplifying rules and procedures and improving access to information about regulation (Koske et al., 2015). Costa Rica has ample scope for making similar improvements and move towards OECD standards.

Eliminating anti-trust exemptions, without creating private monopolies, is key to exposing a larger share of the economy to competitive forces, as underlined in previous OECD reports (OECD 2014c; 2015m). Currently, the sectors exempt from the competition law include all public services requiring state concessions by law, these are all sectors under the purview of Public Services Regulatory Authority (*Autoridad Reguladora de los Servicios Públicos*, ARESEP), with the exception of airports. Other important markets outside the scope of the competition laws include: imports, refinery and distribution of wholesale petroleum and its derivatives; the manufacture of alcohol for beverages; maritime transport; the production and commercialisation of sugar and rice; professional services. The recent experience of the telecommunications sector, which was opened up to competition in 2009 is positive as it was accompanied by a large expansion of the sector and use of telecommunication services, closing the gap with peer countries, and lower prices (Figure 32).

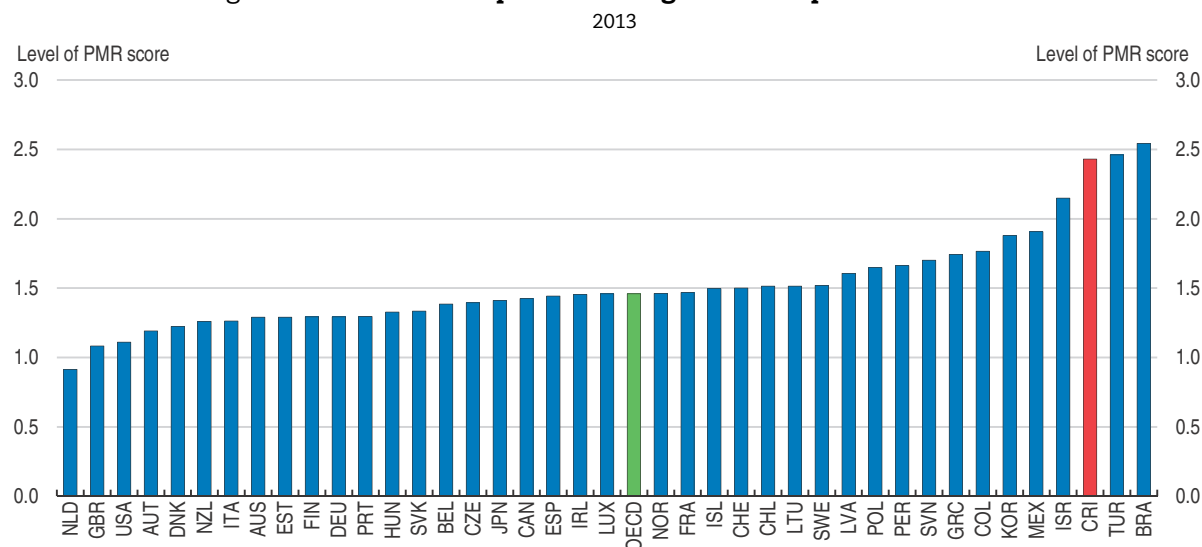
The government should grant the competition authority (COPROCOM) more decisional and administrative independence and raise its human and financial resources. Unlike the Superintendence for Telecommunications (*Superintendencia de Telecomunicaciones*, SUTEL) and ARESEP COPROCOM does not have administrative independence or a separate budget from the Ministry of Economic Affairs. COPROCOM human and financial resources should also be increased as they fall well short of what is needed (OECD, 2015m). Installing full-time commissioners instead of the current part-time system, as the government plans to do, will reduce the likelihood of conflicts of interests. Besides this, COPROCOM's should be granted the power to conduct market studies, and its investigative powers should be enhanced by establishing a leniency programme for whistle-blowers and increasing penalties on those involved in illegal practices and those who do not provide requested information (OECD, 2014c).

Figure 29. **Research and development (R&D) activities are low**

Note: Panel A: Gross expenditure on R&D as a percentage of GDP for 2013 or latest year available. Panel B: Researchers per thousand employment for 2013 or latest year available. Panel C: Total R&D expenditure (public and business) as a percentage of GDP, 2012 or latest available year. Panel D: Public R&D expenditure by type of research system.

Source: OECD (2014e), *Main Science and Technology Indicators 2014*; Eurostat; UNESCO Institute for Statistics (UIS), June 2014.

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Figure 30. **There is scope to ease regulation in product markets**

Note: OECD is a simple average of OECD countries, 2013 data. USA latest data is 2008.

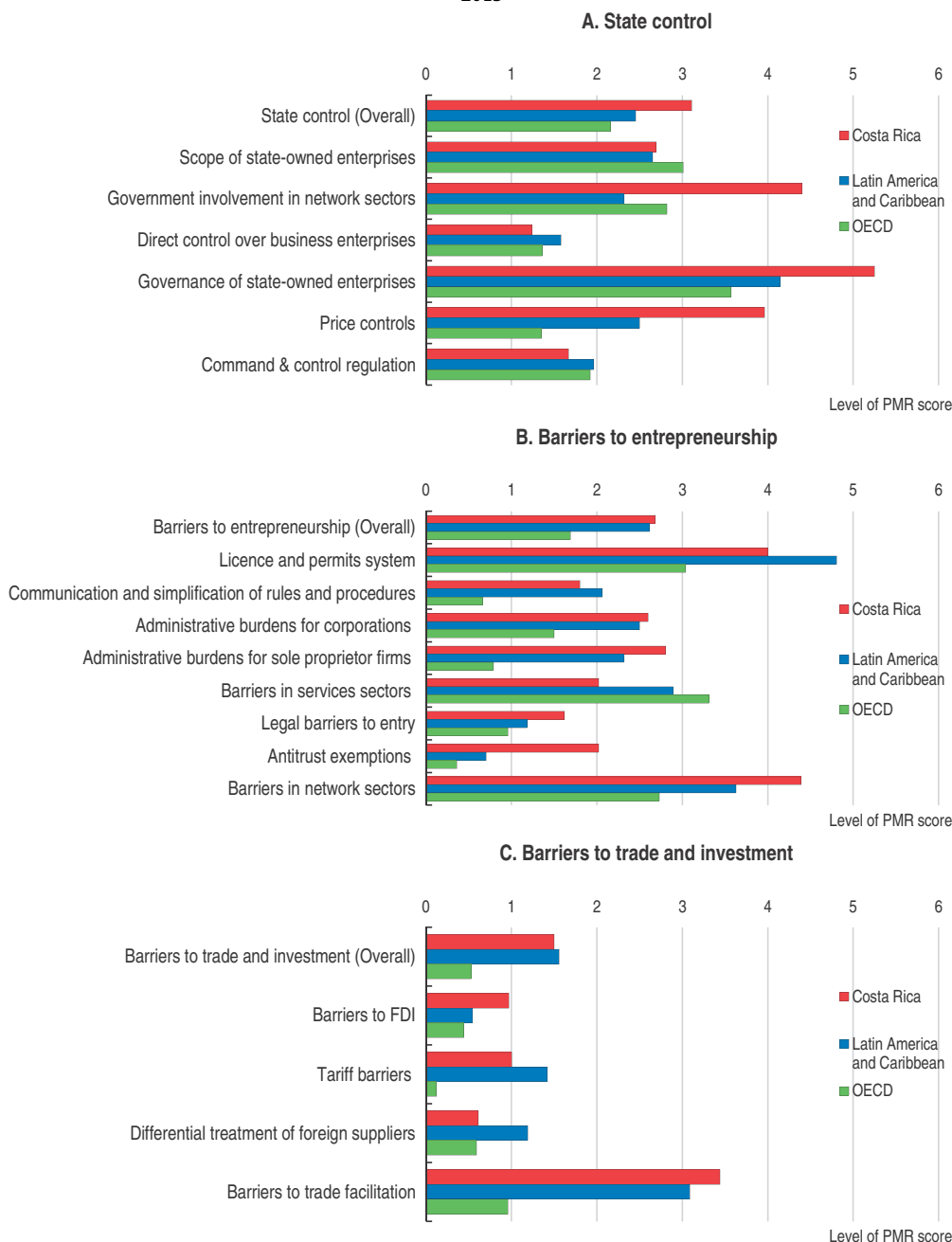
Source: OECD Product Market Regulation Database for OECD countries and Brazil; OECD-World Bank Group Product Market Regulation Database for Colombia, Peru and Costa Rica.

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State-owned enterprises play a dominant role in many key sectors of the economy, such as electricity, transport infrastructure (excluding airlines), banking, insurance and petroleum products. A preliminary count of SOEs by the government following OECD criteria reaches about 40. Most of these SOEs have been created by specific laws determining their internal regulations and procedures for reporting to the central government. Setting a more uniform set of operational regulations and procedures for reporting to the central government would be a start to rationalise their operations. Furthermore, corporatising state-owned enterprises will yield large efficiency gains (Aivazian, Ge and Qiu, 2005; Bilodeau, Laurin and Vining, 2007; Nelson and Nikolakis, 2012). Adherence to the *OECD Guidelines on Corporate Governance of State-owned Enterprises* (OECD, 2015i) can help in addressing governance challenges usually faced by state-owned enterprises attributable to political interference, lack of incentives to improve performance and complex institutional arrangements.

In the banking sector, significant regulatory asymmetries favour state-owned banks, hindering full competition between public and private banks. State-owned banks enjoy a government guarantee on bank deposits (amounting to more than 20% of GDP) that private banks do not. In addition, all public institutions are obliged by law to deposit their cash with one of the state-owned banks. Although the three state-owned banks (Banco Nacional de Costa Rica, Banco de Costa Rica, Banco and Crédito Agrícola de Cartago) are less efficient than private banks (Figure 33), they continue to play a dominant role as in mid-2015, they accounted for around 55% of assets and liabilities. Inefficiencies and lack of competition in the banking sector contribute to high interest rate spreads between loans and deposits in local currency (Castro Arias and Serrano López, 2013) and hamper credit provision (Figure 34). In the absence of strong market pressures, in November 2015 the government issued a directive instructing state-owned banks to increase their efficiency, mainly by cutting administrative expenses, so as to reduce their intermediation margin by at least one percentage point by 2018 (La Gaceta, 2015).

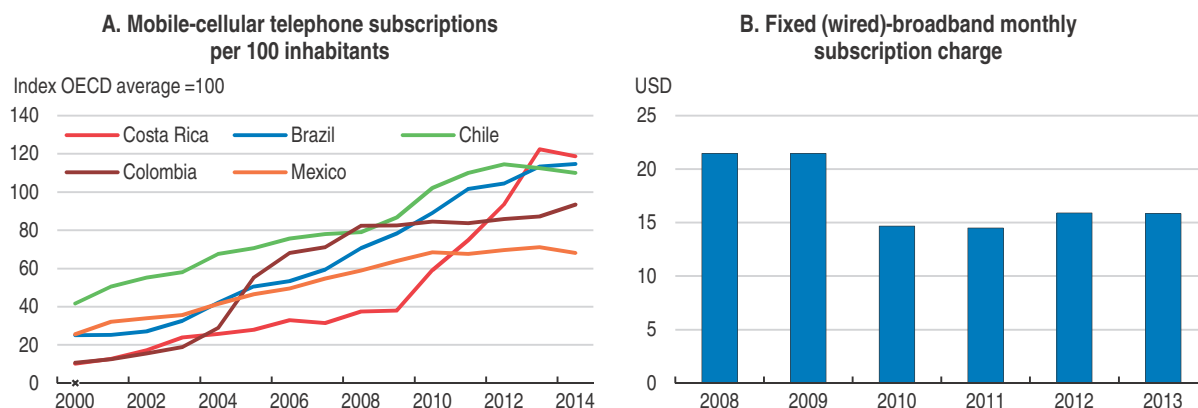
Figure 31. **State control and barriers to entrepreneurship are especially high**
2013



Note: Simple average of OECD and 12 Latin America countries, 2013 data. USA latest data is 2008.

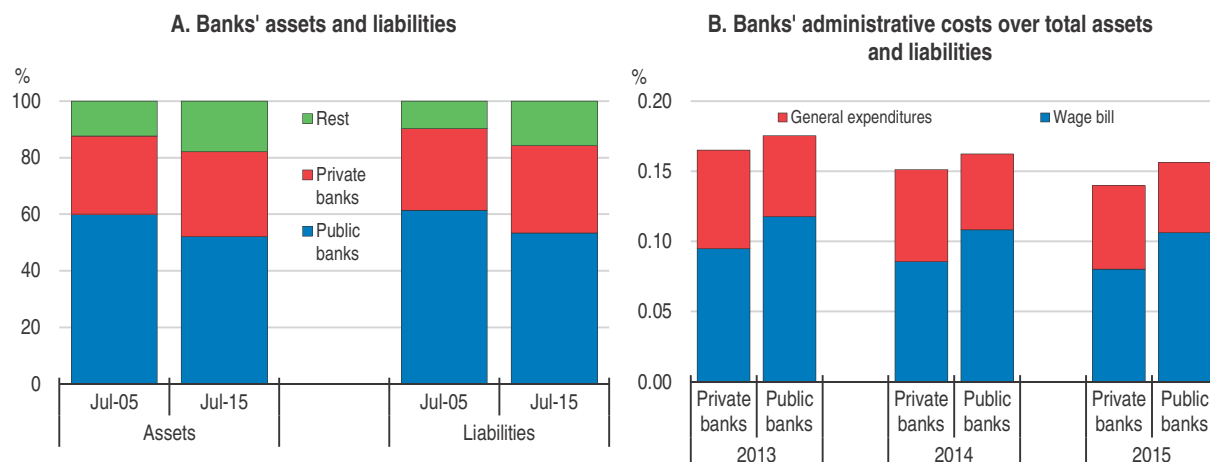
Source: OECD Product Market Regulation Database for OECD countries and Brazil. OECD-World Bank Group Product Market Regulation Database for Latin American and Caribbean countries except Chile, Mexico and Brazil.

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Figure 32. **The telecommunications sector has expanded since opening up to competition**

Source: International Telecommunications Union, World Telecommunication/ICT Indicators Database 2015.

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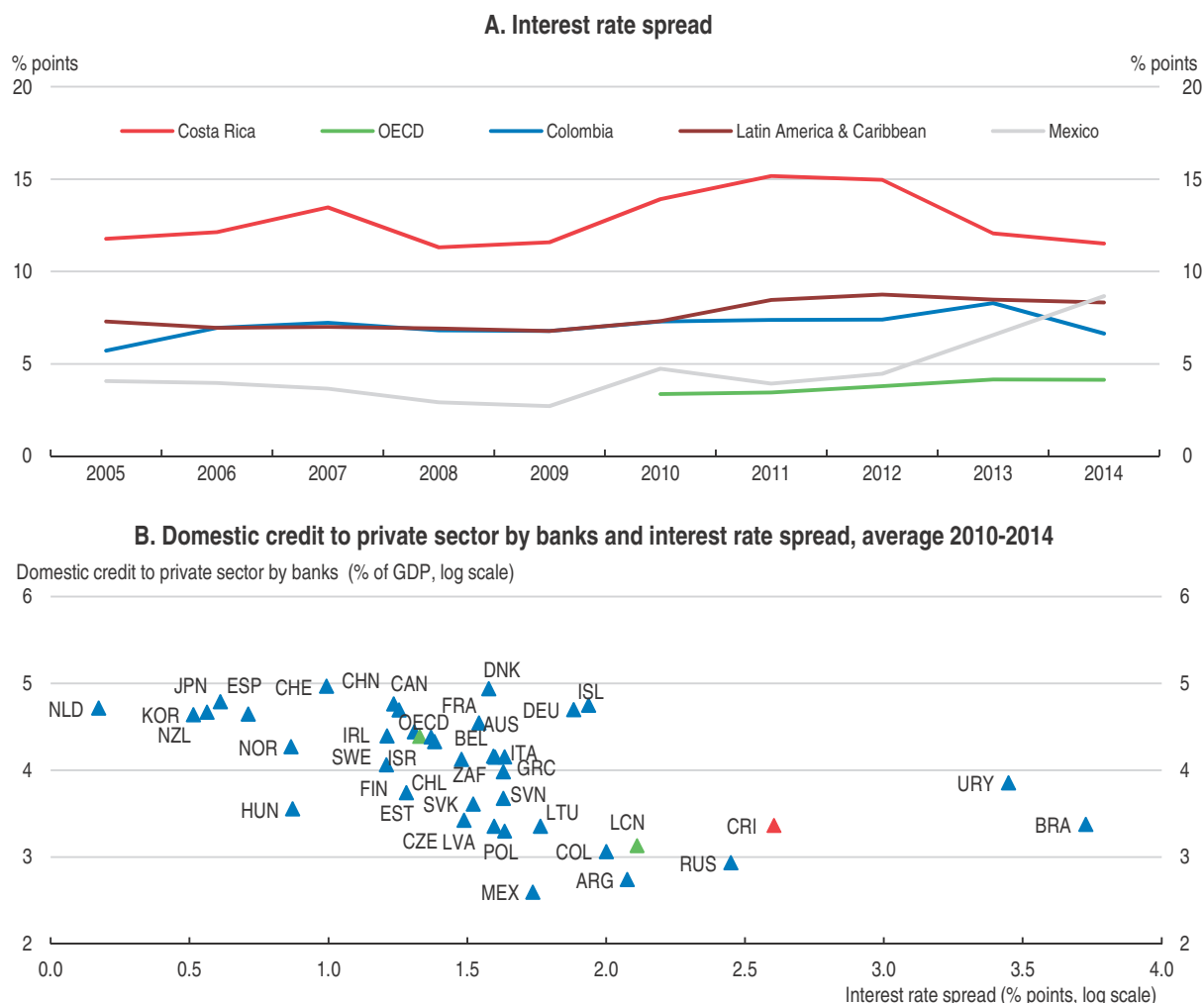
Figure 33. **State-owned banks have a dominant role and have higher costs than private banks**

Note: Panel B: The bars show the median of private and public banks' monthly administrative costs (general costs and personnel expenditures) expressed as percentage of the sum of total assets and liabilities; the ratio of the monthly administrative costs to the sum of total assets and liabilities are averaged over the year; data for 2015 are from January to September.

Source: Superintendencia de Financial Institutions (SUGEF).

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In addition to improving the corporate governance of state-owned banks, the government should create a more even level-playing field in the banking sector by introducing a deposit insurance scheme covering all banks and eliminating all other regulatory asymmetries favouring state-owned banks. Only few OECD or Latin America countries do not have an explicit deposit insurance scheme, such as Israel, New Zealand and Bolivia (Demirguc-Kunt et al., 2014). Eventually, once public banks are operating according to higher standards of governance and corporate performance, the authorities should assess whether or not maintaining public ownership of a large share of the banking industry is justified on economic, social and financial stability grounds. Reducing the

Figure 34. **High banking interest rate spreads curtail credit availability**

Note: Interest rate spread is calculated as the lending rate minus the deposit rate; LCN stands for Latin America and Caribbean (all income levels) as defined by the World Bank.

Source: World Bank World Development Indicators.

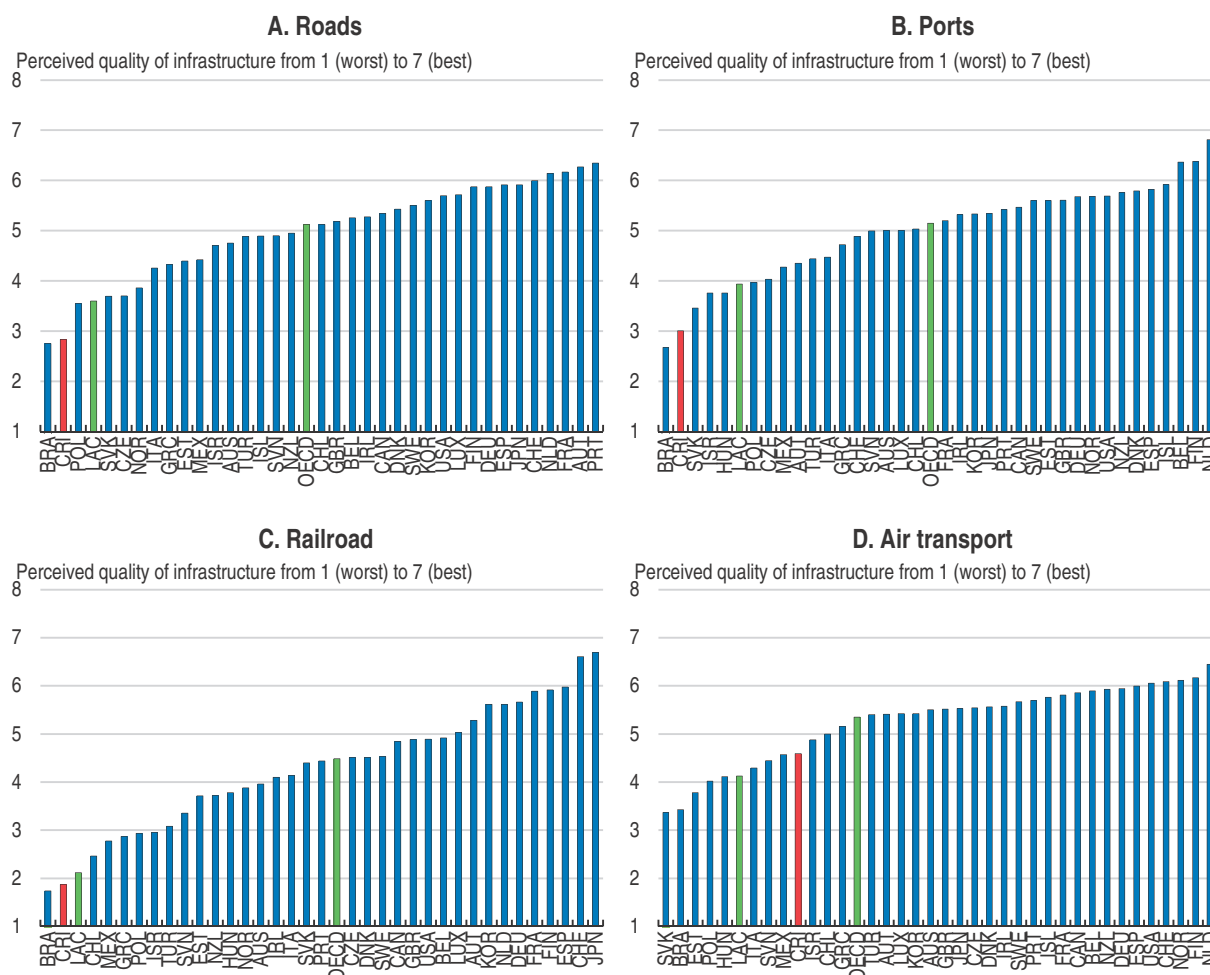
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State's equity stake in reformed state-owned banks could free resources that could be used more effectively to pursue economic and social objectives.

Improving transport infrastructure

Survey data on the perceived quality of infrastructure rank Costa Rica 103rd worldwide, well below Latin America average for roads, ports and railroads, although above it for airports (Figure 35). Better transport infrastructure can contribute to higher GDP growth and productivity through boosting the productivity of private inputs, which in turn will raise private investment (Agénor and Moreno-Dodson, 2006). Better transport infrastructure can support more environmentally sustainable growth and mobility patterns.

The low quality of Costa Rica's transport infrastructure is attributable to chronic underspending compounded by deficient strategic planning and lack of a long-term vision

Figure 35. **There is scope to improve the quality of transport infrastructure**

Note: Figures refer to the following question: How would you assess general infrastructure in your country (from 1 = extremely underdeveloped – among the worst in the world to 7 = extensive and efficient – among the best in the world)? The OECD and Latin America & Caribbean (LAC) aggregate are calculated as an unweighted average.

Source: World Economic Forum, The Global Competitiveness Index Historical Dataset © 2005-15.

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for the sector. From 2002 to 2013, transport infrastructure spending averaged 0.8% of GDP less than the OECD average. In addition, spending has been irregular as in the absence of a multiyear budgeting process, public investment in transport infrastructure is negotiated every year and subject to cuts (MOPT, 2011).

The government is aware of the transport infrastructure spending shortfall. The National Transport Plan 2011-35 (MOPT, 2011) calls for annual infrastructure spending of 3.99% of GDP to 2035. According to the Plan, one third of the estimated spending should be financed by the public budget with the remaining part coming from the private sector.

Improving the efficiency of public investment in transport infrastructure

The transport infrastructure planning and decision making processes are highly fragmented among different ministries and government agencies. The Ministry of Public Works (MOPT) is the institution that has historically been in charge of planning, building, maintaining and operating transport infrastructure. However, in the 1990s, many of these

responsibilities were transferred to new autonomous or semi-autonomous agencies (Pisu and Villalobos, forthcoming). As a result of this fragmentation, infrastructure projects are often the result of individual institutional efforts, do not follow common approaches and suffer from inadequate preparation (CGR, 2012). The current administration is aware of the problem and is trying to recover MOPT's sector stewardship, through better planning, management, coordination, monitoring and control and evaluation of sector agencies.

This complex institutional framework would be simplified by articulating the policy mandate of the different ministries and agencies on transport policies and better integrating the development and execution of policies. To remedy policy fragmentation and reinforce planning capacity, some OECD countries have created dedicated agencies to develop long-term strategies and plans, such as Australia (Infrastructure Australia) and the United Kingdom (Infrastructure UK), with good results. In the current institutional setting, a reformed Presidential Council on Competitiveness and Innovation (CPCI) with a more strategic role could be tasked with the Ministry of Public Works to design long-term transport infrastructure strategies and policies, consistent with other long term economic and social objectives, and track progresses towards them.

Additionally, the role of SOEs should be reconsidered. In this respect, as discussed above, the priority should be to corporatise the state-owned enterprises, especially those responsible for maritime transport and railways, and enhance their corporate governance in line with the *OECD Guidelines on Corporate Governance of State-Owned Enterprises*. Also, a clear functional separation of SOEs' activities – between the regulation and the provision of infrastructure services and between the management of and access to the infrastructure network – can better prepare them for and encourage increased private-sector participation (OECD 2015h).

Reforming the institutional setting to attract more private investment

In the nearly 20 years since General Concession Law has been into force, only four projects involving private participation have materialised. The weak performance of the National Concession Council in promoting concessions and PPPs is partly attributable to its institutional setting as an agency within the Ministry of Public Works. This does not conform with OECD practice as PPP units mostly depend on the Ministry of Finance (OECD, 2010a). The current arrangement in Costa Rica may create a bias against private participation in infrastructure because the Ministry of Public Works also promotes public-funded infrastructure projects that can be in direct competition with privately funded ones. In addition to promoting private participation in transport infrastructure, CNC should be directly involved in project preparation and selection, and perform cost-benefit analyses. Moving CNC within the Ministry of Finance could improve performance and would facilitate the accounting of implicit liabilities arising from private-sector participation, which currently Costa Rica does not undertake (Irwin, 2007; Posner et al., 2009).

Finally, a transparent and credible infrastructure project pipeline will manifest the government commitment to attract private capital and lower perceived policy uncertainty. A credible project pipeline can help de-politicise project selection and execution and instead base them on purely technical and economic considerations. The United Kingdom is a recent example of creating an infrastructure project pipeline, which has helped to revive private investors' interest in infrastructure (Pisu, Pels and Bottini, 2015).

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Thematic chapters

Chapter 1

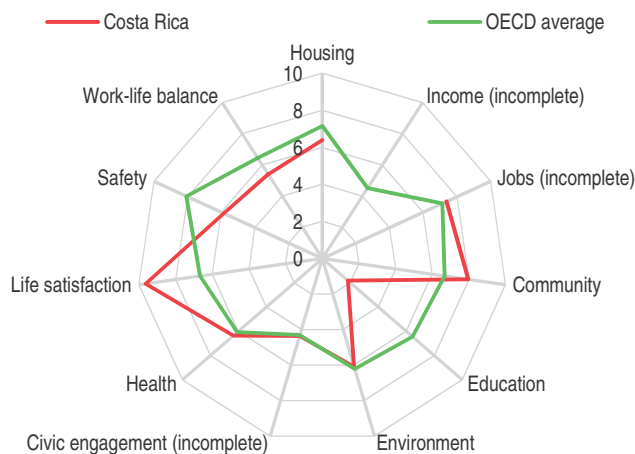
All together: Making growth more inclusive in Costa Rica

In the past 30 years Costa Rica has grown steadily and social indicators have improved markedly. Well-being indicators are comparable or even above the OECD average in several dimensions, such as health, environment or life-satisfaction. This chapter reviews the social progress that Costa Rica has achieved and identifies reducing inequality and poverty as the main challenges. To tackle those challenges, the chapter argues that there is a need to upgrade existing social assistance programmes to maximise their impact. Social policies should put more emphasis on getting more people into formal work, including by raising their skill levels. This is the most effective way to get people out of poverty. Education is the area where the largest gap with respect to OECD countries is observed. Policy efforts are also warranted to tackle informality, which is increasing rapidly, and to close the gender gap in the labour market. The health and pension systems play a fundamental role in maintaining social cohesion in Costa Rica and it is crucial to modernise them and to make them sustainable in the face of demographic challenges. Costa Rica exemplifies the benefits of preserving natural resources in generating growth and employment opportunities, thereby providing a way out of poverty. Building on its achievements in this area, Costa Rica should reinforce environmental protection efforts, such as reducing emissions from the transport sector and improving wastewater treatment.

Costa Rica stands out among Latin America countries for its commitment and efforts to maintain social cohesion by providing virtually universal education, health and pensions. This commitment, together with stable economic growth, has translated in non-monetary well-being dimensions being comparable to levels found in higher-income OECD countries (Figure 1.1). Absolute poverty rates are among the lowest in Latin America. Average life expectancy at birth has improved markedly from 62 years in 1960 to 80 years today, very close to the OECD average. Subjective well-being is relatively high (Gallup, 2015), suggesting high levels of perceived happiness, which is also confirmed by the results of the recently released Gross National Happiness index. Costa Rica is the oldest democracy in Latin America. It abolished its army in 1948 and led pacification processes in the Central American region. It is the only tropical country that has substantially reversed deforestation (World Bank, 2015) by increasing the area covered by forest from 26% at the beginning of the 1980s to 52% today.

Figure 1.1. **Well-being indicators are comparable to OECD average**

Better Life Index approximation (preliminary and incomplete)



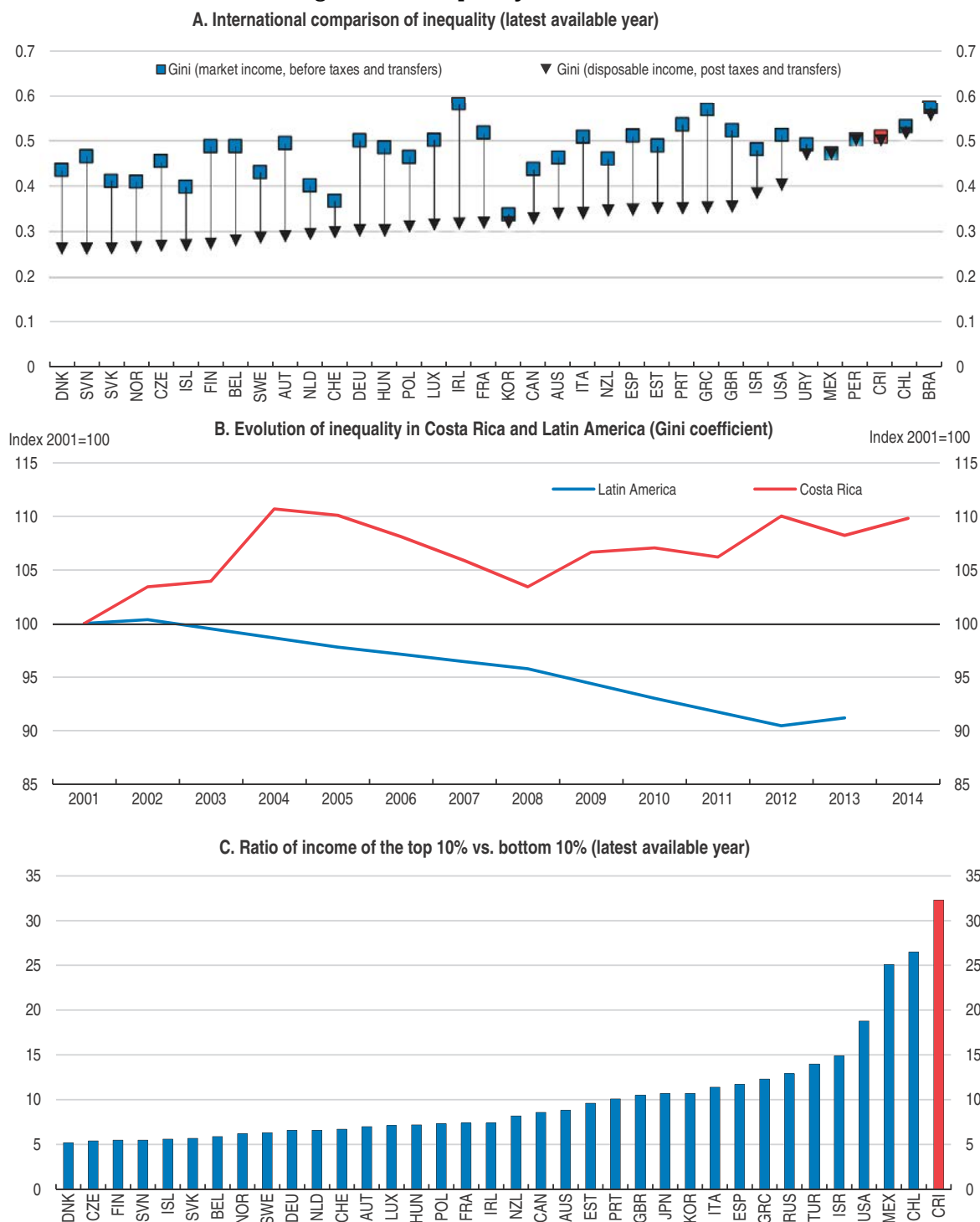
Note: Each well-being dimension is measured by one to four indicators taken from the OECD Better Life Index set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 (worst) according to the following formula: (indicator value – minimum value) / (maximum value – minimum value) x 10.

Source: For Costa Rica: National Institute of Statistics and Censuses (INEC); National Electoral Tribunal (TSE); and Gallup World Poll Database (Gallup, 2015); for OECD average: OECD, Better Life Index Database.

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Inclusive growth in Costa Rica

Inequality in Costa Rica is relatively high by OECD standards, as measured by the GINI index (Figure 1.2, panel A). Despite an improvement in overall macroeconomic performance, inequality has risen since the mid-1990s and is currently at its maximum historical value. In the same vein, poverty has remained largely unchanged over the last

Figure 1.2. **Inequality is on the rise**

Note: Panel A: Provisional estimates for Costa Rica for 2015. Data for Uruguay, Peru, and Brasil is based in per capita concept while data for OECD countries and Costa Rica is based in equivalised income. Panel B: Latin America data refers to a simple average and has been interpolated based on data published by ECLAC-CEPALSTAT, *Social Indicators and Statistics Database*. Costa Rica data comes from Estado de la Nación. Due to methodological differences, the level of the underlying Gini coefficients in this panel is not fully comparable with Panel A. Panel C: Provisional estimate for Costa Rica for 2015.

Source: OECD Income Distribution Database (IDD); Lustig et al. (2013); ECLAC-CEPALSTAT, *Social Indicators and Statistics Database*; Estado de la Nación, *Compendio de Indicadores Sociales* (2015).

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two decades (Box 1.1). This is in stark contrast with other Latin American economies (Figure 1.2, panel B), such as Brazil, which has recently made significant progress in reducing inequality and poverty. Households at the top of the income distribution get a large share of national income: the top 10% gets 32 times the average income of the bottom 10%, compared to an OECD average of 10 times (Figure 1.2, panel C).

The increase in inequality has taken place despite an overall increase in household's disposable income and reflects that the gap between the rich and the poor has increased recently (Figure 1.4). Consistently with evidence from OECD countries (Hoeller et al. 2012),

Box 1.1. Poverty measurement in Costa Rica

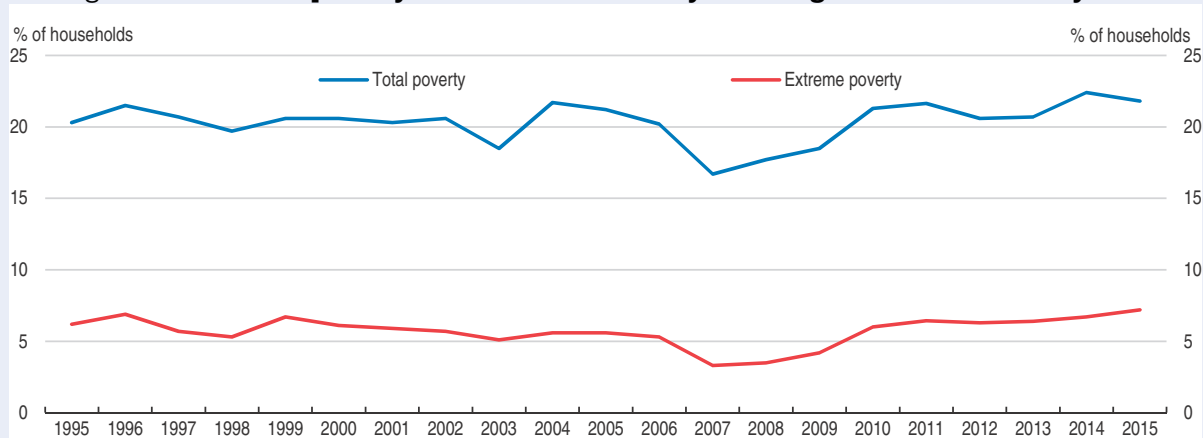
Poverty is measured in Costa Rica against an estimate of the minimum income required for a person to satisfy food and non-food needs. These needs are based on a basket of goods and services deemed to be basic for subsistence. This basket is built based on information obtained from the Survey on Income and Expenditure (ENIGH). Both composition and cost are determined separately for urban and rural areas. The value of the basket, i.e. the poverty line, is updated according to monthly changes in the prices of food and non-food items, weighted by area of residence, according to the calculations underpinning the consumer price index.

A household is considered to be poor if its per capita income is equal or below to the poverty line of the respective area (urban or rural). It would be classified in extreme poverty if the per capita income is below the value of the basic food basket, which includes only items related to food needs.

At July 2015, the poverty line is estimated to be CRC 107293 (around USD 201) per capita per month for urban households and CRC 82418 (around USD 155) for rural households. Extreme poverty lines are CRC 49607 (around USD 92) and CRC 40673 (around USD 76), respectively.

The resulting poverty indicators signal that total poverty has remained broadly stable over the last 20 years (Figure 1.3). It is estimated that total poverty reaches 21.7% of households in 2015. This implies that 317 660 households are poor, concentrating 1 137 881 people (INEC, 2015a). Extreme poverty has seen a slight increase in recent years. From 5.8% in 2010, it has increased to 7.2% in 2015. As a result, 104 712 households and 374 185 people are estimated to be in extreme poverty.

Figure 1.3. Income poverty has remained broadly unchanged over the last 20 years



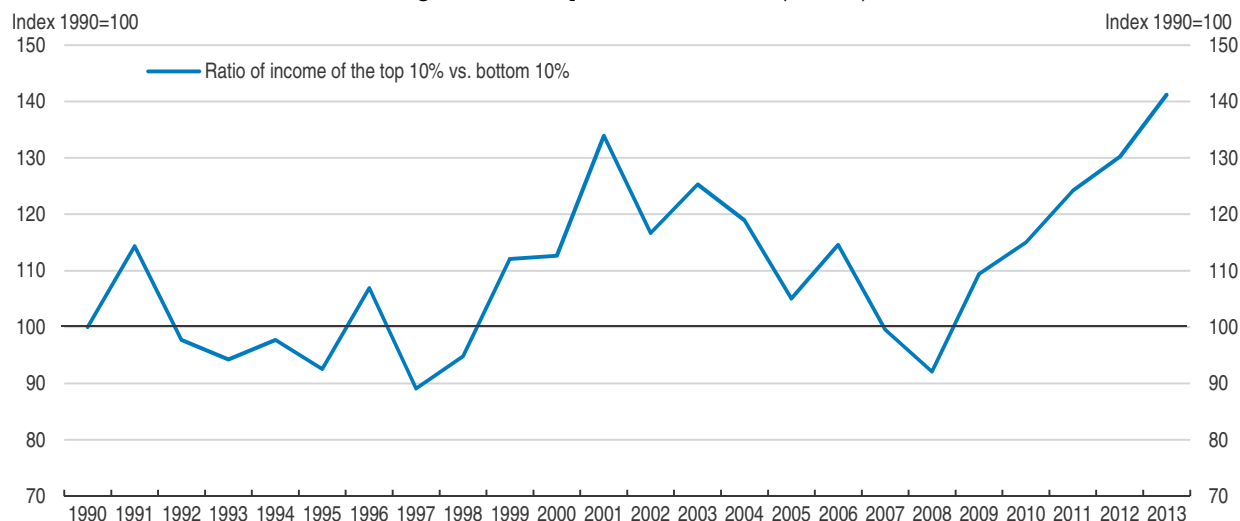
Note: Total poverty is the sum of extreme and non-extreme poverty.

Source: Estado de la Nación, Compendio de Indicadores Sociales until 2013, data for 2014 and 2015 come from INEC, Encuesta Nacional de Hogares 2015, Resultados Generales.

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Figure 1.4. The divide between the poor and the rich has recently increased

Ratios between average income in top and bottom deciles (S90/S10), Index 1990 = 100



Note: Based on income categories reported in ENAHO, which includes contributory pensions, non-contributory pensions and transfers provided by IMAS, the Institute of social welfare.

Source: Estado de la Nación (2014).

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earned labour income is the main determinant of income inequality. Over the 2010-14 period, public sector salaries made the largest contribution to inequality (Table 1.1 and Gabriel and González Pandiella, forthcoming), particularly the salaries of qualified workers in public agencies outside central government. Private sector wages also contributed to inequality, reflecting high skills premium and weak job creation for the low-skilled (more below).

Table 1.1. Relative contribution of each source of income to total inequality

	2010	2011	2012	2013	2014	Average 2010-14
Relative contribution of different sources (%)	100	100	100	100	100	100
Qualified public sector employee salaries	31.2	32.5	29.7	31.0	31.1	31.1
<i>Central government</i>	12.3	13.8	13.1	14.5	14.6	13.6
<i>Other public agencies</i>	18.9	18.7	16.6	16.5	16.5	17.4
Unqualified public sector employee salaries	1.5	1.7	1.3	1.5	1.5	1.5
Qualified private sector employee salaries	26.0	26.6	28.0	28.2	30.2	27.8
Unqualified private sector employee salaries	3.6	3.7	3.4	2.6	3.6	3.4
Other employees salaries (e.g. domestic service)	0.6	0.7	1.0	0.3	0.2	0.5
Professionals and tech. self-employed business income	5.5	4.0	3.8	6.2	3.4	4.6
Others self-employed business income	3.4	3.7	5.5	3.9	2.8	3.9
Employers business income	8.6	10.1	8.6	9.3	10.4	9.4
Capital income	11.0	9.4	10.3	9.0	9.1	9.7
Contributory pensions	8.5	7.8	8.0	8.0	8.1	8.1
State transfers (e.g. non-contributory pensions and IMAS programmes)	-0.8	-0.7	-0.7	-0.8	-0.9	-0.8
Other transfers (private and non-monetary)	1.0	0.6	1.1	0.7	0.8	0.8

Note: These calculations are based on the income categories reported in ENAHO, which includes contributory pensions, non-contributory pensions and transfers provided by IMAS. This is in line with Sauma and Trejos (2014), Lustig et al. (2013), Estado de la Nación (2014) and Trejos and Oviedo (2012). The underlying GINI coefficient is based on the per capita income concept and therefore is slightly different from those based on the equivalised income concept such as those reported in Figure 16 (panel A) and Figure 1.2 (panel A).

Source: Gabriel and González Pandiella (forthcoming).

Indicators of income concentration confirm that income inequality in Costa Rica is driven by both ends of the income distribution. Around 38% of income goes to the top 10% (Figure 1.5, panel A). As in other OECD countries, this share has been increasing over time. On the other side of the income distribution, the share of income that goes to the bottom 20% is decreasing (Figure 1.5, panel B).

Figure 1.5. Income is becoming more concentrated

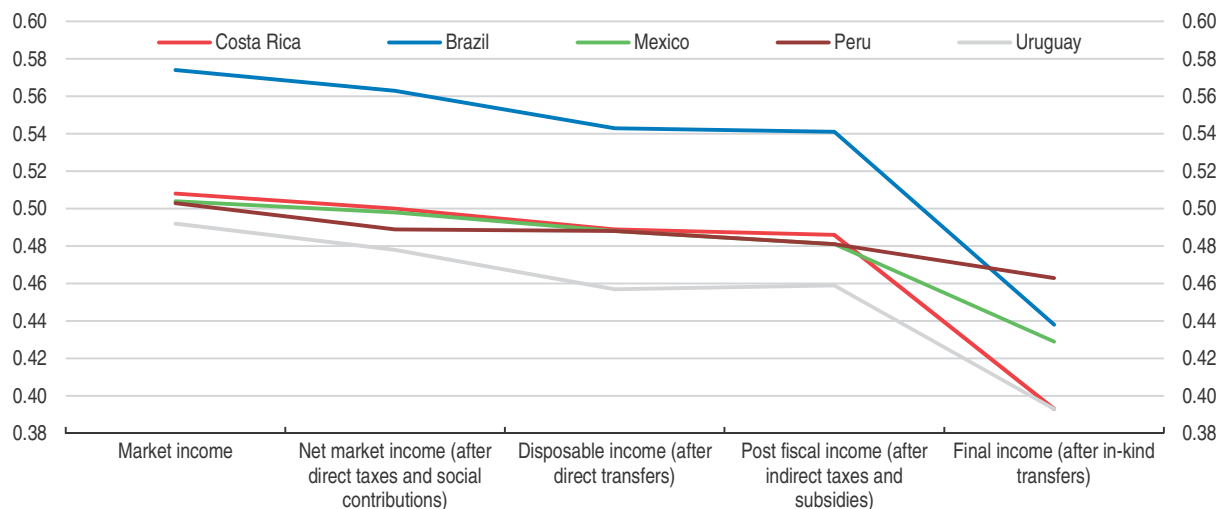


Note: Panel A: The OECD range is the difference between maximum and minimum value considering 19 OECD countries for which data is available in *World Top Incomes Database*. Panel B: The OECD range is the difference between maximum and minimum value considering all OECD countries as available in the *OECD Income Database*.

Source: The *World Top Incomes Database*; OECD calculations based on ENAHO; *OECD Income Distribution Database*; and *Estado de la Nación* (2014).
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The tax and transfer system does not redistribute income to offset these widening income disparities. Comparing market income inequality and disposable income inequality shows that the tax-transfer system only reduces inequality by 4% compared to 26% on average across OECD countries. Conversely, in-kind transfers (benefits in the form of healthcare and education services provided by the state) are quite effective in reducing inequality. They reduce it by 23%, which is a higher reduction than is achieved in other Latin America countries (Figure 1.6).

Figure 1.6. **Transfers in-kind reduce inequality**
Different concepts of GINI coefficients, 2010



Source: Sauma and Trejos (2014a) and Lustig et al. (2013).

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Increasing the progressivity of the tax system

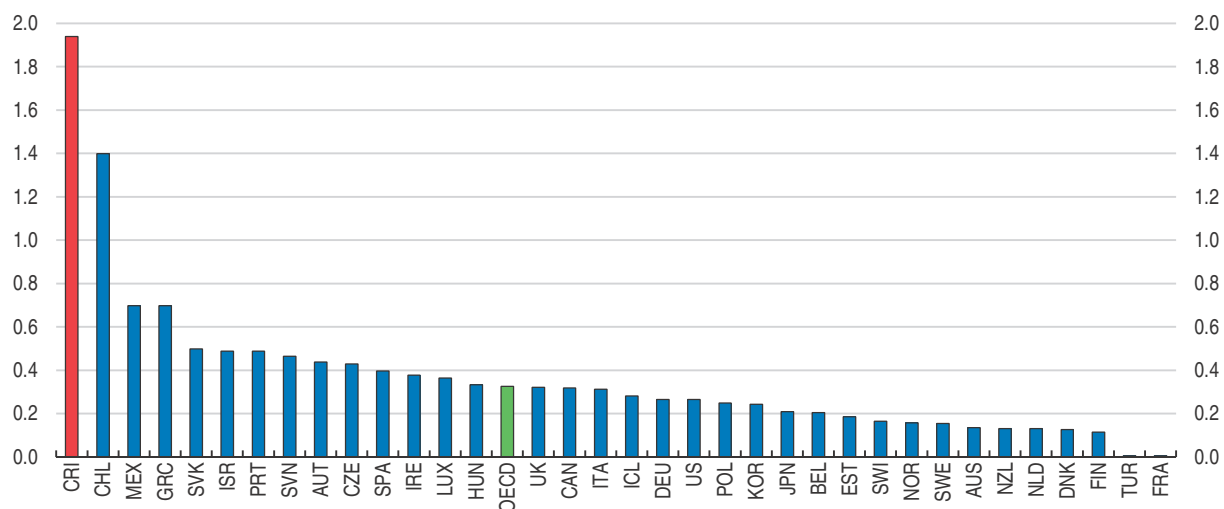
The tax system has a very limited redistributive impact. Tax revenue to GDP is low when compared with OECD countries and direct taxes contribute to redistribution less than in other countries in the region (Sauma and Trejos, 2014b). Costa Rica raises more revenue from social security contributions and less revenue from personal and corporate income taxes than most countries in Latin America (OECD, 2015a) and the OECD. There are also numerous tax expenditures amounting to 6% of GDP (Ministerio de Hacienda, 2014). At the same time the progressivity of the personal income tax is modest, and the employment income threshold below which no personal income tax has to be paid is very high in international comparison (Figure 1.7). As a result, a large share of employees does not have to pay personal income tax, thereby reducing tax receipts and eroding the role the tax can play in reducing inequality. Taxes on capital income at the personal level are also relatively low in Costa Rica, and tax evasion of free professions is large (Brys, forthcoming).

A large tax reform proposal is currently under consideration. It would create two additional income brackets, with rates of 20% and 25% at 5 and 10 times the average income. This is a step in the right direction to increase the progressivity and the redistributive impact of the tax, although its effect is modest, as the two new brackets will affect only 2% of total wage earners given the high tax-free income threshold. To make the personal income tax system more progressive, the additional income brackets could be set at lower income levels and the threshold under which no personal income tax is paid should be gradually lowered.

The tax reform proposal includes also the introduction of a fully-fledged VAT tax. The current standard sales tax rate is 13%, considerably below the 19% average rate for OECD countries. Moreover, services are currently exempted. The VAT reform bill will increase the rate to 14% in the first year and to 15% in the second year. It will also broaden the base to include services. In addition, it will be accompanied by a refund system to compensate households in the lowest four income deciles, which is welcome from a distributional point of view. Thus, the proposed VAT reform will not have a significant impact on inequality, but

Figure 1.7. The income threshold under which no income tax is paid is high

Income threshold where single taxpayers start paying income tax, measured as a multiple of the average wage (2010)



Source: OECD calculations for Costa Rica and OECD Taxing Wages 2011 for the rest of the countries.

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the government expects it will lower the poverty rate by about 3 percentage points. These tax changes should be complemented by additional efforts to eliminate existing exemptions across the tax system that reduce its progressivity. Moreover, Costa Rica would greatly benefit from a rebalancing of the tax mix. Shifting taxation away from social security contributions towards less distortive or more progressive taxes – such VAT, or income and property taxes – would have a positive effect on stimulating growth and formal employment (more below) and reduce inequality and poverty.

Less fragmentation and better targeting would make social assistance more effective

Public sector cash transfers, such as non-contributory pensions and social programmes run by the Institute of social welfare (IMAS; *Instituto Mixto de Ayuda Social*) reduce inequality (Table 1.1), although their overall impact is small. This partly reflects that they only represent 1.3% of household income, although they have increased by 11% in the period 2010-14 (Gabriel and González Pandiella, forthcoming). But their impact could be larger if their targeting were improved.

The Family Allowances Fund (FODESAF; *Fondo de Desarrollo y Asignaciones Familiares*) is the main government mechanism to finance social assistance programmes. In 2015, FODESAF funds accounted for 2% of GDP and 76% of social spending. According to the law that established its creation and functioning, FODESAF is aimed at those living in poverty and extreme poverty. However, the beneficiaries of several programmes financed by FODESAF spread well beyond those in a situation of poverty. Only half of the beneficiaries are actually in the first income quintile (Table 1.2), which corresponds to those in poverty and extreme poverty; 25% goes to second quintile, which corresponds to those not in poverty but in a vulnerable situation; and the remaining 24% goes to middle and high income households. This suggests that there is room to improve the targeting of some of the programmes financed by FODESAF.

Bono familiar vivienda, a subsidy to allow poor households acquiring a house, had a positive effect in facilitating access to owned housing. Currently about 67% of poor

Table 1.2. **Distribution of beneficiaries of social programmes by income quintile**
 % of beneficiaries in each income quintile (2013)

Programme	Income quintiles				
	I	II	III and IV	V	
Youth centres (<i>Centros infantiles</i>)	57	25	18	0	100
School meals	42	27	28	4	100
Scholarships for secondary education (<i>Avancemos</i>)	49	29	21	1	100
Non-contributory pensions	64	15	19	2	100
Family welfare centres (<i>Promoción y bienestar familiar</i>)	50	28	21	1	100
Family housing fund (<i>Bono familiar vivienda</i>)	30	23	39	8	100
Insured on the account of the state (<i>Asegurados por cuenta del estado</i>)	70	16	14	1	100
Total Fodesaf	51	25	22	2	100

Source: Estado de la Nación (2014).

households own their house. However, only 30% of the beneficiaries of the subsidy are in poverty, and, remarkably, around 40% are in the third and fourth income quintiles (Table 1.2). Moreover, this subsidy excessively promotes homeownership. Around 20% of households in Costa Rica access housing through renting (Blanco et al., 2014), a rate which is in line with the Latin America average but well below rates observed in most OECD countries and in some Latin America countries such as Colombia. A negative side effect of a small rental market is a low degree of residential mobility. It is more costly for homeowners to move than for renters, and a small rental market may prevent households from moving close to where jobs are and undermine their economic opportunities, especially for cash-strapped workers. This may be an important constraint for Costa Ricans, given the lack of public transportation options and the heavy traffic congestions they face (more below). Hence, *Bono familiar vivienda* should be better targeted and, in parallel, a more tenure-neutral scheme, such as rental cash allowances, could be introduced. Similar schemes exist in many OECD countries, such as the United Kingdom and some Nordic countries (Andrews et al., 2011), and has also been introduced recently in Chile (OECD, 2013a) and Mexico (OECD, 2015b).

Another scheme that could be better targeted is the school meals scheme, which reaches only 40% of students in the lowest income quintile. *Avancemos*, which offers cash transfers to poor families conditional to their children attending secondary education, seems to be successful in avoiding too many beneficiaries among medium and high income earners (Table 1.2), but has few recipients among those in extreme poverty (Estado de la Nación, 2013), as it is linked to attendance to education. Non-contributory pensions and the scheme providing health insurance coverage to poor households are the programmes that better target low-income households.

Better targeting of social programmes would allow the government to focus scarce resources on those that need them the most. At the same time, targeting should be carefully designed to avoid poverty or unemployment traps, whereby the withdrawal of social benefits or support that comes with entering formal paid work dissuades people from taking a job. Removing social benefits in a gradual way would avoid the creation of such traps while, at the same time, help to focus support on neediest households.

Reducing poverty is a priority

Analysing the characteristics of poor households in Costa Rica indicates that these tend to be larger than non-poor ones (Table 1.3). They have more children and more members that are economically dependent (i.e. below 15 and above 64 years old). They also tend to be headed by women. Poverty is also strongly connected with labour market performance. Poorest workers tend to work in the informal sector: 77% of those employed have informal jobs. There is also a strong association between poverty and education. Poor tend to have 6.4 years of education, which correspond to primary education, while the non-poor reach higher levels of education. Children in poor households are less likely to attend secondary education. No difference between the poor and the non-poor is observed concerning children's attendance to primary education, which is nearly universal in Costa Rica. Poor children also accumulate larger educational underachievement. This analysis suggests that policies conducive to tackling unemployment, reducing informality and improving education – as discussed below – are fundamental to help Costa Ricans escape poverty. It also suggests that targeted support to some groups, such as low-skilled, youth and women, is warranted.

Existing social programmes have prevented an increase in poverty rates in Costa Rica, despite the rise in unemployment. Nevertheless, with poverty rates remaining largely

Table 1.3. **Who are the poor in Costa Rica?**

Indicator	Poverty Status	
	Poor	Non-Poor
Demographic		
Total persons	1 137 881	3 685 834
Total households	317 660	1 144 475
Household size	3.6	3.2
Household members of 5 years old or less	0.4	0.2
Percentage of households headed by women	43.5	34.1
Percentage of households headed by women without a partner	35.7	25.5
Demographic dependency ratio	0.7	0.4
Employment		
Unemployment rate	25.4	5.3
Employment rate	34.2	60.3
Percentage of employed population with informal employment	77.3	36.6
Economic dependency ratio	2.2	0.9
Education		
Average schooling of people 15 years old or more	6.4	9.3
Percentage of population of 6 to 12 years old who do not attend regular education	1.1	1.0
Percentage of population aged 13 to 17 years who do not attend regular education	15.9	10.9
Percentage of population aged 7 to 17 years with educational underachievement	32.7	20.9
Housing and access to services		
Percentage of households without an owned home	33.4	28.3
Percentage of households with housing in regular or bad physical condition	62.4	34.6
Percentage of households with crowding by housing bedroom	7.5	1.5
Percentage of households without internet service	60.1	34.1
Access to subsidies and pension		
Percentage of households receiving a grant or scholarship	45.5	16.9
Percentage of elderly without pension	35.6	33.7

Note: The table excludes domestic servants and pensioners living in households.

Source: INEC, Encuesta Nacional de Hogares Julio 2015 Resultados Generales.

unchanged over the last 20 years, Costa Rica has rightly established fighting poverty as a priority. Structural reform to address institutional fragmentation and lack of coordination in social policy is needed to reduce poverty and make growth more inclusive. Several steps have already been taken but further efforts are warranted to increase efficiency and make the system more evaluation-based.

IMAS, the Institute of social welfare, is gradually executing *Puente al Desarrollo*, a strategy to reduce extreme poverty. Such strategy encompasses social assistance, to ensure that basic needs are met, and also a social protection component, whereby social workers establish a family plan comprising education, training, health and childcare. There is conditionality attached to the plan, so that beneficiaries need to comply with the duties established in it, such as sending children to school or completing training programs. The design of *Puente al Desarrollo* seems to adequately reflect that poverty is a multifaceted phenomenon that requires coordinated actions in different policy areas. Taking advantage of its gradual execution, IMAS should promptly set-up evaluation mechanisms, and adjust the design of the programme based on that evaluation. IMAS has also put in place mechanisms to assess needs and check progress, including the compilation of social maps, which help to geographically monitor and target efforts, and of a multi-dimensional poverty index (INEC, 2015b).

In general terms social programmes currently run in Costa Rica to reduce poverty show scope for achieving greater efficiency. Programmes are run independently by different institutions, although they offer similar benefits, use different eligibility criteria and different registries of beneficiaries. This suggests that there is room for gaining efficiency and economies of scale by reducing fragmentation, especially considering that Costa Rica is a relatively small country. FODESAF currently finance 26 different programmes, managed by 22 different institutions. And there are other social programmes run by other ministries or autonomous agencies. This translates into a complex institutional framework, with difficulties to coordinate efforts, delineate responsibilities and check performance, and very prone to duplication.

For example *Avancemos*, aimed at supporting attendance to secondary education and run by IMAS, coexist with other grant schemes that offer cash transfers to those attending primary, secondary or higher education. These programmes are run independently by other institutions, such as FONABE (Fund for national scholarships). Similar duplication is observed in areas such as nutrition programmes or housing. This implies a lack of spending efficiency and a duplication of efforts by both beneficiaries and government agencies, preventing from taking advantage of economies of scale.

A key obstacle to a more efficient delivery of social assistance is that different programmes use different eligibility criteria and keep unconnected registries of beneficiaries. Moving towards a unified framework, based on a common database, would improve the efficiency of the system, reduce duplication and better verify the eligibility of applicants. Efforts in this direction have started. IMAS has integrated their information systems with those of some other social assistance programmes such as those of the non-contributory pensions or the housing programme. In June 2015, the budget for the creation of a national registry of beneficiaries (SINIRUBE – *Sistema Nacional de Información y Registro Único de Beneficiarios*) was approved. This registry would be a key tool to improve the

coverage and the targeting of the programmes so that more social spending goes to those more in need.

There is also a need to make the social protection system more accountable and performance-based. At the heart of the current structure is FODESAF, which acts as a financial intermediary. It receives a transfer from the central government based on a formula and channels those funds to the institutions in charge of executing social assistance programmes. Part of the funding is channelled back to other departments in the central government that are in charge of executing social assistance programmes. More than 50% of FODESAF budget is earmarked and cannot be controlled either by FODESAF or the line ministries. All this implies that is difficult to associate financial flows to individual programmes, making the system inflexible and evaluation difficult.

The national registry of beneficiaries would help to establish systematic and robust mechanism of evaluation. Establishing a culture of systematic evaluation would help to adjust programmes to make them more successful, making possible to reallocate more resources to those that actually help to escape poverty. An evaluation culture is well-established in some OECD countries such as United Kingdom, the Nordic countries and the Netherlands. Costa Rica should also take decisive steps in that direction. Evaluations should be able to isolate the effect of the programme from the outcome that would have been achieved without programme participation (OECD, 2010). This can be done either via experimental evaluations or quasi-experimental evaluations based on statistical techniques.

Rice price controls and tariffs are regressive

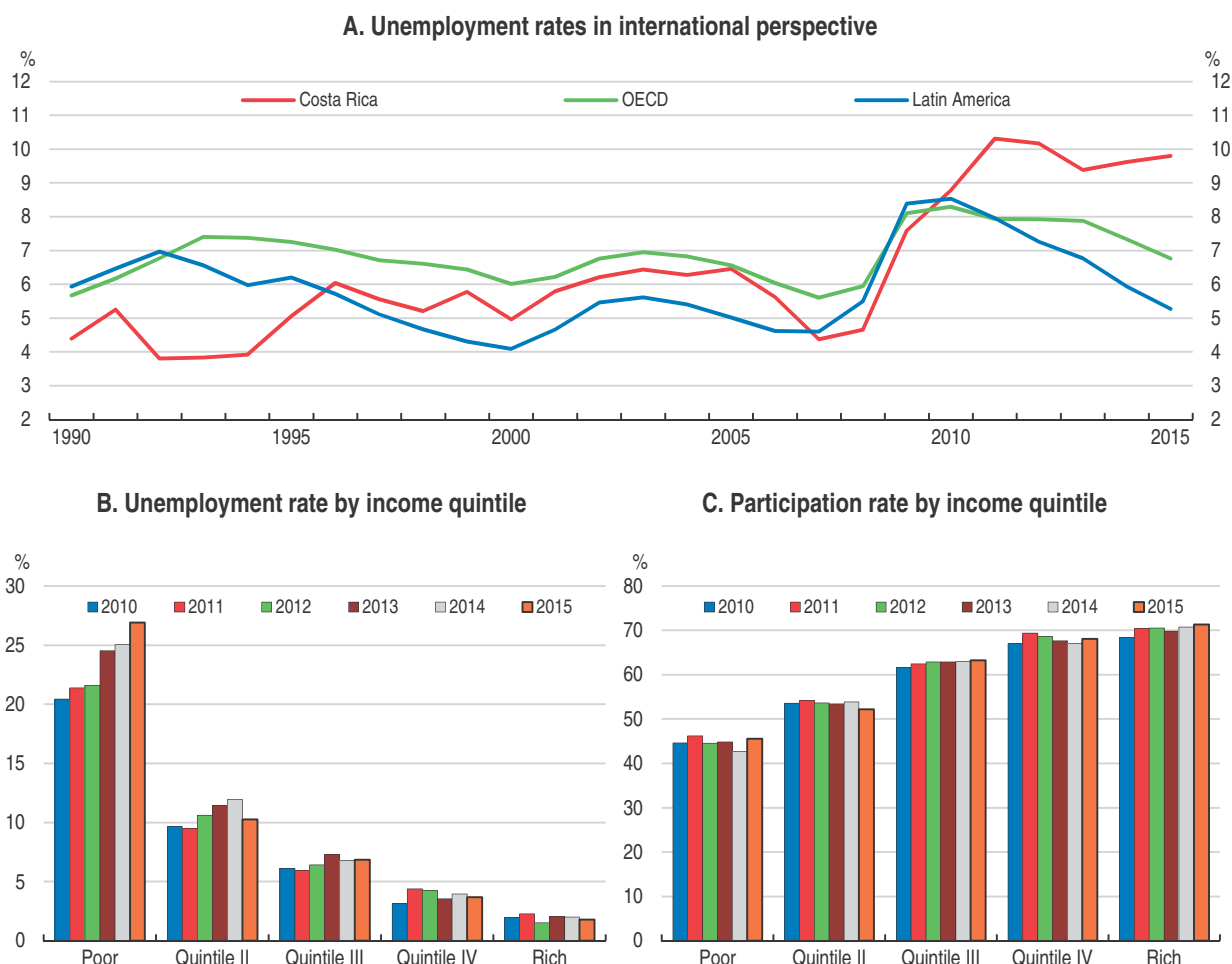
Lack of competition and inadequate regulations in key markets (see Chapter 2) can have a direct impact on living conditions of poor households and increase inequality. This is the case of regulations affecting rice. Rice is a basic staple food for the poor in Costa Rica, and local production is not sufficient to satisfy local demand. At the same time rice cultivation is protected by tariff and non-tariff barriers and through price controls. The average tariff for rice amounts to 28%, and prices for locally produced rice are strictly controlled in every step of the production process. As a result, rice prices paid to local producers are double international prices (Umaña-Alvarado, 2014). Rice price support mechanisms also exceed by almost five times the country's commitment under the World Trade Agreement on Agriculture (OECD, 2015c). Monge González et al. (2010) estimate that, in the period 1995-2005, tariffs and price support mechanisms entailed a transfer from consumers to rice producers equivalent to USD 396 million. The impact of this transfer on the poorest households represents about 8% of their per capita income, which contrasts with a burden on the richest households that amounts to 0.5%. At the same time, price controls have blunted incentives among local producers and productivity has therefore been falling (Monge González et al., 2010). Conditions for small local farmers have not improved either, as large producers are the ones receiving the rents (Umaña-Alvarado, 2014). Costa Rica has announced plans to gradually reduce rice price support mechanisms, which is long overdue.

Making the labour market more inclusive

The recent labour market performance has been weak. Unemployment has been increasing steadily since 2007 and is closed to 10%. Contrary to the situation before 2007, the unemployment rate is now above OECD levels and also well above unemployment rates seen in Latin America (Figure 1.8, panel A). The gaps in labour market performance across

different socioeconomic groups are large and increasing. The unemployment rate for the bottom quintile is 25% and is increasing rapidly (Figure 1.8, panel B). There is also a stark contrast in labour market participation. Only 40% of those in the bottom quintile participate in the open labour market and this percentage is falling. The differential in unemployment and participation rates between bottom and top quintiles is higher in Costa Rica than in other countries in the region and is increasing, which highlights the need to put in place targeted policies to make the labour market more inclusive. As in other emerging countries, the quality of jobs in Costa Rica is below the one observed in OECD countries, especially as concerns incidence of long work hours, informality and risk of entering extreme low-pay status (OECD, 2015d).

Figure 1.8. **Unemployment is high and hits the poor hard**



Note: Panel A: Unemployment rate data for Costa Rica before 2010 comes from ENAHO and after 2010 from Encuesta Continua de Empleo. Both series are not comparable

Source: OECD (2015g), OECD Economic Outlook 98 Database; INEC, Encuesta Continua de Empleo y Encuesta Nacional de Hogares.

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Women and youth also face difficulties to get jobs. Unemployment is three percentage points higher for women than for men. Poor women who are heads of a household are particularly affected by high unemployment rates. The youth unemployment rate is 24%. There are no significant differences in terms of unemployment between urban and rural areas. But Costa Rica indigenous population faces lower employment opportunities. Indigenous people represent 2% of total population (Census, 2011) – the second lowest proportion of indigenous population in the Latin America. Immigrants, particularly from Nicaragua, represent a large share of the labour force. In 2013, 10% of those employed were foreign born (World Bank, 2015). They tend to be low qualified and the unemployment rate of women born in Nicaragua and other Central American countries is double the unemployment rate for native women. Conversely, for men the rate is below the one observed for Costa Ricans.

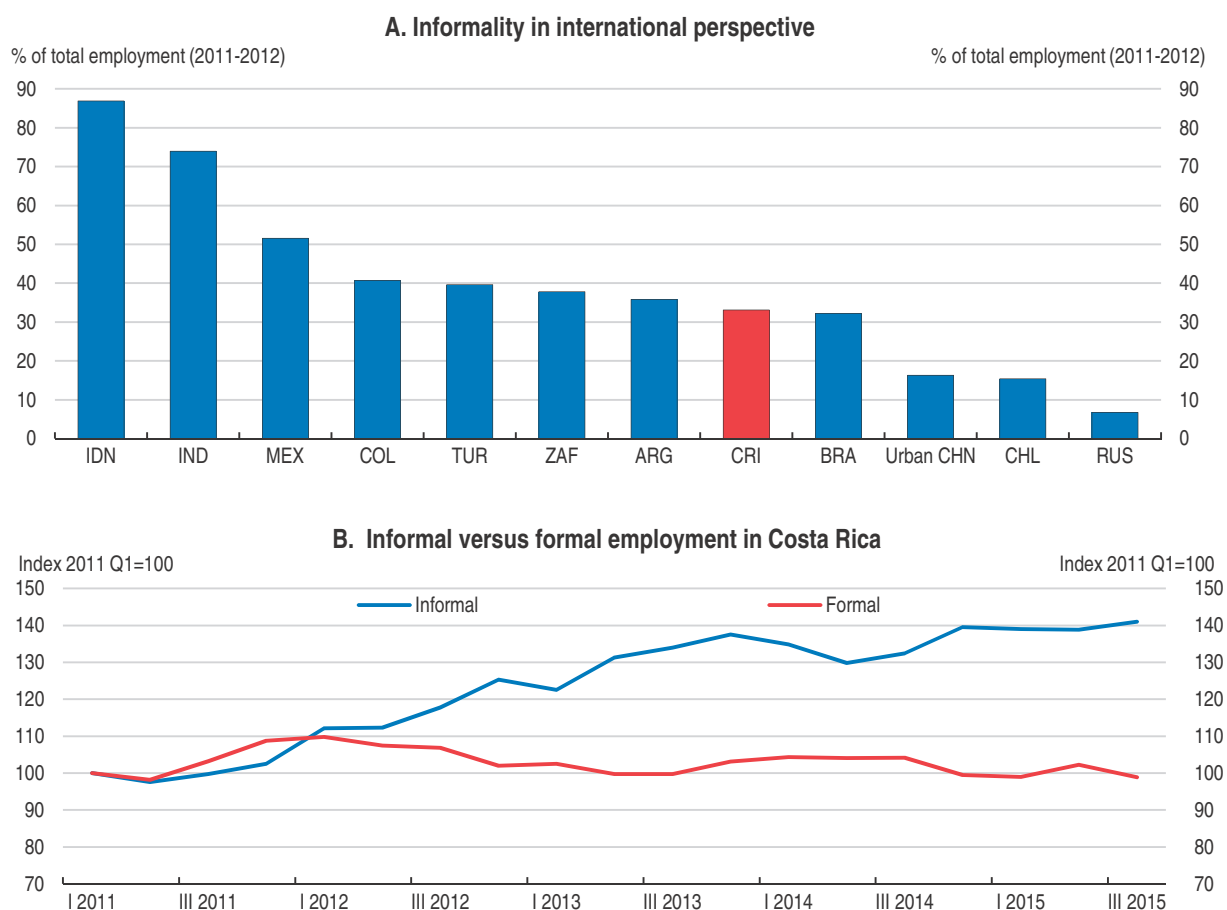
In addition to higher levels of unemployment, an obstacle to making the labour market more inclusive is informality. The informal sector in Costa Rica is smaller than in other Latin America countries (Figure 1.9, panel A) but large for OECD standards. Contrary to many Latin America countries that have seen recently a decline, informality is increasing rapidly in Costa Rica. In the period 2011-14, informal employment has grown by 40%, while employment in the formal sector has remained flat (Figure 1.9, panel B). Informality accounts now for 45% of total employment and affects the less educated the most. Half of those with only primary education that are working are employed in the informal sector. Among those with tertiary education the rate is 8%.

The labour market is also characterised by increasing duality. On the one hand traditional sectors, such a domestic-oriented agriculture, manufacturing, construction and domestic services, employ workers that tend to be low-qualified, earn lower salaries and have stagnating or decreasing employment opportunities. On the other hand, exporting sectors, such as those operating in the free trade zones including high value manufacture and services, employ higher qualified workers and are expanding and offering new job opportunities. This shift away from labour-intensive activities into higher value added activities (more in Chapter 2) has increased demand for high-skilled labour. Nevertheless, Costa Rica has a large relative supply of low-skilled workers who are not equipped for those new job opportunities. Thus, many employers report difficulties in finding workers with the skills they need, especially medium level technicians and engineers (ManPower, 2015). This structural mismatch of skills and jobs has translated into high skills wage premia, contributing to the increasing inequality, and into a growing structural unemployment rate, which is one of the largest in the Latin America region.

Costa Rica faces three fundamental challenges to make its labour market more inclusive. First, it should put in place policies to facilitate the acquisition of skills by the unemployed. Second, it should improve incentives for employers and workers to stay or move to the formal economy (informality may be a source of jobs and livelihood in the short-term, but it hampers growth, job quality and productivity in the medium-term). Third, it should implement policies supporting women to participate in the labour market.

Helping unemployed Costa Ricans get back to work

Active labour market policies are barely developed in Costa Rica. As other Latin America economies, Costa Rica prioritises social programmes such as conditional cash transfers, and the provision of basic services to socio-economically disadvantaged groups. Nevertheless, it has been less successful in increasing employability of certain groups.

Figure 1.9. **Informal employment is high and increasing**

Note: Informality is defined to include: i) employees who do not pay social contribution, except for Colombia where contract status is used; and ii) self-employed who do not pay social contributions (Brazil, Chile, China, India, Indonesia, Turkey) or whose business is not registered (Argentina, Colombia, Costa Rica, Mexico, South Africa). The figures for China are for 2008 and 2009. All figures for Indonesia are for 2007.

Source: OECD (2015d), *OECD Employment Outlook*; INEC, Encuesta Continua de Empleo (ECE) 2015.

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Public employment offices provide basic intermediation services but need to expand its services, coverage and effectiveness (Mazza, 2013). There is evidence that stepping-up job-search support and activation programmes boost both growth and equity (Causa et al., 2015). Improving active labour market policies would be particularly beneficial for low-skilled workers, as they are likely to gain the most from active support and guidance as concerns what skills are needed to find formal employment and how to obtain those skills. Hence, policies should be targeted to those experiencing more difficulties in finding a job. In this respect *Mi Primer empleo*, a recently launched scheme providing financial incentives to employers that hire young and female workers, seems to be well designed. Going forward, the government should evaluate the programme to assess its effectiveness in increasing employability when taking into account the participants' profiles. This would contribute to further adjusting eligibility criteria to limit potential deadweight costs.

Training programmes for unemployed have been found to increase employability both in the OECD and in Latin America (Ibarrarán and Rosas, 2009), where they have been associated with higher probability of getting a formal job. For many Costa Ricans, learning

new skills will be the only way to take advantage of new employment opportunities. Thus, social assistance programmes should encompass training opportunities and be made conditional on attending them. Costa Rica faces significant skill shortages in technical occupations, which could be partly addressed via retraining of unemployed workers. The National Learning Institute (INA), the main provider of technical training in Costa Rica, plans to develop a dual vocational track and it is involved in parliamentary discussions to implement an initiative on the matter (OECD, 2015e). Such tracks should be also made available to the adult low-skilled unemployed. Targeted support in the acquisition of new skills is also especially warranted for those that have abandoned the education system without finalising secondary education (more below).

As in many other Latin American countries, there is no unemployment insurance scheme in Costa Rica. In case of unemployment, workers are compensated through a severance pay scheme, amounting to approximately 20 days per year of service. The scheme is financed by employers, which contribute 1.5% of the payroll. As Costa Rica becomes a more open economy, it is expected to be subject to more shocks and adjustment needs, which would imply more frequent spells of unemployment. The high level of structural unemployment, 9% according to OECD estimates, and persistent skill mismatches in Costa Rica suggest that workers face difficulties to transition between jobs. An unemployment insurance system would provide them with income support and lead them to assistance and training to get ready for a new job.

Unemployment insurance schemes are well established in OECD countries, and emerging economies have also been gradually stepping-up their unemployment schemes. These are often mandatory savings into individual accounts that may be accessed during a specified period of unemployment. Mexico recently introduced a 6-month benefit to all workers who lose their job in the formal sector, partly funded by the employer and complemented with a solidarity fund. Chile has in place an unemployment insurance system of individual unemployment savings accounts, also in combination with a solidarity fund. Colombia has recently introduced a new mechanism of protection against unemployment based on individual unemployment savings accounts complemented with small allowances for unemployed people. Brasil has in place an individual account system although in this case is complemented with a firing penalty. Taking into account Costa Rica fiscal resources and administrative capacity, running a comprehensive unemployment protection scheme may not be currently feasible. Instead, to provide income compensation in the case of job loss and promote active job search and acquisition of new skills, Costa Rica could consider setting-up a scheme based on individual unemployment savings, as recently done by other OECD Latin American countries.

Boosting employment in the formal sector

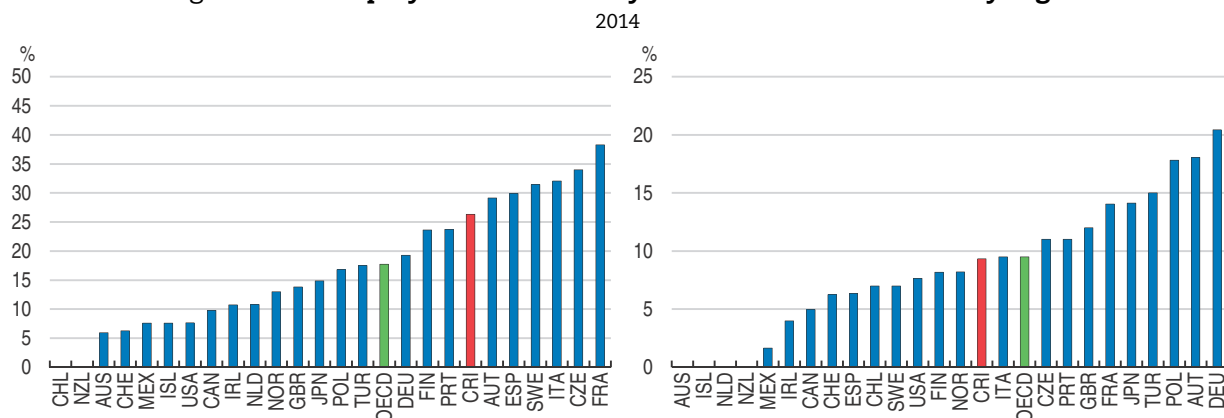
Reducing informality requires a comprehensive strategy, with actions covering multiple dimensions such as fiscal, labour market, social policies, education, or business regulations. Reducing non-wage labour costs, simplifying some labour market policies, improving training and education and adapting business registrations procedures to the needs of micro and small firms would help to boost formal employment.

High non-wage labour costs deter the creation of formal jobs

An important part of the strategy to reduce informality is to avoid excessive non-wage labour costs that could deter the creation of formal jobs. Several studies (e.g. Ramirez-Alfaro,

2010) signal high social security obligations as the main obstacle for a business to become formal. The total social security contribution rate is 36%, of which 26% are borne by the employers, a high rate by international standards (Figure 1.10). Out of the total contribution, the social security actually receives 23.5% of the salary. The rest is used to finance other institutions, such as public banks, or social programmes. Empirical evidence based on a panel of Latin America countries shows that lowering the tax wedge can be an effective tool to combat informality (Lehmann and Muravyev, 2012). Such policies tend to be particularly effective if structural unemployment is high (Katz, 1998), as is currently the case in Costa Rica. Thus, in the medium-term, a gradual reduction of social security contributions would help to raise formal employment. Across-the-board cuts in social security contributions are easier to implement and administer but could lower fiscal revenues. Targeted cuts may be more difficult to administer but would contribute to broaden the tax base without engendering large revenue losses. Experiences of countries that have introduced targeted cuts in employer social security contributions suggest that they can be effective in increasing formal employment and cost-effective if they are targeted at those accounting for the bulk of the non-employed or informal employment (IMF, 2014). Costa Rica could then focus cuts in social security contributions on those sectors of the economy where informality is rampant, specifically agriculture, construction and domestic work services, which account for 60% of all informal employment. The government should also avoid using social security contributions to fund public banks or antipoverty programmes but use other more progressive taxes instead, and fight domestic and international tax evasion, as these are less distortive ways to raise revenue.

Figure 1.10. **Employer social security contributions are relatively high**



Source: OECD, Tax Database and Caja Costarricense de Seguro Social.

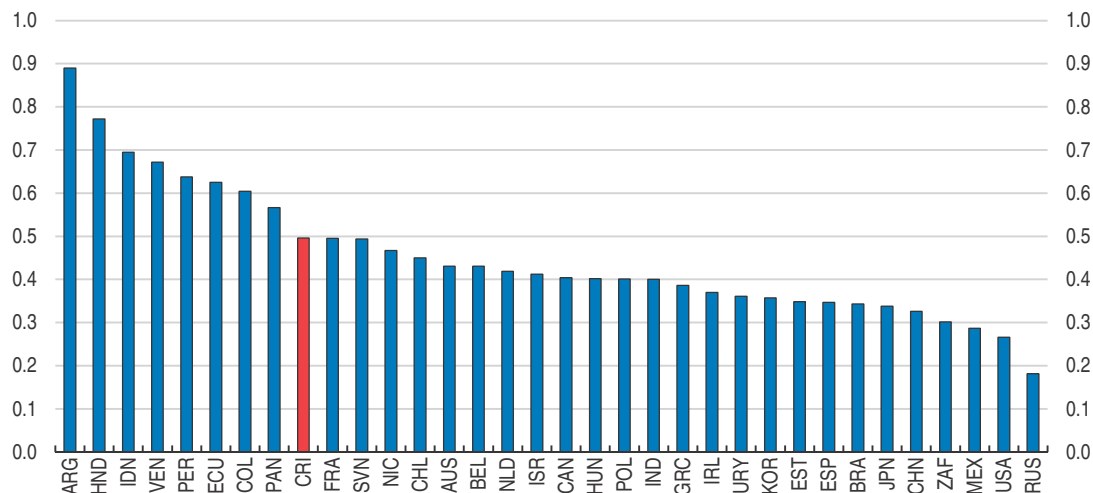
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The minimum wage structure should be simplified

The level of the minimum wage is not excessively high in Costa Rica relative to other countries in Latin America (Figure 1.11). Recent changes in the minimum wage have been relatively modest and overall the real minimum wage has evolved in line with labour productivity. Nevertheless, one out of three workers is being paid below the minimum (Estado de la Nación, 2014). This affects mostly young workers, women, workers in rural areas, immigrants, people with disabilities, poor, and workers in agriculture, construction and domestic work. This suggests that the current minimum wage structure is not acting as a wage floor for more vulnerable workers.

Figure 1.11. **The minimum wage is in line with other countries in Latin America**

Ratio to average wage, 2014 or latest available



Source: OECD Earnings Database for OECD countries and ILOSTAT Country Profile Database for non-OECD countries.

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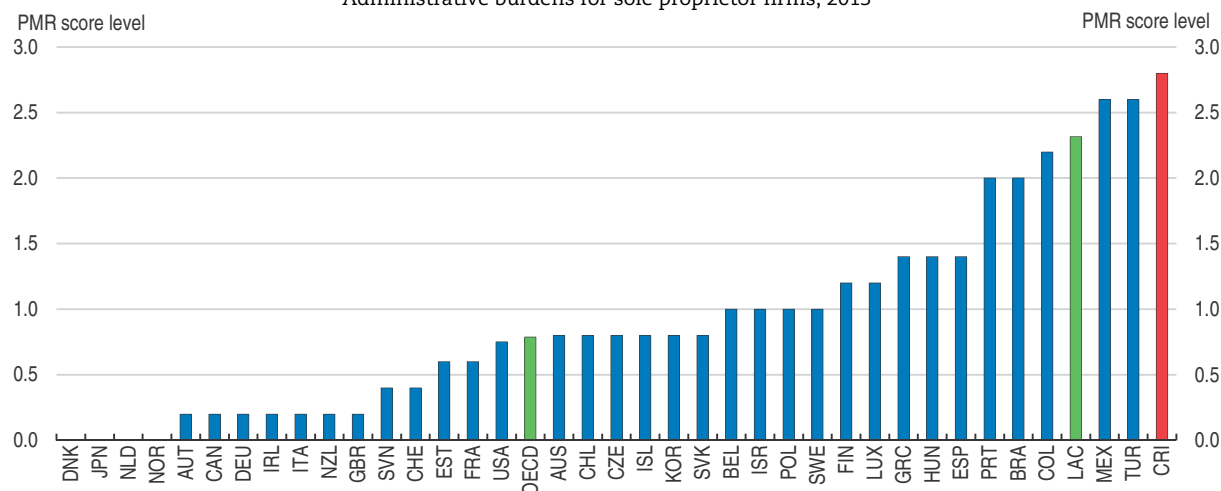
The minimum wage structure is complex. Simple minimum wage systems are most likely to improve compliance (OECD, 2015d). There are more than 200 minimum wage categories depending on sector and occupation. This makes it very difficult for employees and employers to know which level of the minimum wage corresponds to a given occupation. And minimum wage levels are updated twice per year. This biannual update was established when inflation was very volatile in order to correct for large changes in inflation. Nowadays, with inflation better anchored, the biannual revision introduces transaction costs without clear benefits. In international perspective countries with a simple national minimum wage system tend to have higher compliance rates than those with multiple sectoral or occupational minimum wages (Rani et al., 2013). Hence, compliance with the minimum wage in Costa Rica would be facilitated by a simplification of its structure, reducing significantly the number of categories, and by moving to an annual update. The level of the minimum wage should be established so that it is not an obstacle for more vulnerable workers such as young or low skilled workers. Moreover, there is also an urgent need to improve enforcement mechanisms (more below).

Informality affects the less educated the most. Half of the workers with only primary education are employed in the informal sector. This suggests that providing Costa Ricans, especially those with less education, with more job-relevant skills will be fundamental to lower informality (more below).

Formalising a business is also more difficult in Costa Rica than in most countries in Latin America and the OECD. Administrative burdens for sole proprietor firms are relatively high according to OECD's Product Market indicators (Figure 1.12), and this is also reflected in World Bank's index measuring the ease of starting a business, where Costa Rica ranks relatively low (121 out of 189 countries). Major perceived obstacles are the difficulties and expenses needed for obtaining a licence. OECD best practices suggest that limiting

Figure 1.12. **Formalising a business is burdensome**

Administrative burdens for sole proprietor firms, 2013



Note: OECD and LAC data are the unweighted average. LAC includes Mexico, Chile, Brazil, Argentina, Colombia, Costa Rica, Dominican Republic, El Salvador, Honduras, Jamaica, Nicaragua and Peru. USA latest data is 2008.

Source: OECD, *Product Market Regulation Database* for OECD countries and Brazil; OECD-World Bank Group, *Product Market Regulation Database* for Latin American and Caribbean countries except Chile, Mexico and Brazil.

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licensing to those activities where it is justified on health, safety or environmental grounds, and reducing the associated cost are important steps to curb informality. Establishing single points for issuing or accepting all notifications and licences required to register a business can significantly reduce administrative burdens to become a formal firm. One-stop shops are increasingly used in OECD countries, and have also been set-up in Brazil and Mexico to establish more flexible and simple registration procedures and facilitate that micro and small firms move to the formal sector.

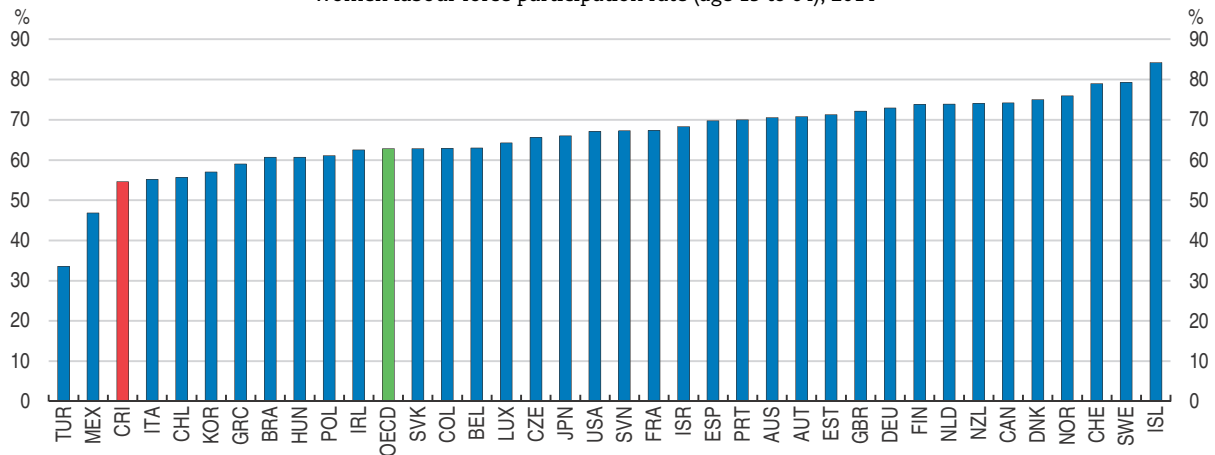
Evidence from other emerging economies suggests that stricter enforcement can also play a role in increasing formality (Almeida and Carneiro, 2012), as exemplified by Mexico and Brazil. Monitoring and enforcement can be enhanced not only by increasing the number of labour inspectors, which may be currently difficult for Costa Rica given the fiscal situation, but also by other initiatives, such as linking labour inspectors remuneration to performance targets. Such initiatives have proved to be effective in increasing formality in other Latin American emerging countries (Berg, 2010).

Boosting employment of women

Female labour force participation in Costa Rica has recently increased, but it remains low in international comparison (Figure 1.13). OECD evidence suggests that the availability of affordable, high-quality childcare is a key factor explaining cross-country differences in women's labour market participation (OECD, 2012a). In Sweden, for example, the expansion of child care services during the 1970s is thought to have helped increase women's employment rates from 60% to over 80% (OECD, 2012b). Positive evidence has also been found in Latin American countries (Mateo-Díaz and Rodríguez-Chamussy, 2013). Facilitating access to good quality child care is important not only to encourage greater female labour supply, but also because access to early childhood education and care can improve school outcomes later in life for disadvantaged children and mitigate social inequalities (OECD, 2011; Ruhm and Waldfogel, 2011). It is during children's early years that

Figure 1.13. **Female labour market participation is low**

Women labour force participation rate (age 15 to 64), 2014



Note: Data for Brazil is 2013.

Source: OECD, Labour Force Statistics Database.

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it matters most, as the longer that mothers stay out of the labour force to take care of their children, the more difficult it is for them to get back to work (Thévenon, 2013).

The main gender gap in Costa Rica concerns labour market participation (Table 1.4). Contrary to other Latin American countries, women in Costa Rica do not seem to face wage discrimination at the lower end of the income distribution (Carrillo et al., 2013). Nevertheless, similarly to other countries in the OECD, glass ceilings (wage gaps at the top of the distribution) are significant. Costa Rica stands out in Latin America by a large presence of women in parliament; 33% are women, compared with an average of 20% in Latin America and 28% in the OECD

Table 1.4. **Gender gaps in Costa Rica versus the OECD**

How do men and women perform in Costa Rica?	And in the OECD?				Year
	Women	Men	Women	Men	
Health					
Life expectancy at birth (years)	82	78	83	78	2013
Share of people who reported good/very good health conditions	73%	79%	66%	70%	2006 (Costa Rica) 2013 (OECD)
Education and skills					
Share of 25-64 yrs. old with at least upper secondary education	42%	39%	75%	75%	2014
Share of 25-64 yrs. who have attained tertiary education	19%	17%	35%	31%	2014
Skills (PISA mathematics results)	396	420	489	499	2012
Jobs					
Unemployment rate (15-64 years)	12%	8%	8%	7%	2014
Labour force participation rate (15-64 years)	55%	82%	63%	80%	2014
Share in informal employment	48%	42%	-	-	2015
Civic Engagement and governance					
Share of seats in national parliament	33%	67%	28%	72%	2015
Subjective well-being					
Levels of life satisfaction on a 0 to 10 scale	7.4	7.4	6.6	6.5	2014

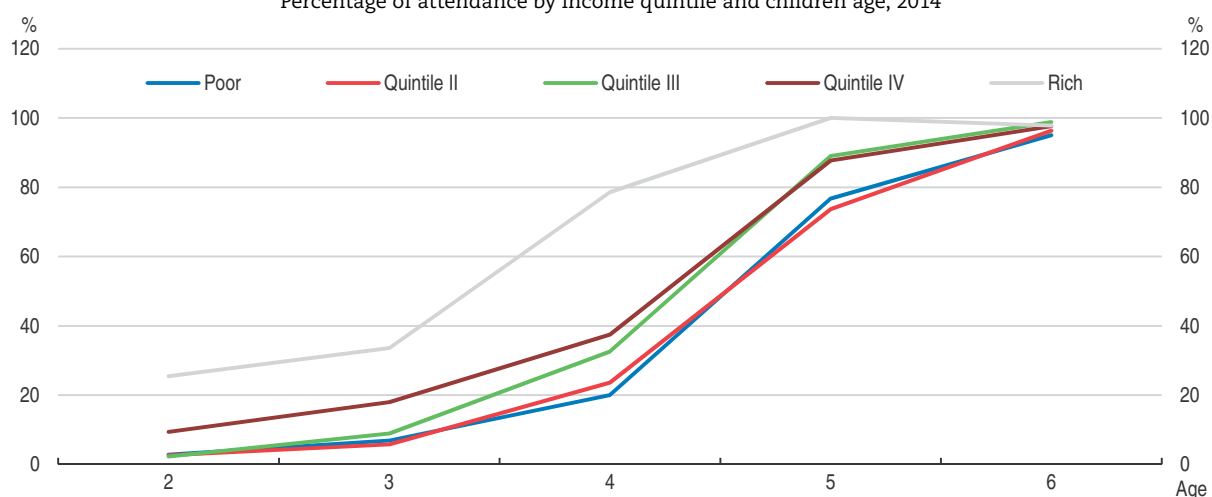
Source: OECD, Health Status Database; OECD (2015), Education at a Glance; OECD (2012), PISA 2012 Results; OECD, Labour Force Statistics Database; OECD, Better Life Index – Edition 2015 Database; Centro Centroamericano de Población, Encuesta Nacional de Salud 2006 (ENSA); INEC, Encuesta Continua de Empleo (ECE) 2015; Inter-Parliamentary Union Database; and Gallup World Poll Database (Gallup, 2015).

Scaling-up childcare services

The constitution mandates that the state should provide education starting at 2 months of age and until six years old. The Ministry of Education offers education as of 4 years old. For children below 4 years old, public services are offered by *Red Nacional de Cuido*, involving IMAS, PANI (*Patronato Nacional de la Infancia*; National Children's Trust), CEN-CINAI (*Centros de Educación y Nutrición – Centros Infantiles de Atención Integral*; Education and Nutrition Centres – Children's Comprehensive Care Centers) and the Ministry of Education. But supply is limited resulting in a low coverage. Only 15% of those below three years attend, while the OECD average is 35%. Attendance increases to 62% for children age 5 and to 85% for those aged 6. There are also important differences across income levels and geographical areas. Attendance is lowest in the bottom two quintiles, especially of children below 4 years old (Figure 1.14). These differences arise mainly because higher income households resort to private childcare services (Estado de la Educación, 2015). Coverage rates are higher in those regions more economically developed. Attendance is also positively related to the education level of parents; attendance is higher for children whose parents have higher levels of education. There is also a significant geographical mismatch between the supply of childcare education and the areas where disadvantaged households in need of those services, such as households with low education background and large children population, are concentrated. All this is a source of important inequalities, both concerning the integration of women in the labour market and concerning children education outcomes. The authorities should expand the number of places available in early childhood education with a focus on children below 4 years old living in the least developed areas of the country and from more disadvantage households.

As in OECD countries, female labour market participation is also affected by prevailing social norms as concerns the role of men and women towards work and care. Large gender

Figure 1.14. **Attendance to early childhood education and care differ by income level**
Percentage of attendance by income quintile and children age, 2014



Note: Ages of 2, 3 and 4 years comprise attendance mostly to “maternal/prekindergarten” and a few children in “preparatoria”. Age of 5 years includes “maternal/prekindergarten” and “preparatoria” mostly and a few in “escuela”. Age of 6 comprise children mostly in “preparatoria” and “escuela” and a few in maternal/prekindergarten.

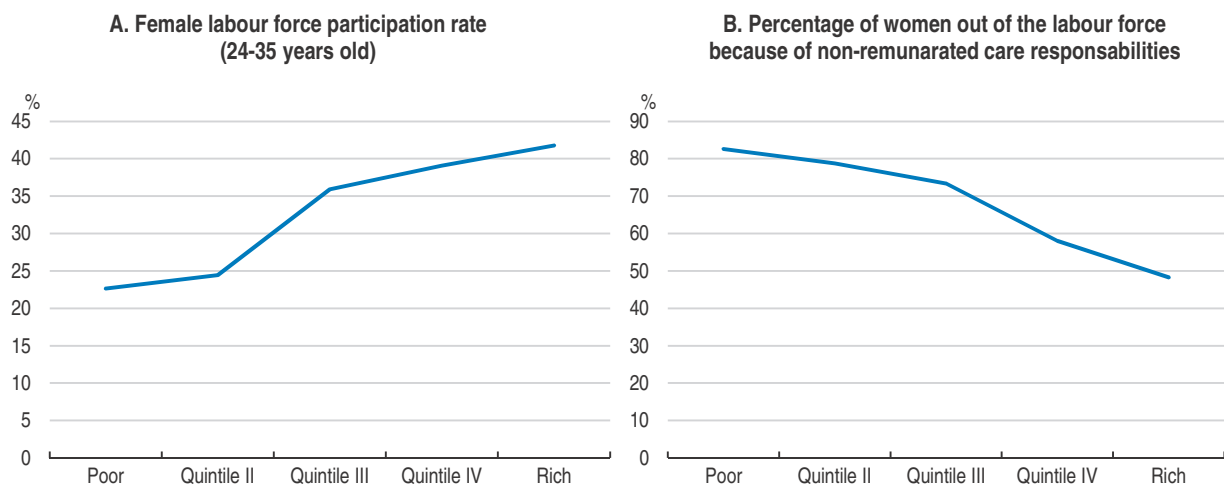
Source: OECD calculations based on ENAHO (2014).

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gaps are observed in Costa Rica regarding the sharing of non-remunerated activities such as eldercare, childcare, and care for others. Costa Rican women tend to devote an average of 6 hours per day to non-remunerated activities, while men devote only 3.5 (Estado de la Nación, 2014). These gender gaps start at very early ages and remain large thereafter. As a consequence, women, especially those assuming care responsibilities early, face difficulties to continue in education and tend to drop out of the labour force, especially those in low income households (Figure 1.15, panel A). Eighty per cent of the poor women that are out of the labour force report care responsibilities as the cause (Figure 1.15, panel B). This further highlights the need for specific policies, such as increasing coverage of childcare or eldercare, and for targeting them at women facing difficulties to access the labour market, such as those in low-income household or those taking family care responsibilities at an early age.

At the same time the proportion of female-headed households has increased notably in the last 25 years (Estado de la Nación, 2014). Currently one third of the population live in a female-headed household. This indicates that reducing gender gaps in labour market participation would have a significant positive impact, not only for women themselves, but also for their families and for the Costa Rican economy as a whole. Some estimates suggest that gender gaps currently observed in Costa Rica reduce output per capita by 23% (Teignier and Cuberes, 2014).

Figure 1.15. **Care responsibilities hinder labour market participation of poor women**
By income quintile



Note: Panel A: Female labour force participation rate is the share of women (24-35 years old) working or looking for a job relative to the total population of 24-35 years old. Panel B: Proportion of women (24-35 years old) out of the labour force because of household non-remunerated care responsibilities.

Source: OECD calculations based on ENAHO (2014).

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Complying with labour rights

Gradual progress in increasing compliance with labour rights has been recently observed in Costa Rica. Still one out of three workers is being paid below minimum wage conditions. Incompliance is also relatively large as concern the payment of overtime and the payment of the Christmas salary bonus (*aguinaldo*). The number of workers not enjoying any of the labour rights recognised in the legislation, such as sick leave, holidays,

overtime payment or social security insurance, has been falling, although it is still 7% of all workers (Estado de la Nación, 2014). Vigilance should continue to ensure that compliance keeps increasing.

Another area which requires monitoring concerns trade union rights. The number of collective agreements in the private sector is low and, instead, direct agreements with non-unionised workers are frequent. Existing laws prohibit anti-union discrimination but enforcement has been weak. Thus, Costa Rica has attempted to promote trade union labour rights in recent years and a new law was approved in the late 2015. The new law explicitly bans any form of discrimination in the workplace, besides shortening labour related disputes, by introducing oral arguments in courts and establishing out-of-courts resolution mechanisms. However, the law still prohibits strikes in public services considered as essential – such as police but also hospitals and ports – and allows for hiring temporary staff to replace striking workers. The government should continue legal reforms so as to comply with ILO conventions and recommendations.

Improving the quality of education

Costa Rica is a pioneer of universal access to education in Latin America and has shown a strong commitment to invest in education. Costa Rica's public education system encompasses education from primary to university level. Education is free of charge up to secondary level while universities fees are very low. Attendance to primary and basic secondary education is compulsory. In 2013, spending on education represented 6.9% of GDP, excluding spending done by the institution devoted to vocational training, the INA (*Instituto Nacional de Aprendizaje*, the National Learning Institute), which is independent from the academic education system. In the OECD, only Nordic countries and New Zealand invest a higher share of its GDP in education (Figure 1.16, panel A). There is a constitutional mandate to raise education spending to 8% of GDP by 2018.

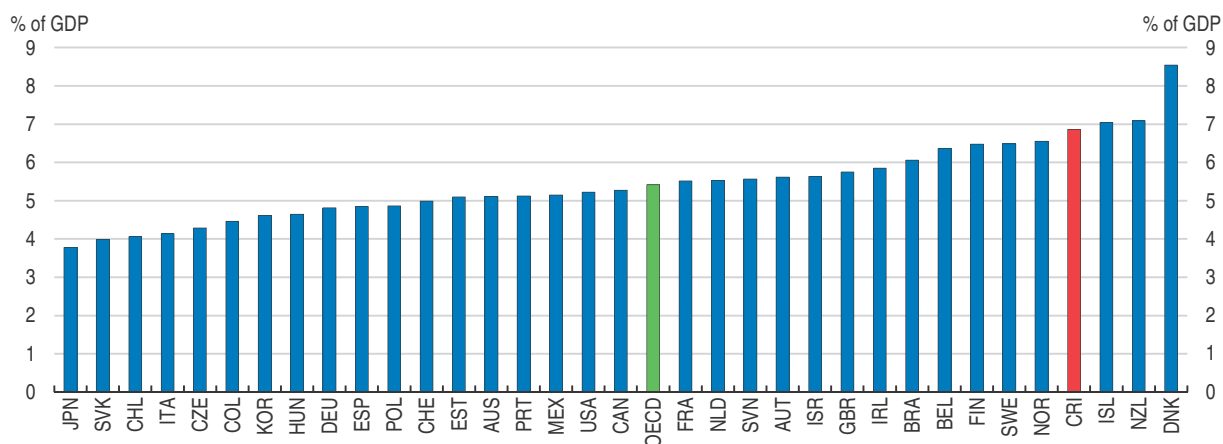
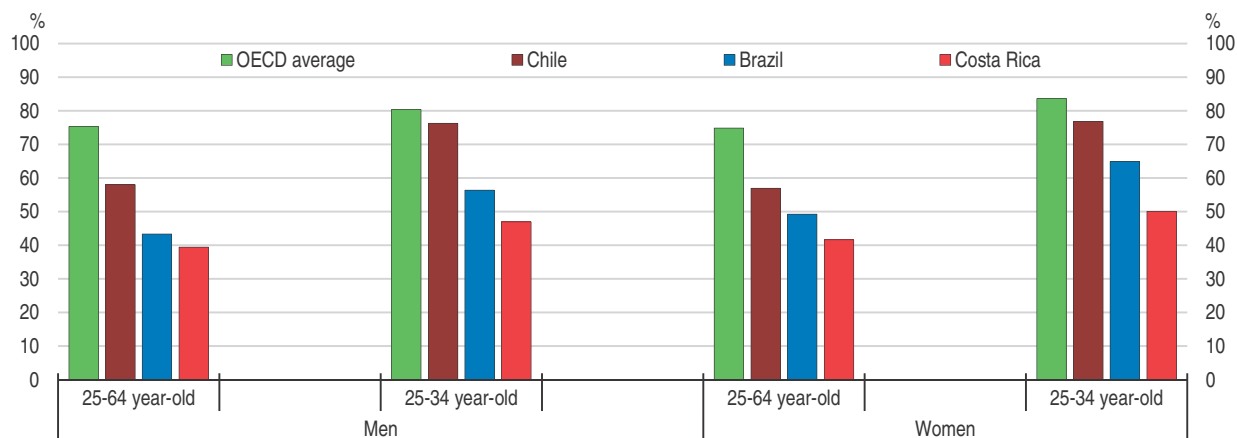
Making the most of education spending

Costa Rica has achieved significant progress in reducing illiteracy as 21% of population faced illiteracy problems in 1953 and only 2% does now according to latest census. Moreover, the country has achieved almost full enrolment (94%) in primary education, which is comparable to OECD countries. The net enrolment rate has also risen and reached 61% for 4 year-olds in 2014, and 87% for 5 year-olds in 2014. Nevertheless, the average educational attainments remain low, especially considering Costa Rican level of GDP per capita and education spending. Only 40% of the workforce has completed secondary education (Figure 1.16, panel B). Similar results are also observed for recent cohorts: less than half of the 25-29 cohort has completed secondary education. These results are far from graduation rates of OECD countries and are significantly lower than other Latin America countries such as Colombia, Peru or Panama.

The quality of education is also comparatively low, given the level of spending. PISA scores are low in the three subjects: reading, scientific and, especially mathematics (Figure 1.17). Moreover, since tests are only taken by those in schools, and given the high dropout rates, the average skill level of Costa Rican children are likely to be lower. There are also increasing disparities depending on socioeconomic status (more below). Given this large mismatch between the level of spending and the resulting educational outcomes, Costa Rica should move away from an exclusive emphasis on increasing spending as a policy target and, instead, establish the improvement in educational outcomes as the main

Figure 1.16. **Spending in education is large but outcomes could be improved**

Last available year

A. Total spending**B. Percentage of population with at least secondary education**

Note: Panel A: Latest year available. Year 2013 for Costa Rica and 2012 for Korea. 2011 for the rest. Panel B: Year 2014 for OECD average and Costa Rica, 2013 for Chile and Brazil.

Source: UNESCO Education Database; OECD (2015f), *OECD Education at a Glance 2015*.

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target. OECD evidence shows that a high level of spending is not always associated with better outcomes (OECD, 2015f); how money is spent is critical. High-performing systems tend to allocate resources more equitably across socio-economically advantaged and disadvantaged schools (OECD, 2013b). Moreover, demographic dynamics imply a gradual decrease in the number of students entering primary and secondary education. Thus, the target of increasing spending on education should be also weighed against increasing needs in health or in fighting poverty.

Besides improving outcomes, an additional fundamental challenge is to spread education benefits more fairly across the society. Gaps in the access of education depending on household's income have widened in the last two decades (Estado de la Nación, 2014). Enrolment rates in secondary education are significantly higher for children in higher income quintiles. PISA tests indicate that Costa Rican schools, in addition to low performance, show low equity (Figure 1.17), as disparities in learning outcomes depending on socioeconomic status are large. In Costa Rica, as in other Latin America countries, family background is a bigger determinant of student learning than in OECD countries. Students from lower socio-

Mean score

650

600

550

500

450

400

350

300

30 25 20 15 10 5 0

Percentage of variance in performance explained by the PISA index of economic, social and cultural status

Greater equity

*Above-average mathematics performance
Below-average equity in education outcomes*

*Above-average mathematics performance
Above-average equity in education outcomes*

*Below-average mathematics performance
Below-average equity in education outcomes*

*Below-average mathematics performance
Above-average equity in education outcomes*

OECD

OECD

Poland
Germany
Denmark
Spain
Ireland
Latvia
Lithuania
Netherlands
Finland
Mexico
Chile
Costa Rica
Brazil

◆ Strength of the relationship between performance and socio-economic status is above the OECD average
◇ Strength of the relationship between performance and socio-economic status is not statistically significantly different from the OECD average
◆ Strength of the relationship between performance and socio-economic status is below the OECD average

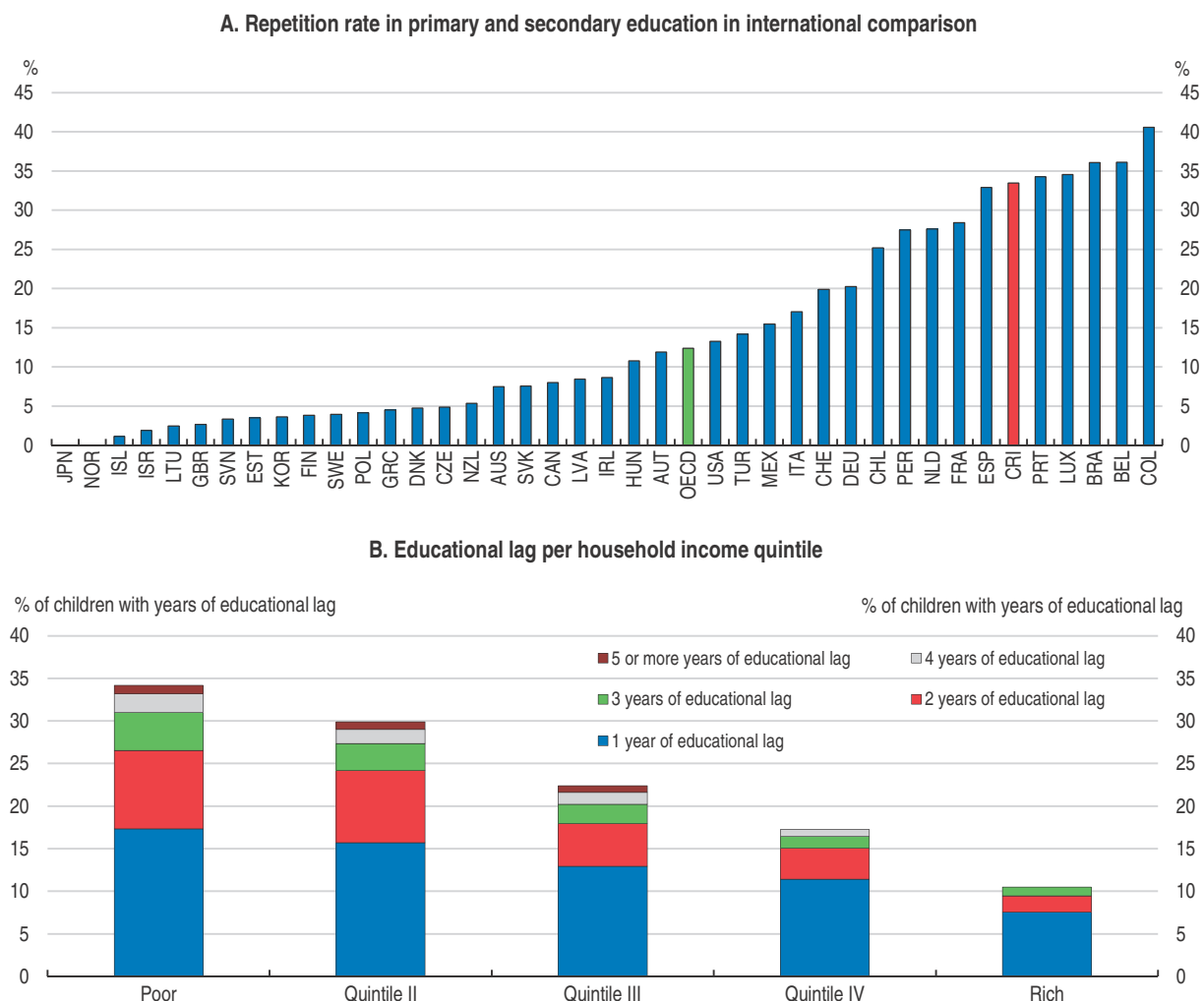
economic backgrounds perform well below their peers and are less likely to enter and complete tertiary education. The gap in performance between public and private schools is also large, partly reflecting differences in socioeconomic background of students (Fernández and Del Valle, 2013). There are also disparities originated within the public educational system, with important differences across the system in terms of instruction time or access to key subjects such as foreign language or IT (Estado de la Educación, 2015).

Inequalities in education outcomes start early. At the end of primary education, the share of students coming from low-income households lagging behind is high. These difficulties are aggravated in lower secondary, when many students repeat grade and finally drop-out. This suggests that grade repetition has high costs and doubtful benefits, as also observed in other OECD countries. Grade repetition is negatively related to equity (OECD, 2013b). The percentage of students who have repeated a grade during primary, lower secondary or upper secondary school is one of the highest among PISA-participating jurisdictions. More than 33% of

15 year-old students reported having repeated a grade at least once, compared to an OECD average of 13% (Figure 1.18, panel A). Furthermore repetition is highly concentrated in low-income households (Figure 1.18, panel B). Focusing on early and targeted support to those students with a higher risk of leaving the education system would be more efficient and render better outcomes than grade repetition. This would require providing additional support to disadvantaged students and schools, which would require prioritising further lower secondary education. Spending seems to be skewed towards primary and tertiary levels, where Costa Rica spends more than the average OECD country, to the detriment of early childhood and secondary education, where public spending per student is low by international standards.

Costa Rican authorities have put in place several initiatives to foster retention in secondary education and also facilitating the return to the education system of those that dropped out. These include *Yo me apunto* and *Proeduca*, a joint project with the European Union. The design of the schemes seems appropriate as they are specifically targeted at those that have previously abandoned the education system or that are experiencing more

Figure 1.18. **Grade repetition is high and concentrated in low-income households**



Source: OECD (2013b), PISA 2012 Results and OECD calculations based on ENAHO 2014.

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difficulties to remain in education. These initiatives should be evaluated and, in case of a positive outcome, expanded.

Another action to curb drop-outs at secondary level is to reinforce the vocational or technical tracks. This has proved to be an effective tool across OECD countries to improve educational outcomes and employability, especially when vocational programmes are designed and implemented to be responsive to labour market needs (OECD, 2014a). Acknowledging this, Costa Rica is in the process of discussing the implementation of a dual system in vocational education. International experience suggests that a key element for a successful development of dual education is to give employers a central role in workplace learning, so that the training mix reflects labour market needs. Consultations with relevant stakeholders are maintained in Costa Rica, but these are not sufficient (OECD, 2015e), as educational institutions are the dominant players of the system, with employers having a lesser role. Moreover, many technical courses do not include workplace learning. Work-based learning clearly contributes to better labour market outcomes and therefore should become mandatory (OECD, 2015e), as successfully done in other OECD countries such as Denmark and Belgium. International experience also signals that apprenticeship systems are associated with lower youth unemployment rates and the development of job-relevant technical skills in the workforce. Hence, as part of its strategy to improve technical education, Costa Rica should develop an apprenticeship system engaging all social partners in its design and delivery.

Making tertiary education more responsive

Despite the significant educational effort made by Costa Rica and the relatively high level of unemployment, employers face difficulties to fill vacancies for certain posts (ManPower, 2015). Some skills gaps have also been identified as an important bottleneck to attract foreign direct investment. These gaps are in technical and scientific professions (Monge-González et al., 2015). The tertiary education system is heavily biased towards social science and humanities, producing few Science, Technology, Engineering and Mathematics (STEM) graduates. In the last decade, 33% of graduates were in education area, followed by Economics (23%), Social Science (15%) and Health (12%). Engineering only accounted for 6% of all graduates.

As a result of this mismatch between the demand and supply for skills, Costa Rica has one of the largest skills premiums in Latin America, with high-skilled workers earning on average more than three times as much as low-skilled workers (Tosunta and Osuke, 2012). Furthermore, contrary to other countries in Latin America, the premium has been increasing in Costa Rica, reflecting that the mismatch is largely structural.

Reducing skill mismatches require actions both on the supply and on the demand. On the supply side there is a need to improve the governance of the universities to make them more accountable, performance-based and responsive to Costa Rica's skills needs. At the core of the reform there should be a change in the universities funding model to encourage a more rapid response to labour market needs and to avoid an excess of supply of graduates in certain fields and shortages in others. The current funding model creates incentives to increase places in fields that are less expensive to deliver, such as the humanities and social sciences. Conversely, it does not encourage the expansion of programmes that are relatively more costly to provide such as engineering, which requires more expensive equipment. Incorporating better incentives into the funding formula should help to ensure a better alignment of courses and curricula with skills demand.

On the demand side it should be also facilitated that students obtain early on in their student life comprehensive information about employment options in the country, as well as wage levels in different industries and about labour market status by degree and university. Making available this information could encourage more students to enrol in those institutions that offer the prospect of better employment and earnings. This would create greater competition among institutions, thereby helping to raise quality standards. It would also help students to better understand the relative value that qualifications have in the labour market, promoting that students follow educational paths conducive to careers within more dynamic sectors such as technical and scientific fields. While much of this information is already available in Costa Rica, it is often in the form of ad hoc reports. To be effective, such information needs to be made available more generally, kept up-to-date and tailored to the needs of different users, such as students initiating secondary education, who are making study choices that might enable or constrain their future educational options.

Finally, there is a need to ensure that the education system as a whole remains inclusive. The current situation, in which students from low-income households face high risks of being left behind in public secondary education and not reaching tertiary education, while students from high-income families complete secondary education in private schools and then move on to virtually free public tertiary education, is not optimal from an equity point of view. Ultimately, rising tuition fees in public universities, accompanied by means-tested waivers, could be an option to increase equity.

Improving governance and evaluation mechanisms

Improving efficiency and evaluation mechanisms and increasing accountability across all the education system, including universities, is also needed. Recent significant increases in education spending have not been accompanied by an improvement in outcomes. A significant share of recent increases in education spending was dedicated to raise teachers' wages, which increased by more than 20 percent in real terms in the period 2009-13 (Estado de la Educación, 2015). This could be beneficial if it leads to hire more high-quality teachers. In general, the countries that perform well in PISA attract the best students into the teaching profession by offering them higher salaries and greater professional status (OECD, 2013b). Improving teacher's professional development, including those in vocational tracks, and harmonising their qualifications would also help to improve the quality of teaching.

The salary structure includes numerous bonuses completely delinked from educational outcomes that are perceived as part of the fixed salary (Estado de la Educación, 2015). Annual increases are granted quasi-automatically without any relationship with performance. The school assessment system needs to be reformed and rewards should be linked to improving outcomes. Those rewards should not depend exclusively on an improvement in test results but should also reward student's retention. Countries that have embarked recently in similar reforms have seen an improvement in educational outcomes. Brazil established recently nationwide competency tests that allow to benchmark schools and to introduce incentive mechanisms (OECD, 2013c).

Increasing efficiency in the health system

Costa Rica has a long-standing commitment to provide universal health care, which has translated into outstanding health outcomes, similar to those in OECD countries. Life

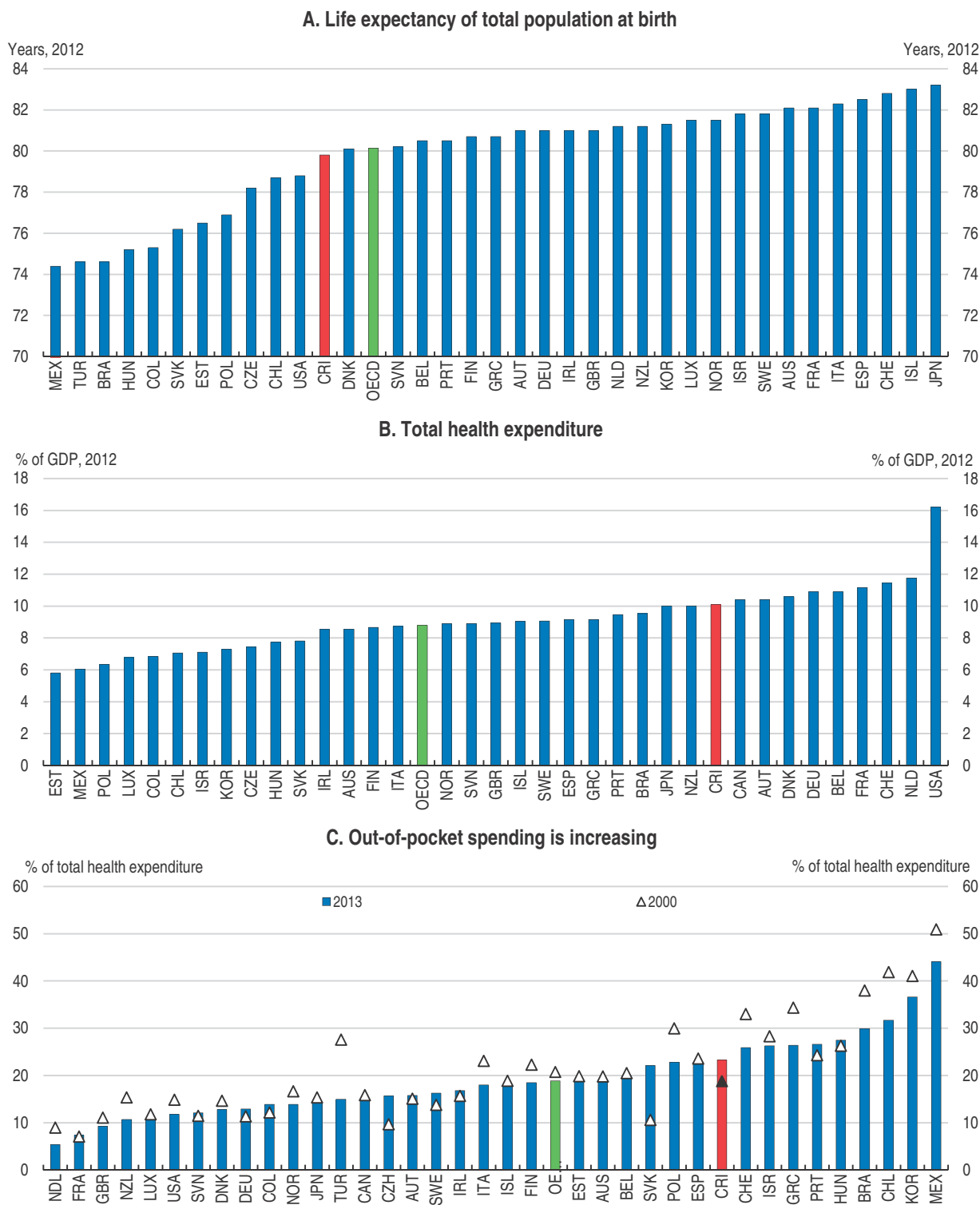
expectancy is 82 for women and above 77 for men, and child mortality is low. Nevertheless challenges are also surmounting in this area as concerns the growth, sustainability, and level of equity of the health system.

Public health services in Costa Rica are provided by the Costa Rican Social Security Agency (*Caja Costarricense de Seguro Social*, CCSS), which is the largest decentralised autonomous entity in the Government. This institution also administers the contributory pension fund and implements the non-contributory pension scheme (more below). The health insurance provided by the CCSS is based on the solidarity principle. It is financed with contributions from workers and employers, via social security contributions. Around 86% of population is insured by the CCSS. It also receives transfers from the national budget, to cover the health needs of poor and uninsured.

Health spending has grown since 2000s and is now 10% of GDP, which is above average spending in OECD countries (Figure 1.19, panel A). The recent increase in spending has not been coupled with an increase in revenue growth, raising concerns about the sustainability of the system, especially in view of demographic trends. Recent spending increases have been nearly exclusively devoted to raising the number and salary of employees. At the same time, average daily hospital production has dropped and the number of outpatient visits per professional has declined (Word Bank, 2015). Users face increasingly long wait times, especially for surgery, diagnosis, and specialised treatments. As a consequence, out of pocket spending is increasing and now is higher than the OECD average (Figure 1.19, panel C). Private health services are increasingly used by those can afford it to get services covered by the CCSS. This is generating inequities in access and quality of treatment, and increasing patient dissatisfaction.

CCSS performance is hampered by excessive fragmentation and dispersed information systems. There are multiple non-linked IT tools, some of which take the form of spread sheets, whose update and reconciliation is done dispersedly and manually. An update of the information system underpinning the CCSS is a crucial and much needed step in order to improve the management of the system. Compiling in a more efficient, timely and accurate way key information, such as financial statements, unitary costs per intervention or waiting lists, would help to make the system more efficient, accountable and performance-based. In this direction, progress is underway to roll-out the single digital medical file, which will provide real time statistics and performance indicators. The single medical file has already been deployed to half of the medical centers providing primary care and it will be gradually deployed to other medical centres (also those providing other than primary care) in 2016 and 2017. The information gathered through this initiative will be fed into SINIRUBE, the single social assistance beneficiaries' database, and hence could also help to improve the targeting of social assistance programmes.

Changes are also needed in the way resources are allocated across the system. So far Costa Rica allocates resources based on a historical basis, without taking into account demand originating from population needs and morbidity patterns. This leads to inefficiencies and inequities. A move towards a budget model based on epidemiological needs that respond more swiftly to demand and demographic changes is needed. This should be accompanied by introducing diagnosis-related funding schemes, i.e. hospitals should be funded according to patient characteristics. OECD evidence shows that diagnosis-based schemes are very effective at containing costs without prejudice to the quality of services, as they provide stronger incentives to control spending than fee-for-

Figure 1.19. **Despite relatively high government spending in health, out-of-pocket spending is increasing**

Source: OECD, Health Statistics Database; World Bank, World Development Indicators; WHO, Global Health Expenditure Database.

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service schemes, which can result in service oversupply (Pisu, 2014). On the human resources side, wage increases should be linked to performance.

Costa Rica needs also to update its health model to respond to the aging of the population, which has already brought changes in the epidemiological profile of the country and increasing demands. Chronic diseases are becoming more prevalent. This will require changes in the health model, putting a stronger emphasis on prevention and on formal home care services. The latter are increasingly used across OECD countries as a preferable and less costly alternative to long hospital stays.

Buttressing the pension system

Pension coverage in Costa Rica, though not universal, is relatively large, especially when compared with other countries in Latin America. Seventy per cent of Costa Rican workers contributed to or were affiliated with a pension scheme in 2010, which is one of the largest coverage in Latin America and Caribbean countries (OECD/IDB/The World Bank, 2014).

The Costa Rican pension system comprises four pillars: 1) a contributory defined-benefit scheme; 2) a non-contributory regime paying a minimum pension (below the poverty line), which is financed from the government budget; 3) a compulsory contributory defined-contribution scheme; and 4) a voluntary defined contribution scheme. In addition there had been special regimes for public employees, but they were mostly closed to new beneficiaries in the 1990s.

Nearly all workers in the highest income quintile contribute to the first pillar, while around 20% of those in the lowest quintile do so. Costa Rica is also one of the few Latin America countries getting significant pension savings from the self-employed. Given the low labour participation of women, Costa Rica has the largest gender pension coverage gap in Latin America (OECD/IDB/TheWorld Bank, 2014). Coverage is 12 percentage points higher for men than for women.

The non-contributory scheme covers 44 % of the population aged 65 and over. It is managed by the CCSS, the Costa Rican Social Security Agency (*Caja Costarricense de Seguro*), and financed with resources from the Social Development and Family Assistance Fund (FODESAF), and certain specific taxes. It is means-tested. The scheme seems well targeted at those more in need and contributes to reduce income inequality (Gabriel and González Pandiella, forthcoming).

Two main weaknesses are affecting the contributory system. On the one hand, it does not generate enough resources to be sustainable in the medium-term, even after allowing for the 2005 reform that mandated a progressive increase in contributions from 8.5% to 10.5% by 2035. There are different estimates concerning when the system will turn into deficit. According to CCSS's projections, it will be in 2038; according to the pension regulator it would be in 2025. Either the system will require funding in addition to contributions, or it will need reform. Pension entitlement parameters, for example pension benefits or the statutory retirement age, could be indexed to changes in life expectancy. To increase the linkage between contributions and pensions the government could also consider phasing in a pension benefit calculation formula that reflects a larger proportion of participants' working life. Currently only the last 300 monthly salaries are used to determine pension entitlements.

The second weakness is that its assets are highly concentrated: 96% of CCSS assets are invested in Costa Rica sovereign debt. A downgrade in the credit classification of Costa Rica, for example, would have a severe impact on the system sustainability. The CCSS is guaranteed by the government, which make it an implicit government liability. A more diversified financing strategy that decreases investment in government securities would reduce risks.

There is also a need to increase the transparency of the system. The pension regulator has reported unmet requests for key information to perform its role as regulator (SUPEN, 2014). To increase transparency and accountability, a road map to adhere to the OECD Guidelines for Pension Fund Governance (OECD, 2009) should be established.

Sustaining and reinforcing environment protection

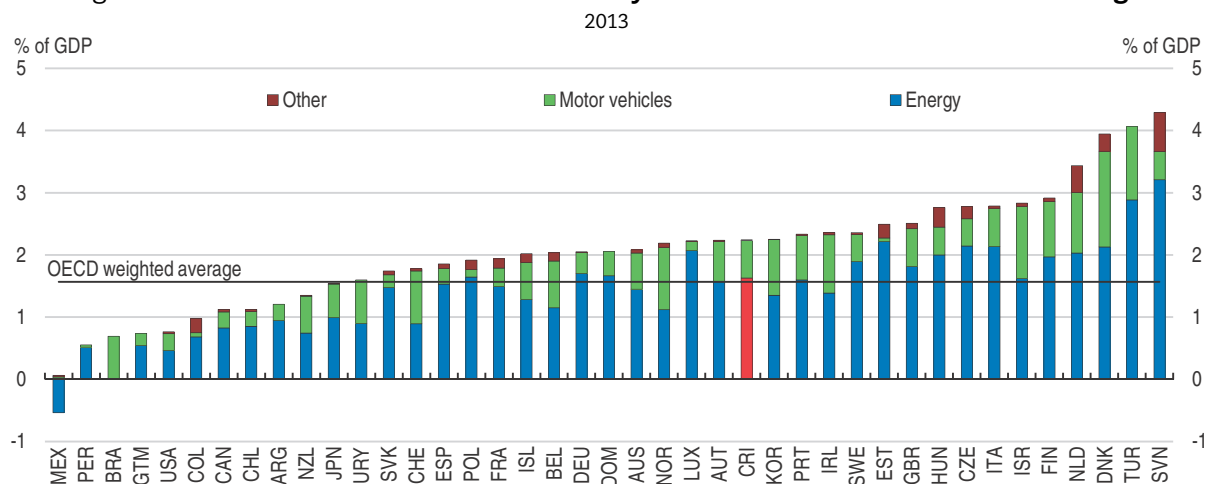
Costa Rica has built a world-distinguished green trademark, centred on conservation, reforestation and national parks. This has been an important engine of economic growth and wellbeing for Costa Ricans. Thanks to the Payments for Environmental Services program (PES), Costa Rica is the only tropical country which has substantially reversed deforestation (World Bank, 2015). Costa Rica is a pioneer in carbon pricing. In 1997, it enacted a tax on fossil fuels, whose revenue funds the PES. Costa Rica is also a pioneer in the development of eco-tourism, with a positive impact on the income of local workers (Robalino and Villalobos, 2014). Costa Rica is one of the most visited countries in Latin America. More than 2.5 million tourists travelled to Costa Rica in 2014. Protected areas, which cover 26% of the country, have contributed to reduce poverty in local communities, mostly through new job opportunities afforded by tourism (Ferraro and Hanauer, 2014). Thus, Costa Rica exemplifies that protecting national resources can pay off and be an additional source of growth and jobs and provide a way out of poverty.

Costa Rica has announced ambitious targets to decarbonise its economy while reiterating its aspiration to align its economy towards carbon neutrality by 2021 and establish a long term goal for decarbonising its economy throughout the rest of the century, including milestones for emissions reductions by 2030, 2050 and 2100 (MINAE, 2015). These encompass a target to reduce total net emissions (i.e. taking into account CO₂ removals by forests) by 25% by 2030 compared with 2012.

In 2012, Costa Rica established the Domestic Voluntary Carbon Market, whereby carbon credits can be generated and exchanged among companies and individuals. Further efforts are ongoing to consolidate and expand this market accompanied by other recent initiatives, such as the creation of certificates of carbon neutrality for companies and several sectoral mitigation programmes, the so-called Nationally Appropriate Mitigation Actions (NAMAs). These efforts should be pursued as they are key towards Costa Rican carbon neutrality aspiration.

Costa Rica has in place a number of green fiscal policy tools. For example, a tax on fossil fuels was enacted in 1997, and Costa Rica ranks above the OECD average in terms of revenues collected from environmentally-related taxes (Figure 1.20).

Costa Rica faces a number of important environmental challenges, especially as concerns the impact that increasing urbanisation is having in the environment and quality of life of Costa Ricans. The urban population has been growing rapidly, from 50% of the total population in 1990 to 75% in 2013. More decisive policy actions will also be required to achieve progress towards the objective of decarbonising its economy. This mainly centres on the necessity to reduce emissions originated by oil energy consumption. Infrastructure

Figure 1.20. **Revenues from environmentally related taxes are above OECD average**

Source: OECD, Instruments Used for Environmental Policy Database.

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gaps need also to be addressed since they hurt not only Costa Rican competitiveness (Chapter 2) but also its environment.

The transport sector is the largest source of emissions, accounting for 60% of all energy consumption and 67% of GHG emissions from energy in 2010. This is explained by the persistent increase in the number and use of motor vehicles, in particular private cars, which grew by 68% from 2003 to 2014. The number of private cars per capita in Costa Rica is above that of OECD countries in the region, like Chile, or neighbouring countries such as Panama. The extended and increasing use of private cars reflects an underdeveloped and inefficient public transportation system network (see Chapter 2), which means that in many cases a private car is the only transport option. This is particularly the case in the San José Greater Metropolitan Area, where traffic congestion is heavy and commutes are long, as a result of an obsolete public transport system. This imposes very high environmental costs, such as climate change, noise and air pollution. Air pollution, measured by the concentration of particulate matters in the air of residential areas, is above the OECD average (26 versus 20).

Costa Rica has put in place a number of initiatives to foster the use of clean cars and encourage the vehicle fleet becoming more energy efficient. In March 2015, it announced the Acquisition Programme for Efficient Vehicles (PAVE), which subsidises buyers of new cars in certain categories. Since 2013, importing hybrid and electric vehicles benefit from a tax rebate and a tax exemption respectively. However, these initiatives may take a long time to deploy their effect. A meaningful reduction in emissions from the transport sector will only come from more decisive steps in the design and implementation of a public transport network, especially in San José Greater Metropolitan Area, home to almost two-thirds of the population. Increasing and improving urban public transport should be a priority for public capital spending. Better coordination between land-use and transport planning would also facilitate a lower use of private cars.

Beyond transportation, the second set of challenges originated from the increasing urbanisation refers to sewage treatment and solid-waste management. Seventy five

percent of residential wastewater is diverted to septic tanks. Sewers are used by only 20% of the population, and only 4% of that fraction receives remedial treatment. This is well below OECD standards and also below standards in other neighbouring countries (Table 1.5). Of all urban wastewater collected in Costa Rica, 96% of it is discharged into rivers and receiving water bodies without any treatment, generating water contamination. Water contamination has been in some cases severe, resulting in beaches being declared unsuitable for swimming. This has consequences for public health and for the sustainability of Costa Rica environmental protection model. To respond to these challenges, the first ever collection system in the Metropolitan Area of San José is being built. The government should aim at building additional waste-treatment plants with the aim of gradually covering 100% of water discharges.

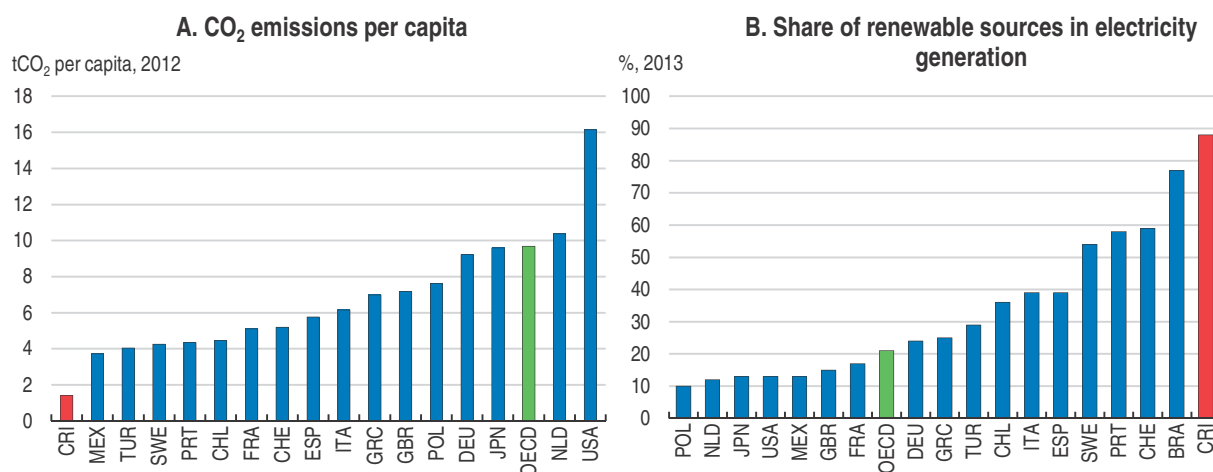
Table 1.5. **Waste water treatment is poor**

Country	Access to water source (% of urban pop)	Access to sanitation (% of urban pop)	Connection to sewage treatment (%)	Sewage treatment (%)
Costa Rica	99.6	94.9	8.0	4.0
Chile	99.6	100.0	91.0	72.0
Lithuania	99.3	98.7	74.0	48.9
Brazil	99.7	87.0	26.0	20.0
Mexico	96.1	87.0	62.0	13.0
OECD average	99.8	93.4	76.0	-

Source: World Bank, *World Development Indicators Database*, 2012; Estado de la Nación 2014; UN stat; Eurostat; Aquastat FAO data; UNEP 2000; *OECD Water Database*; *OECD Environment at a Glance* 2013.

Costa Rica generates most of its electricity (88%) from local renewable sources, mostly hydropower and geothermal (Figure 1.21). This is well above clean electricity generation observed in OECD countries and contributes to low CO₂ emissions per capita. At the same time, the electrification rate is relatively high and reaches 99% of population. Nevertheless, during the last years, due to hydrological factors, electricity generation based on bunker oil and diesel has increased. Only in 2013 it grew by 45% (Blanco, 2014). Increased urbanisation implies that demand for electricity is expected to double over the next 15 years (MINAE, 2012). The high dependence on hydropower makes Costa Rica electricity model particularly vulnerable to climate challenges, especially droughts, as recently exemplified by El Niño phenomenon. Diversifying renewable electricity sources would make Costa Rican electricity model more robust and avoid the eventual need to resort to oil sources. This would imply boosting the use of geothermal, solar, wind and biomass energy sources also with the participation of the private sector. Positive steps have recently been taken as concerns distributed electricity generation such as solar. After a successful pilot project, a regulation is in preparation so that households and businesses will be able to generate photovoltaic electricity for their own use.

These efforts should be complemented by efforts on the demand side. The aim should be to promote a more efficient use of energy. Indeed energy efficiency is an important element in the policy agenda of the Ministry of Environment and Energy. That agenda includes plans to establish hourly tariff schemes for the residential sector, to encourage more cost-effective demand patterns, and the establishment of an energy-efficiency certification programme, among many other actions, to encourage energy efficiency across all sectors.

Figure 1.21. **The high share of renewable in electricity contributes to low emissions per capita**

Source: IEA (2015), IEA World Energy Statistics and Balances, World Indicators Database; IEA CO₂ Emissions from Fuel Combustion Statistics, Indicators for CO₂ emissions Database.

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Policy recommendations

Making the labour market more inclusive

- Foster active labour market policies by strengthening public employment services and by providing training for the unemployed, with a focus on the low-skilled.
- Increase the supply of publicly-funded child care services to facilitate women participation in the labour market.
- Consider establishing an unemployment insurance scheme based on individual savings accounts complemented with a solidarity fund.

Reducing informality

- Adopt a comprehensive strategy to reduce informality by strengthening enforcement, reducing administrative burdens to entrepreneurship, and enabling the poor to become formal workers.
- In the medium term, lower social security contributions with a focus on those segments where informality is rampant, such as workers in construction, agriculture and domestic work.
- Set-up one stop shops for facilitating the formalisation of micro and small firms.
- Simplify the minimum wage structure and enforce compliance with the law.

Improving education

- Establish better educational outcomes, such as raising graduation rates and PISA results in secondary education, as the main policy target.
- Provide additional support to disadvantaged students and schools by scaling up early detection and tutoring classes.
- Develop an apprenticeship system that closely involves employers; make technical education more responsive to labour market needs by increasing workplace education.
- Establish schools evaluation mechanisms and introduce performance-based teachers pay; provide teachers with support and professional development opportunities.
- Make the University system more responsive to labour market needs by introducing funding mechanisms that encourage a better alignment of courses and curricula with skills demand.

Policy recommendations (cont.)

Improving the tax and transfer system

- Reduce fragmentation of social programmes and, based on a common registry of beneficiaries, adjust eligibility criteria to ensure that recipients are those most in need.
- Set-up systematic and sound evaluations of social assistance schemes, reallocate more resources to those empirically proven to lift people out of poverty and scale down ineffective ones.
- Increase the progressivity of the tax system and broaden tax bases by eliminating deductions benefiting more affluent taxpayers, gradually lowering the threshold under which no personal income tax is paid and setting the new top income brackets to lower income thresholds. Go forward with the planned VAT reform.

Buttressing the pension system

- To improve the sustainability of the contributory system, index pension entitlement parameters, such as benefits or the statutory retirement age, to changes in life expectancy.
- To increase transparency and accountability, adhere to the *OECD Guidelines for Pension Fund Governance*.

Modernising the health system

- Move to a hospital budget allocation system based on needs stemming from population profiles, rather than on a historical basis.
- Update the information system underpinning the health system, so as to allow for a more accurate and timely control of costs and performance.
- To respond to aging challenges, put a stronger emphasis in preventive and home care.

Sustaining environment protection

- Improve public urban transport and wastewater management facilities.
- Continue efforts to develop the carbon market and other climate-change mitigation schemes.

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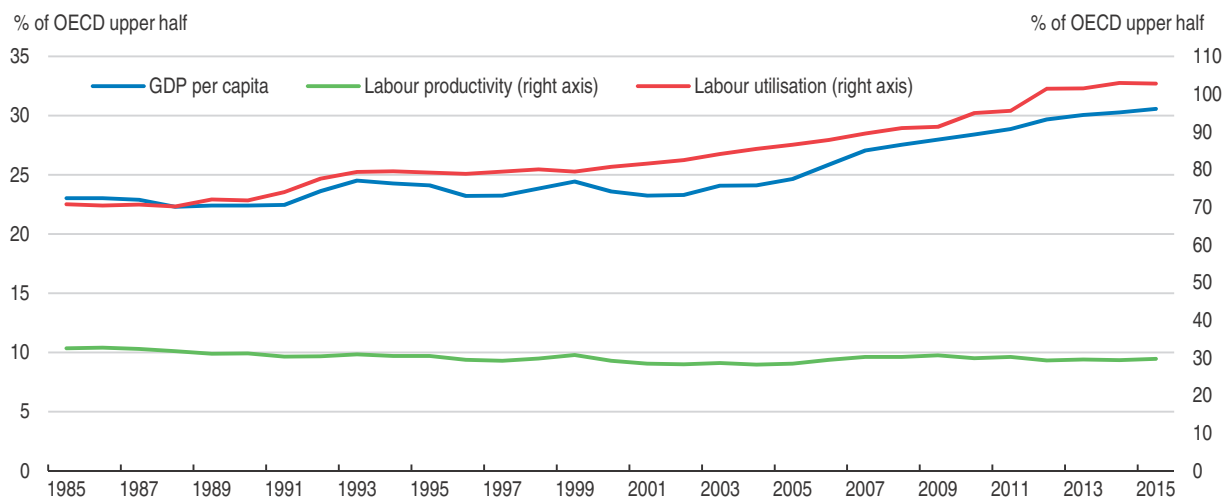
Chapter 2

Boosting productivity to sustain income convergence

In the latest 30 years, Costa Rica's real GDP per capita has more than doubled, driven by increasing labour utilisation. Labour productivity has instead stagnated at around 30% of the more advanced OECD countries. Productivity growth has been lacklustre despite the opening up of markets to international competition and large FDI inflows. Several obstacles continue to hamper the development of domestic firms and markets. They have fostered a dual speed economy characterised, on the one hand, by an innovative, productive and export oriented FDI sector – increasingly focussing on high value added sectors – and, on the other hand, a domestic sector – dominated by small firms and focused on traditional industries – that is neither innovative nor very productive. Boosting national productivity to sustain the convergence process towards OECD countries living standards will hinge on creating the right conditions for domestic firms to thrive and become more innovative and productive, while maintaining the long-standing commitment to open international markets and investment. To make this happens the government should: 1) encourage innovation and improving links between domestic and foreign firms by better enforcing and implementing intellectual property rights, shifting public R&D spending towards tertiary education institutions, and improving the coordination of public programmes promoting innovation of local firms and linkages with foreign affiliates; 2) strengthen competition in product markets and ease access to finance for SMEs by eliminating anti-trust exemptions, empowering the competition commission and giving it more independence, reducing barriers to entrepreneurship, ameliorating the corporate governance of state-owned enterprises and creating a level-playing fields between state-owned and private banks; 3) enhance the institutional and legal framework of the transport and other infrastructure sectors by reducing the number of agencies involved in policy development and project executions, and establishing an institutional framework to reduce policy uncertainty and attract more private investment.

Over the past 30 years, Costa Rica's GDP per capita has more than doubled, narrowing the gap with the upper half OECD countries (Figure 2.1). Despite these gains, Costa Rica's GDP per capita, at USD 15 000, is still about one third of that of the upper half of OECD countries, similarly to Brazil and South Africa but higher than Colombia and China. Higher GDP per capita has been driven by increasing labour utilisation, which is now at the same level with that of the more advanced countries. By contrast, labour productivity has stagnated at around 30% of the labour-productivity average of the more advanced OECD countries.

Figure 2.1. **Labour productivity growth is slowing down convergence in GDP per capita**



Note: OECD refers to the 17 upper half countries based on GDP per capita. GDP is expressed in 2011 PPP.

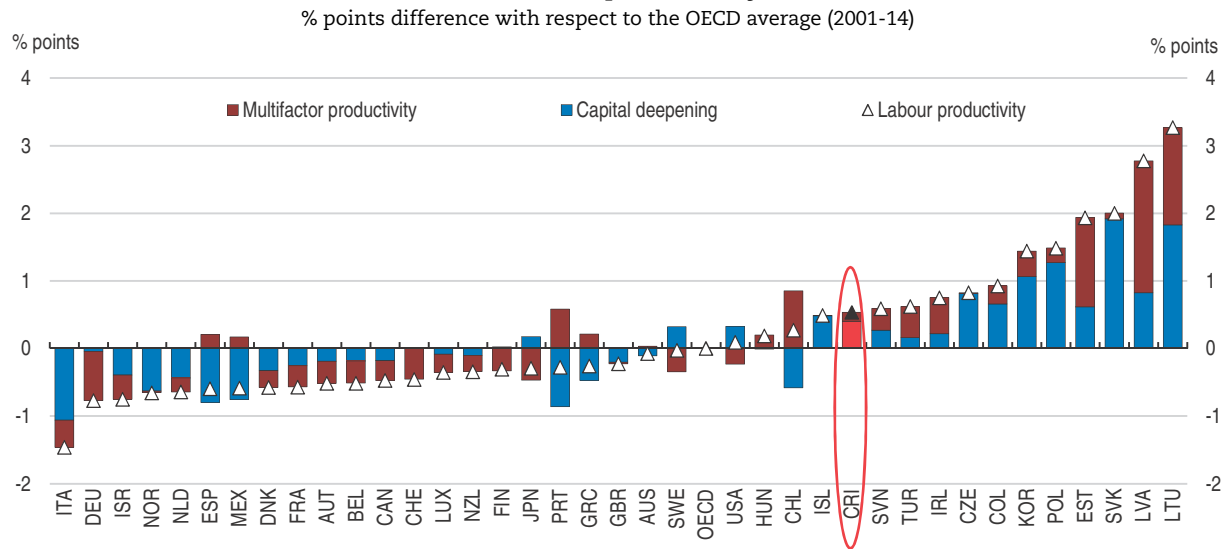
Source: OECD calculations based on the Conference Board Total Economy Database.

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The modest labour productivity growth Costa Rica experienced in the last 15 years is mostly attributable to sluggish multifactor productivity growth and, to a much lesser extent, low capital accumulation (Figure 2.2). Over time multifactor productivity growth has declined, similarly to other countries, and between early 1990s and 2014 it was overall lower than the OECD average and Chile, although higher than Mexico (Figure 2.3). Overall these trends, along with lower employment growth, have contributed to reduce potential output growth from nearly 5% in early 2000s to about 4% (Figure 2.3), hurting growth prospects for the coming years. The slowdown in productivity has taken place despite policies promoting international markets openness and attracting foreign direct investment (FDI).

The continuation of the convergence process towards OECD countries' higher living standards will hinge on boosting productivity growth as further large gains from rising labour utilisation are limited. Recent OECD research underlines three key areas to boost productivity growth (OECD, 2015g): i) adopting the best available technologies at global

Figure 2.2. **Low labour productivity growth is mostly attributable to sluggish multifactor productivity**

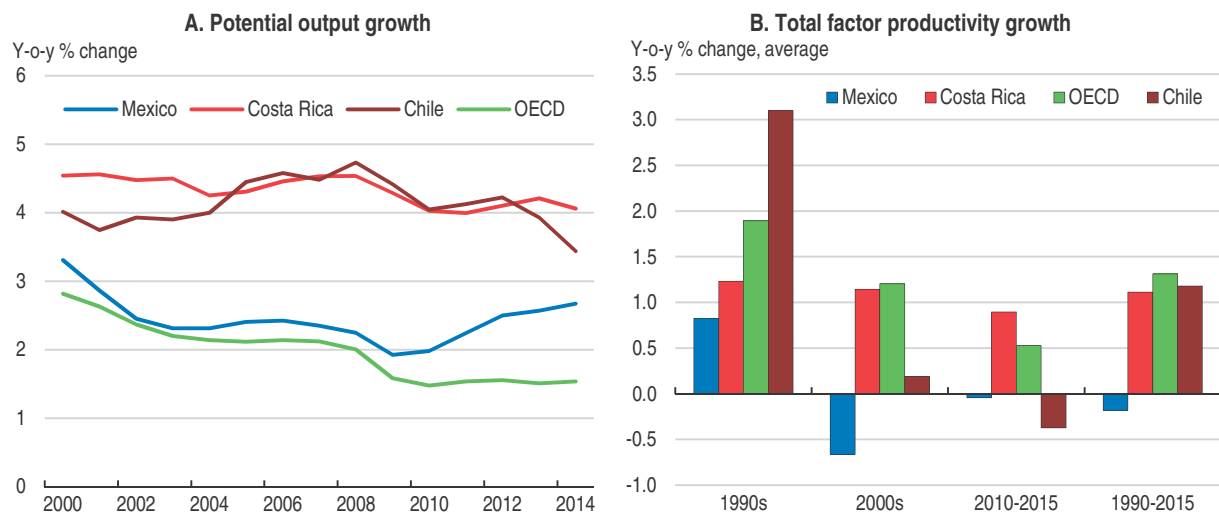


Note: The bar shows the % points difference in countries' labour productivity growth over the 2001-14 period with respect to the OECD average and the contribution to the difference attributable to the growth in multifactor productivity and capital deepening (i.e. capital stock over labour); growth rates are computed as logarithmic differences, which are approximately equal to percentage changes; the capital share in the production function is equal to 1/3.

Source: OECD (2015h), OECD Economic Outlook 98 Database.

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Figure 2.3. **Potential output and productivity growth have slowed**



Note: Panel B: Data for Mexico is available since 1996 and for Costa Rica since 1992. OECD corresponds to the arithmetic average of the percentage annual growth of member countries whose data is available at each year.

Source: OECD (2015h), OECD Economic Outlook 98 Database.

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level by the most advanced national firms; ii) creating a market environment where the most productive and innovative firms can thrive, thereby facilitating the widespread penetration of available technologies; and iii) reducing resource misallocation, particularly skill mismatches. While policies to reduce skill mismatches are analysed in the second chapter – as means to reduce poverty, inequality and labour market informality – insofar as they facilitate labour mobility and a more efficient allocation of resources they will also boost productivity. This chapter instead focuses on some of the major obstacles – low innovation and weak linkages between domestic and foreign firms, high barriers to competition and difficult access to finance, and deficient transport infrastructure – that thwart the development of domestic firms and the creation and adoption of more productive technologies.

Open markets and foreign direct investment have served the country well

Over the past three decades Costa Rica has opened up to international markets and managed to attract significant inflows of FDI. After shelving import substitution policies in the wake of the 1980s debt crisis, the country opted for an export-oriented development strategy, in which FDI and free trade zones (FTZs) played a central role, spearheading a period of gradual structural reforms. Three agencies have played a central role in the process of opening up to international market: the Ministry of Foreign Trade (COMEX), in charge of defining the country's overall FDI and international trade policies; the *Coalición Costarricense de Iniciativas de Desarrollo* (CINDE), responsible for promoting the country as an investment destination; and the *Promotora del Comercio Exterior de Costa Rica* (PROCOMER), which works on export promotion.

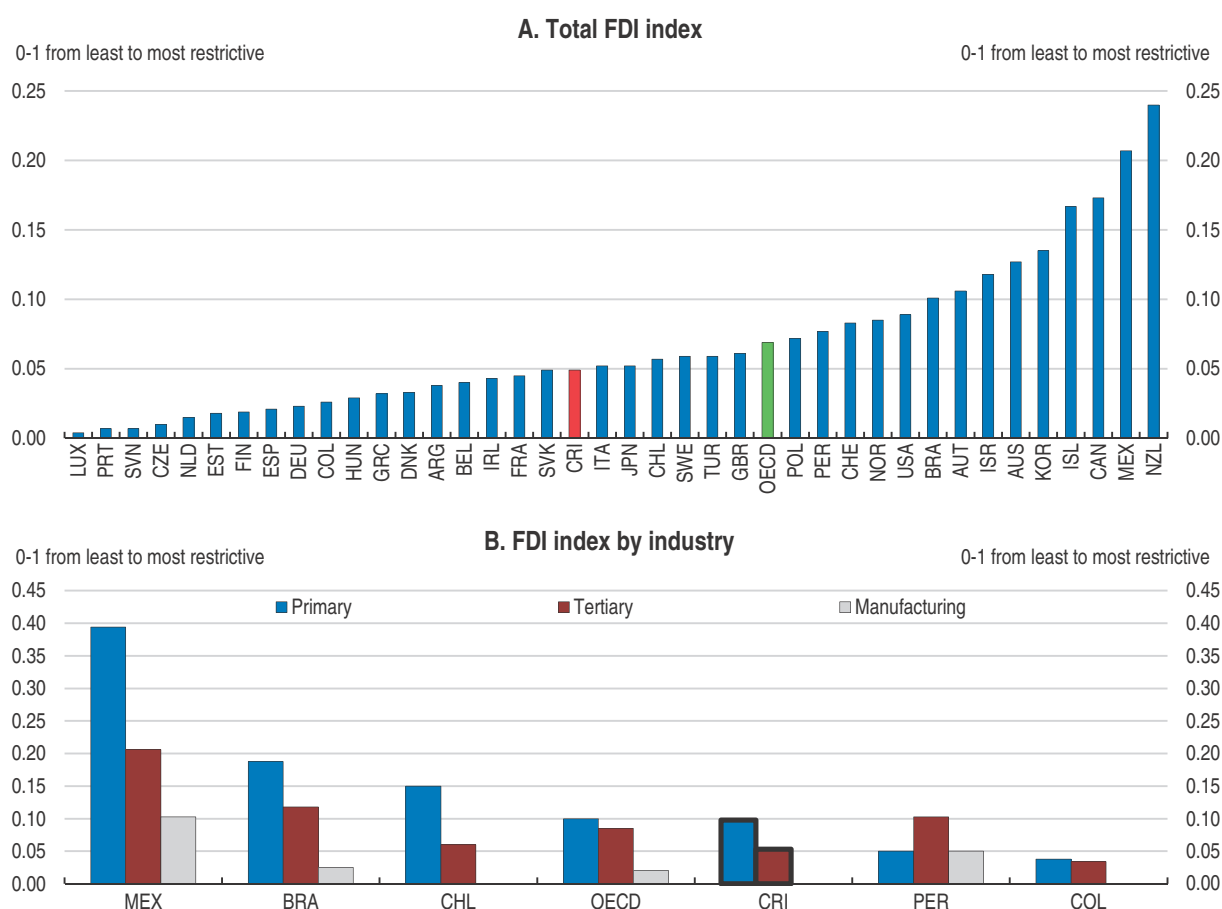
The FTZ regime was established in 1981 with the explicit intent of promoting, through different tax incentives, exports of non-traditional products by domestic and foreign companies. Currently, in compliance with WTO rules, the FTZ regime is open to manufacturing companies either exporting or not, whereas export requirements still apply to services companies. The FTZ regime is a rule based system as the law clearly specifies the requirements foreign and domestic companies must meet to accede to it, in terms of, for instance, the size and geographical area of investment and sector of activity. Tax incentives currently provided include the exemption from the corporate income tax for eight years (extendable for other eight years in case of additional large investments), and a reduced rate for the following four years, besides exemptions from stamp duty, property taxes, withholding tax on royalties, fees and dividends and others. The FTZ regime is geared towards increasing investment in strategic high value-added sectors such as advanced electronics and electrical components, medical devices, aerospace and offshore services (Gereffi et al., 2012).

The country has a robust legal framework protecting foreign investors' rights and the free flows of capital across borders. The Constitution clearly contains provisions enshrining the principle of non-discrimination between nationals and foreigners, and along with secondary laws, guarantees protection against expropriation and fair compensation. There are no restrictions to transfer of foreign capital and profits. Costa Rica adhered to the *OECD Declaration on International Investment and Multinational Enterprises* in 2013 following the Costa Rica's *OECD Investment Policy Reviews* (OECD, 2013). As a signatory of the *Declaration*, Costa Rica is also committed to promote the *OECD Guidelines for Multinational Enterprises*.

As a result of these policies, Costa Rica ranks rather well in the OECD FDI Regulatory Restrictiveness Index (Figure 2.4). The country performs better than the average OECD country and some Latin American peers, Mexico and Chile, albeit worse than others, such as Argentina and Colombia. Costa Rica has scope to lower FDI restrictions in some sectors, especially electricity distribution, surface and maritime transport, and insurance. The country maintains exception to the national treatment for foreign-owned enterprises in some sectors, such as access to land, electricity, mining or exploration of ores other than hydrocarbons and transport (OECD, 2013).

Figure 2.4. **Costa Rica has an attractive FDI regime but could do even better**

2014

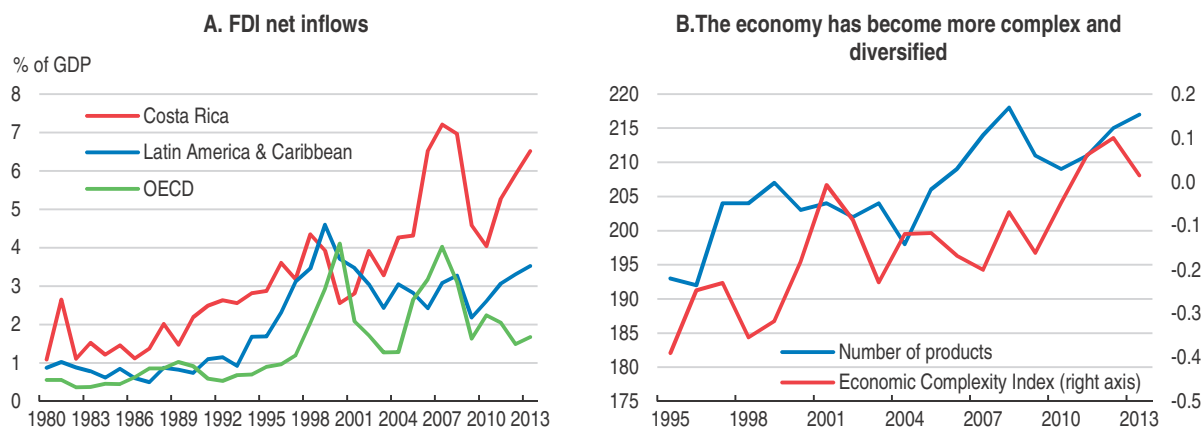


Note: Index ranges from zero (least restrictive FDI regime) to one (most restrictive FDI regime). The higher the value of the index, the more obstacles for inward FDI.

Source: OECD FDI Regulatory Restrictiveness Index Database.

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FDI inflows, as a share of GDP, increased rapidly over the 1990s and 2000s, reaching a peak of 7% in 2008; their quick recovery after the sharp drop in 2009 triggered by the global economic crisis attests to the long-term attractiveness of Costa Rica as foreign investment destination (Figure 2.5; panel A). FDI inflows are shifting from low value added sectors – such as agro-industry, textile and apparel – to medium and high value ones – such as advanced manufacturing, life sciences and services – in addition to diversifying their origins (Figure 2.6). This process has contributed to increase the complexity of the economy (Figure 2.5; panel B).

Figure 2.5. **Costa Rica is an attractive FDI destination**

Note: Panel A: Foreign direct investment is net inflows. Panel B: The Economic Complexity Indicator (ECI) ranks how diversified and complex a country's export basket is. ECI is determined by combining in a single index a measure of a country's diversity (how many different products it can produce) and another measuring the ubiquity of those products (the number of countries able to produce those products) (Hausman, Hidalgo et al., 2014).

Source: World Bank, World Development Indicators and United Nations Conference on Trade and Development (UNCTADSTAT) and The Atlas of Economic Complexity, Center for International Development at Harvard University.

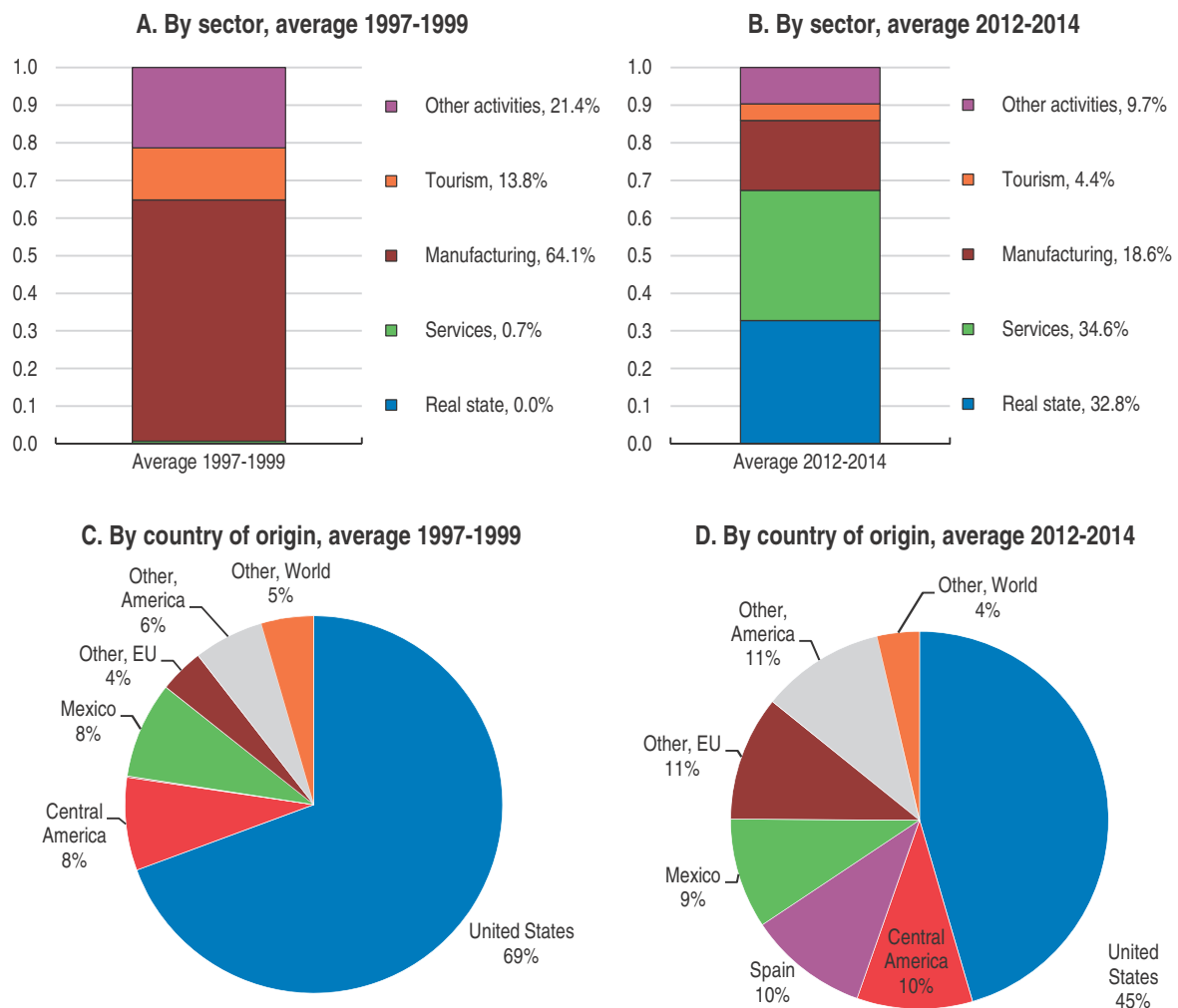
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FDI and free trade zones have made an important contribution to exports, increasing the value and sophistication of exported goods. Between the mid-1990s and 2014 the share in goods' exports of firms located in free trade zones (mostly foreign-owned ones) rose from about 12% to more than half the total value of goods' exports, which more than tripled over the same period (Figure 2.7). At the same time, the share of high technology products in total exports of manufactured products rose from about 6% – well below the OECD average – to more than 40% – higher than in any OECD country. As a consequence, Costa Rica is now well integrated into global value chains, especially in medium and high technology products (IADB, 2014). The government is seeking to deepen Costa Rica's participation in the global value added chains of four sectors, medical devices, electronics, aerospace and offshore services, by attracting foreign companies operating in these fields (Gereffi et al. 2012).

Raising productivity will require a whole of government approach

Improving productivity will require actions across several policy areas such as education and skills, innovation, competition and infrastructure. Co-ordinating initiatives across all these policy areas and breaking policy silos will be crucial to managing trade-offs and building complementarities. The government is aware of this challenge and it has established the Presidential Council on Competitiveness and Innovation (CPCI), to co-ordinate policies. It is composed of three sub-councils – Council on Competitiveness, Council on Innovation and Human Talent, and Alliance for Employment and Development – with representatives from ministries and the private sector and it has the support of a small technical unit.

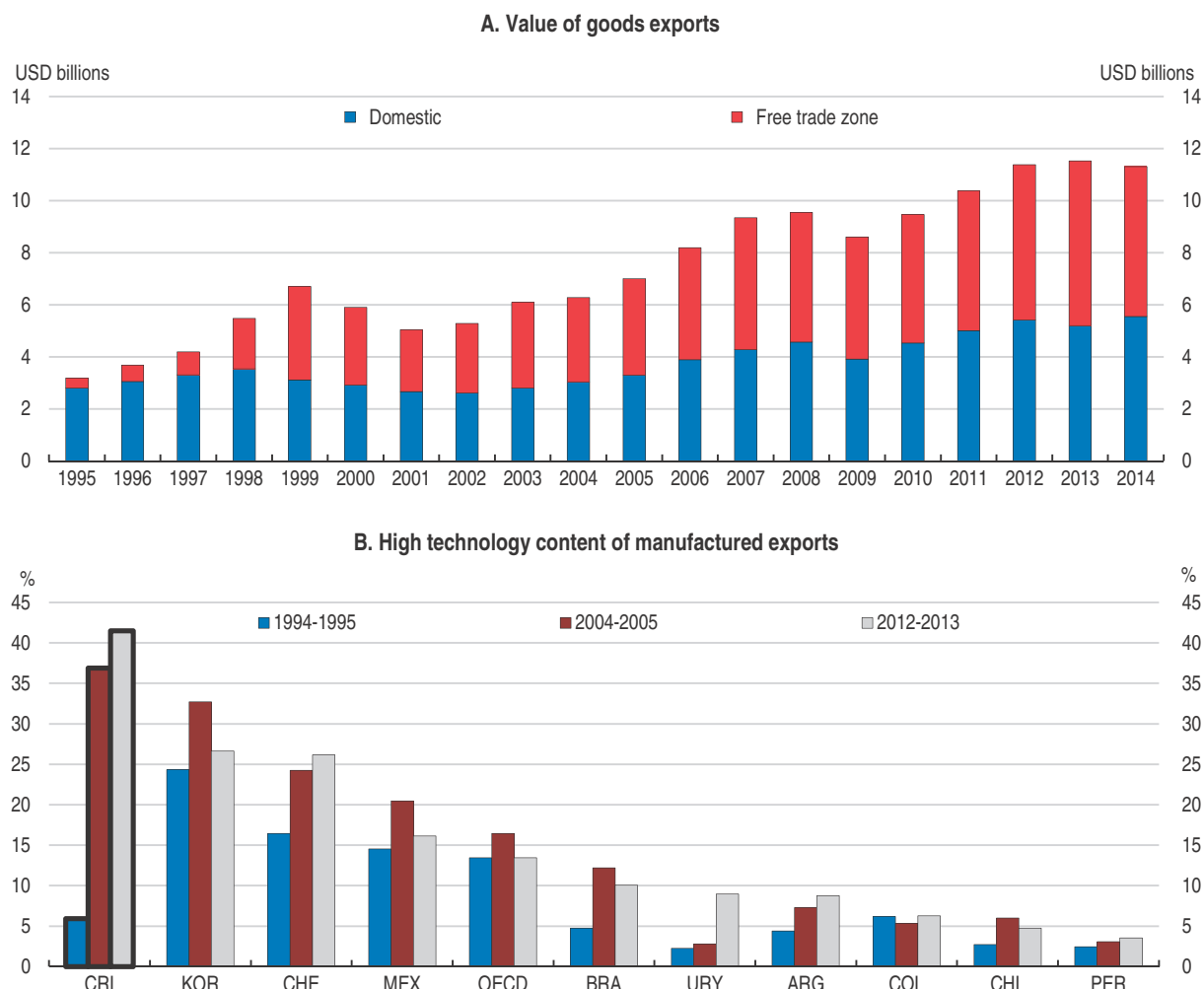
The establishment of the CPCI is a good development and is consistent with similar initiatives in OECD countries, such as Australia, Chile, Mexico and New Zealand, which

Figure 2.6. **FDI inflows have diversified**

Source: Inter-institutional Foreign Direct Investment Group (Central Bank of Costa Rica, Costa Rican Investment Promotion Agency, Foreign Trade Promotion Enterprise, Ministry of Foreign Trade & Costa Rica Tourism Board).

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have created productivity commissions. Such commissions can play a useful role by providing open and impartial advice to the government and parliament based on sound data and research (Banks, 2015). To become more effective in identifying obstacles to productivity growth and propose policy options to overcome them, CPCI should be streamlined, by merging the three sub-councils into one, and assume a more strategic role. The technical unit should be strengthened and made more independent from the executive by staffing it with experts in the subject areas under the remit of the CPCI coming from the academia, private sector and think tanks. This reformed technical unit would be better able to supply the council with the necessary inputs to provide evidence-based policy advice. The council could be tasked to prepare and update at regular intervals long-term strategic plans to be submitted to the government and parliament for discussions and approval. Overall, this institutional setup would result in a more coherent policy framework and time-consistent policies, and raise the quality of public debates on productivity issues, among which innovation, competition and infrastructure.

Figure 2.7. **Free trade zones have contributed to Costa Rica's goods export performance**

Note: High-technology exports are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery.

Source: COMEX and World Bank World Development Indicators.

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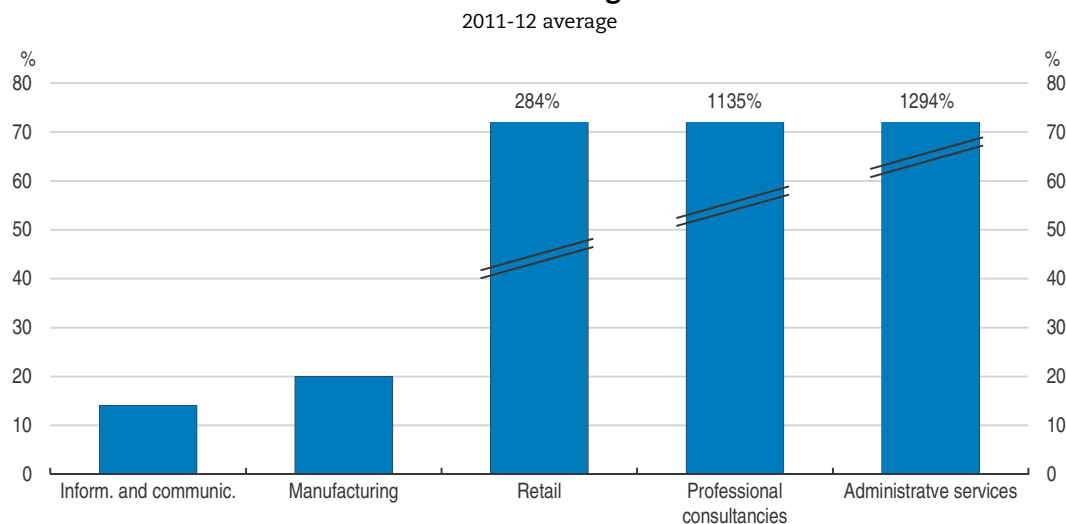
Other efforts to improve the coordination and implementation of policies to boost productivity are also underway. These include a draft law to create an agency (Agencia Costarricense de Fomento Productivo, Innovación y Valor Agregado, FOMPRODUCE) with a public-private governance structure, which will centralise funds and functions currently dispersed across several agencies, to facilitate the establishment of businesses and promote innovation. This initiative is welcome as it will reduce institutional and policy fragmentation. The government should press for the swiftly approval and establishment of FOMPRODUCE.

Enhancing links between the foreign and domestic firms and encouraging innovation

Despite the large FDI inflows, benefits in terms of technological and knowledge spillovers have so far been limited. Foreign affiliates tend limit their purchases from local suppliers to unsophisticated products and services, such as packaging materials, office

supplies, security and food. As a result, large labour productivity differences between firms in and outside the free trade zone regime persist (Figure 2.8). Also, wages differences between foreign and domestic companies are also large (see Chapter 1), hampering labour mobility and thus the transfers of technologies and know-how. While the investment promotion agency (CINDE) has shown to be a small but effective institution in attracting FDI it has played only a minor role in promoting linkages between foreign and domestic companies. The export promotion agency (PROCOMER) manages programmes promoting linkages between foreign and local suppliers, but actual linkages so far have been below expectations as foreign companies use superior technologies and produce higher quality products than domestic companies.

Figure 2.8. **Labour productivity differences between firms in and outside free trade zones are large**



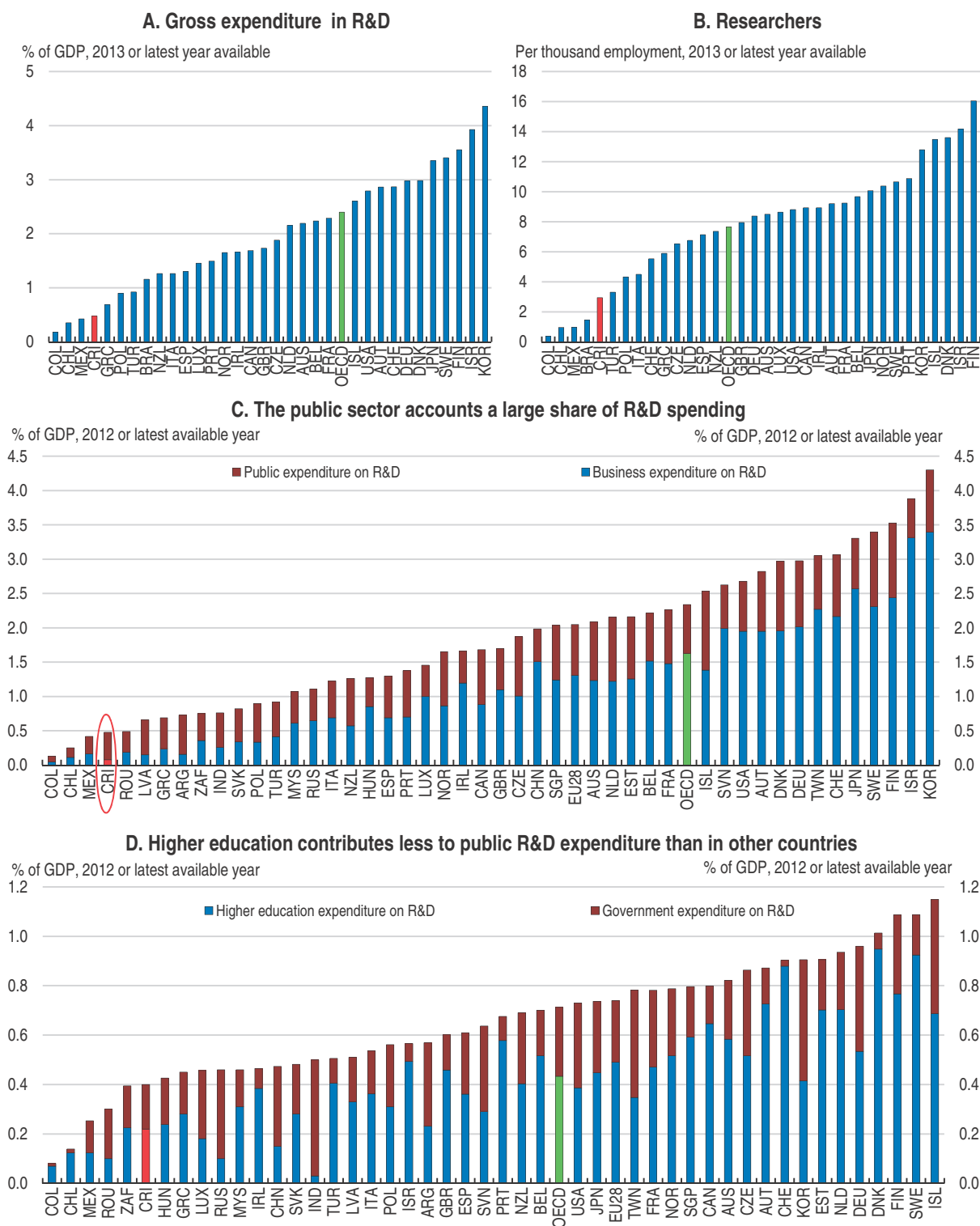
Note: The bars show the percentage difference in average labour productivity (expressed as value added per worker) of firms in and outside free trade zones; values refer to the average of 2011 and 2012 (the latest available years); some sectors are not reported because of no or too low number of firms operating in free trade zones.

Source: OECD calculations and Central Bank of Costa Rica data.

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Strengthening linkages between domestic and foreign firms will hinge on improving the technology and quality of products of domestic companies. In this respect, R&D activities will be paramount as not only they stimulate innovation but also favour technology transfers (Griffith et al., 2004; Adalet McGowan et al., 2015). In Costa Rica, gross expenditure on R&D and the numbers of employees involved in R&D activities are significantly lower than in most OECD countries, although not dissimilar from other Latin American countries such as Argentina, Chile, Colombia and Mexico (Figure 2.9). Costa Rica's gross expenditure on R&D was only 0.5% of GDP in 2011 – 0.6% in 2012 and 2013, according to national source (MICITT, 2015). Businesses' R&D spending is exceedingly low (Figure 2.9) and mostly performed by large firms and foreign affiliates in free trade zones. Overall, this results in a number of patent applications per thousands of people that is considerably lower than the OECD average, albeit not dissimilar from peer Latin America countries (Figure 2.10).

The share of R&D performed in higher education is still limited compared to other OECD countries. In many OECD countries higher education has replaced public research

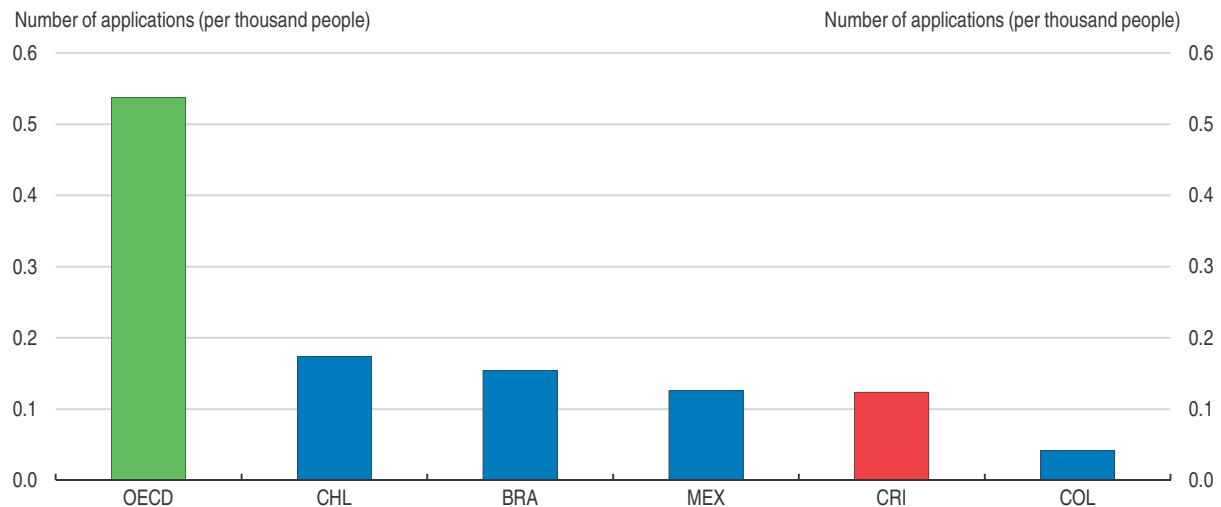
Figure 2.9. **Research and development (R&D) activities are low**

Note: Panel A: Gross expenditure on R&D as a percentage of GDP for 2013 or latest year available. Panel B: Researchers per thousand employment for 2013 or latest year available. Panel C: Total R&D expenditure (public and business) as a percentage of GDP, 2012 or latest available year. Panel D: Public R&D expenditure by type of research system. HERD and GOVERD, as a percentage of GDP, 2012.

Source: OECD, Main Science and Technology Outlook 2014; Eurostat; UNESCO Institute for Statistics (UIS), June 2014.

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Figure 2.10. **Costa Rica has low patent applications compared with OECD countries**
2013



Note: Patent applications refer to residents and non residents.

Source: World Bank, World Development Indicators.

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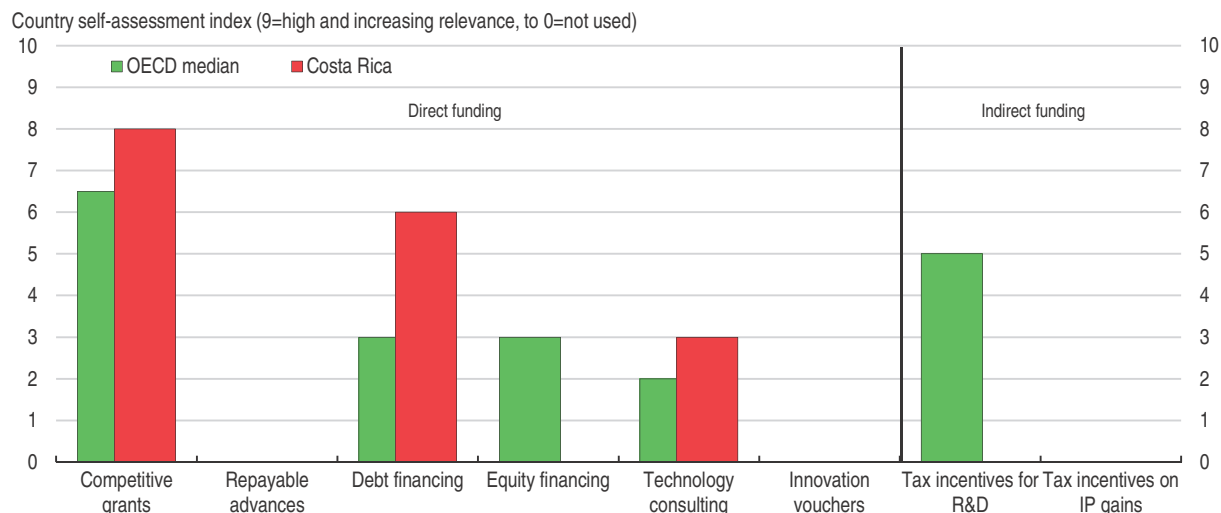
institutes as the main performer of publicly-funded research (OECD, 2015f). An important cause of this change is the universities' teaching role and the set of skills and research capacity universities nurture. Shifting R&D activities to universities would be a conduit to stronger linkages with local innovative companies (and foreign affiliates) and enhance the career prospects for graduates of technical and scientific disciplines, thus ultimately increasing their number and reducing skill mismatches in the labour market. Also, more intensive collaboration between universities and local firms could facilitate the diffusion of innovative foreign technologies in the business sector through universities international contacts and research programmes (McGowan et al., 2015; OECD, 2015g). To take full advantage of the knowledge being generated in universities it will be important to consolidate and scale up the Ministry of Science, Technology and Telecommunication's current efforts to work collaboratively with universities with the aim of connecting researchers with private sector firms and fund research-based innovation projects.

The current ways to finance public R&D spending seems to be well suited to increase the share of public R&D spending in higher education as it relies to a large extent on competitive grants and not on R&D tax incentives (Figure 2.11). Given the small size of local companies, R&D tax incentives, such tax credits, would be an ineffective way to boost innovation in Costa Rica. Competitive contracts, grants and awards are more effective instruments to increase R&D activities in small and young firms (OECD, 2015g).

The legal framework for intellectual property rights is in compliance with ratified international treaties and trade-related commitments (OECD, 2013; OECD, 2015d) but enforcement is weak. Costa Rica's intellectual property rights protection is part of the strategy to attract foreign investors but enforcement still presents problems, especially in terms of copyright piracy and trademark counterfeiting. In 2011 with the support of the World Intellectual Property Organisation, the country developed a national intellectual property strategy. On that basis, Costa Rica is amending the patent law and has reinforced prosecution of intellectual property rights violations in the attempt to improve

Figure 2.11. **Most relevant instruments of public funding of business R&D**

2014



Source: OECD, based on country responses to the OECD Science, Technology and Industry Outlook policy questionnaire 2014.

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enforcement (OECD, 2014d). These efforts should be continued and coupled with initiatives to strengthen awareness and the effective use of IPRs in universities and local firms.

Improving coordination between innovation and foreign-domestic linkages programmes

The government has adopted policies to promote businesses' innovation and linkages between foreign and domestic companies. Two prominent examples are the funding programmes PROPYME (*Programa de Fortalecimiento para la Innovación y Desarrollo de las PYMES*) – managed by the Ministry of Science Technology and Communications to promote innovation and technological development in SMEs through grants – and CRP (*Costa Rica Provee*) – managed by PROCOMER to improve linkages between foreign and domestic companies by matching suppliers with buyers. Policy evaluation suggests that these programmes improve beneficiaries' performance metrics, such as employment, profitability and exports, with stronger effects for firms enrolled in both programmes (Monge Gonzáles et al., 2010; Monge Gonzáles and Rodríguez-Álvarez, 2013).

Given these positive results of PROPYME and CRP, the government should scale them up, and improve their coordination. The effort the Ministry of Science, Technology and Telecommunications to increase funding to this sort of programmes through IADB loans is therefore welcome. As the outcomes of programmes and activities aiming at boosting innovation in local companies and deepening their links with foreign affiliates are tightly connected, establishing a one-stop agency is likely to improve their effectiveness. In this area, the establishment of the agency FOMPRODUCE, as envisaged by a draft law proposed by the government (as described above), to concentrate funds and responsibilities concerning firms' innovation and development in a single entity, is an initiative going in the right direction. However, programmes to strengthen innovation and links with foreign affiliates will need to be carefully evaluated and the government should commission policy evaluations on a regular basis to assess their cost effectiveness and inform future policy changes. In addition, CINDE and PROCOMER should reinforce their companies' monitoring

capabilities and post-establishment services so as to further facilitate links of foreign affiliates with the local economy.

Improving the competition regime and access to finance

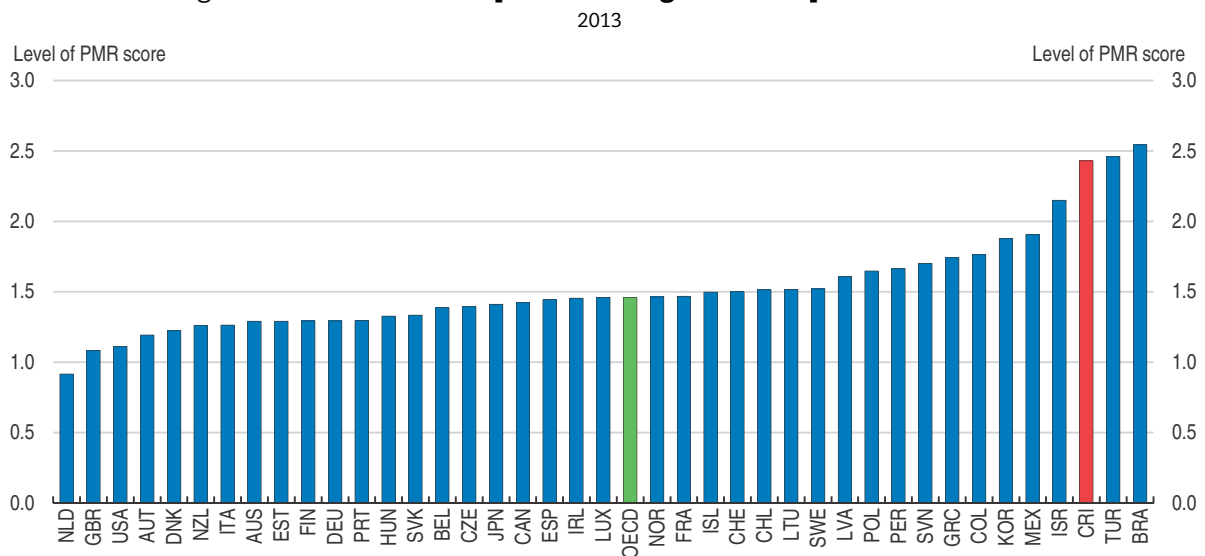
Restrictions to product market competition are significant

Strengthening competitive pressures in product markets can boost living standards and welfare, by increasing productivity and product quality and lowering product prices (e.g. Bouis and Duval, 2011; Bourlès et al., 2010; Conway et al., 2006; Koske et al., 2015). Many OECD countries have removed regulations restricting competition in product markets by, for instance, reducing state involvement in business sectors and making it easier for entrepreneurs to create firms.

According to OECD's Product Market Regulation (PMR) indicator, regulation in Costa Rican product markets is stringent. Among OECD countries, only Turkey has a higher level of the PMR index than Costa Rica; Latin American peers, such as Chile, Mexico and Colombia, perform better than Costa Rica (Figure 2.12). The sub-indicators of the PMR reveal that state controls and barriers to entrepreneurship are especially high (Figure 2.13). State controls are particularly restrictive because of large government involvement in network sectors, poor governance of state owned enterprises and extensive price controls. Barriers to entrepreneurship are an obstacle to competition because of the license and permits system, administrative burdens for sole proprietors of firms, antitrust exemptions and barriers in network sectors.

Costa Rica fares better in terms of barriers to trade and investment due to the transparency and accountability of its trade and investment framework. Despite these progresses, Costa Rica's tariffs are still 20% higher than the OECD average (65% higher for consumer goods and almost 15% higher for raw materials). The top 20 highest tariffs apply to some agricultural products, such as meat, dairy products, sugar and rice (see Chapter 1) (OECD, 2015d).

Figure 2.12. **There is scope to ease regulation in product markets**

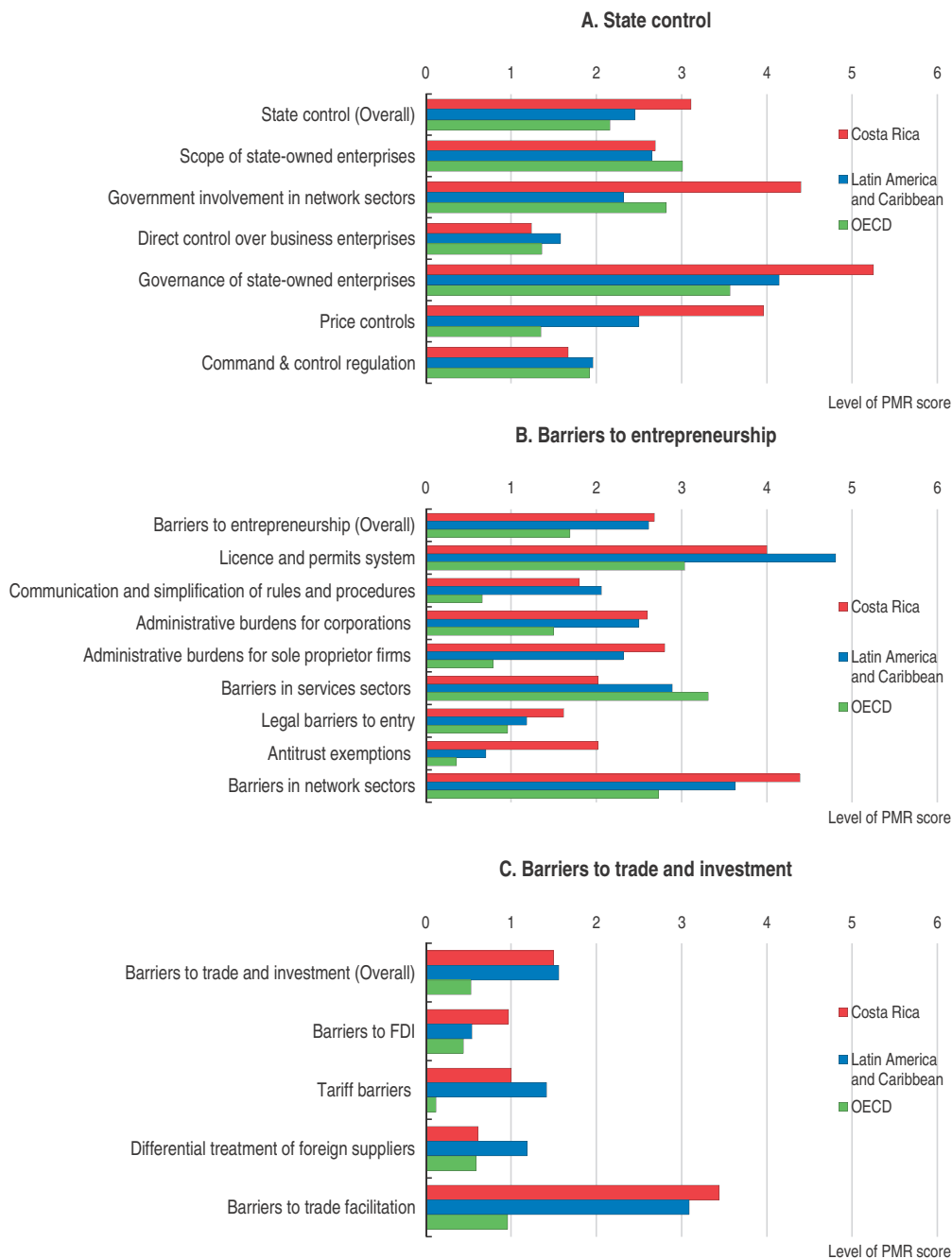


Note: OECD is a simple average of OECD countries, 2013 data. USA latest data is 2008.

Source: OECD Product Market Regulation Database, for OECD Countries and Brazil; OECD-World Bank Group Product Market Regulation Database, for Colombia, Peru and Costa Rica.

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Figure 2.13. **State controls and barriers to entrepreneurship restrict competition**
2013



Note: Simple average of OECD and 12 Latin America countries, 2013 data. USA latest data is 2008.

Source: OECD Product Market Regulation Database for OECD countries and Brazil. OECD-World Bank Group Product Market Regulation Database for Latin American and Caribbean countries except Chile, Mexico and Brazil.

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The 1949 Costa Rica Constitution contains provisions to support competition. The Constitution mentions free trade, agriculture and business as fundamental rights of people. However, for a long time these provisions were interpreted mainly as against private monopolies and before the 1980s were construed to allow for import protection policies, price controls, restrictions to market entry and state ownership in key sectors such as electricity, telecommunications, transport infrastructure, banking and insurance.

Current competition policy dates back to the 1990s, when the competition and consumer protection law was approved as requirement of the free trade agreement with Mexico signed in 1994. Another important moment in the process of opening up the economy to competition was the signing of the Central American-Dominican Republic Free Trade Agreement with the United States (CAFTA-DR), which required the abrogation of legal monopolies in the telecommunications and insurance sectors, which were liberalised in 2010 and 2011.

The key agencies shaping the Costa Rican competition regime are:

- The Competition Commission (*Comisión para Promover la Competencia*, COPROCOM). Established in 1998, COPROCOM enjoys a degree of decisional autonomy; it is an agency of the Ministry of Economy, Industry and Commerce (MEIC) and as such does not have administrative and budgetary independence.
- The Public Services Regulatory Authority (*Autoridad Reguladora de los Servicios Públicos*, ARESEP). Established in 1996, its responsibilities involve regulating and setting tariffs for public services, namely water and waste, electricity, buses and taxis, fuels (petroleum and its derivatives), airports, railways and ports. The law clearly mandates that services in these sectors can only be provided upon obtaining a state concession. ARESEP is an independent institution as it was created as a decentralised agency; it has its own budget, partly funded with charges on regulated companies.
- The Superintendence for Telecommunications (*Superintendencia de Telecomunicaciones*, SUTEL). Created in 2008 with the liberalisation of the telecommunications sector, it is part of ARESEP; SUTEL has the double role of regulator and competition agency for the telecommunications sector; it is a decentralised agency with its own budget partly funded with charges on companies.

The competition regime needs to be strengthened

Markedly reducing barriers to entrepreneurship will improve the business environment and enhance competitive pressures, in addition to reducing labour market informality (as analysed in Chapter 1). More specifically, among barriers hampering entrepreneurship, the license and permits system and administrative burdens for sole proprietor firms are significantly higher than the OECD average. OECD best practices indicate that establishing one-stop agencies and adopting the “silence is consent” rule can significantly lower these barriers. Over the past five years, most OECD countries have made progress in this area by, for instance, modernising license and permits systems, streamlining administrative procedures for start-ups, simplifying rules and procedures and improving access to information about regulation (Koske et al., 2015). Costa Rica has ample scope for making similar improvements and move towards OECD standards.

Eliminating anti-trust exemptions, without creating private monopolies, is key to exposing a larger share of the economy to competitive forces and improving welfare. As underlined in previous OECD reports (OECD 2014a, 2015b), best international practices

among OECD countries have moved towards repealing anti-trust exemptions. Currently, the sectors exempt from the competition law include all public services requiring state concessions by law, i.e. all services under the purview of ARESEP, with the exception of airports. In many of these sectors competitive pressures among market players are feeble or non-existent. Private participation is admitted in only some of them, such as electricity generation, seaports services, buses and taxis, and prohibited in others, such as railways and water.

The electricity sector is dominated by state-owned enterprises and private-sector participation is limited by statutory restrictions. In 2014, the *Instituto Costarricense de Electricidad* (ICE) generated about 71% of the total electricity supply, six percentage points lower than in 2004, with municipalities and cooperatives and private companies accounting for the remaining share. ICE also provides all transmission service in the country and is responsible for about 40% of electricity distribution. Its subsidiary *Compañía Nacional de Fuerza y Luz* (CNFL) distributes around 40% of generated electricity while municipal companies and co-operatives cover the rest of power distribution in rural area. ICE and all other electricity distribution companies provide their services under monopolistic conditions as all have exclusive market-allocation areas. Private companies are allowed only in the electricity generation and can sell their electricity to ICE only. Private-sector generators compete for the market rather than in the market, because to enter the market they must first win ICE's tendering contracts, which also specify the quantity of electricity ICE will purchase. Recent legal changes have increased the share of allowed private-sector electricity generation from 15 to 30%. Allowing private generators to compete in the market, and not only for the market, and a stricter functional separation between electricity generation and distribution by state-owned entities would yield larger benefits from increased private sector participation.

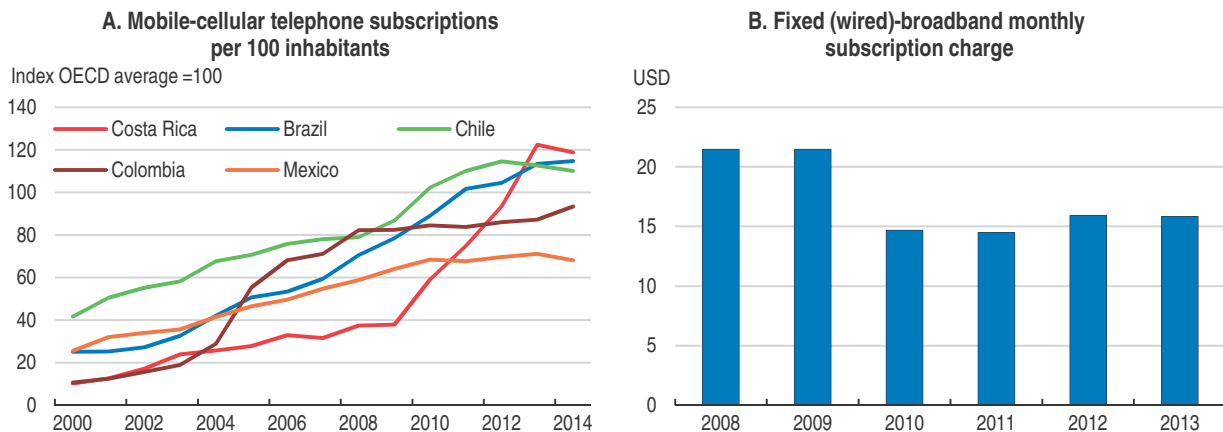
Two state-owned enterprises – INCOP and JAPDEVA – dominate maritime transport as they have the exclusive right to manage all ports on the east and west coasts respectively. Both have the double role of port authorities and port operators. Given the importance of maritime transport for Costa Rica as means to connect with international markets, the country would benefit from adopting the management concept of landlord port, whereby port authorities owns and manages the land and basic ports' infrastructure that are then rented or leased to different private port operators on a competitive basis. Similar changes in Mexico and other countries have resulted in significant improvements in the productivity of ports and reductions in cargo handling charges (Estache et al., 2004; Cheon et al., 2010).

Other important markets outside the scope of the competition laws include: imports, refinery and distribution of wholesale petroleum and its derivatives, for which the state-owned Costa Rican Petroleum Refinery (RECOPE) has a legal monopoly; the manufacture of alcohol for beverages, for which the National Liquor Factory (FANAL) has a legal monopoly; the production and commercialisation of sugar and rice, which are subject to sector specific laws and are regulated by two cooperatives – the Agriculture League of Sugarcane Industry (LAICA) and National Rice Corporation (CONARROZ); professional services, following a 1999 pronouncement of the Constitutional Court (OECD, 2014a).

Lifting restrictions to competition would generate large benefits for the society as a whole. The recent experience of the telecommunications sector points in this direction and could serve as a template for other sectors. To date, four private companies, in addition

to the former state monopolist (ICE), operate in the mobile-phone market and more than ten companies are active in each of the fixed telephony and internet-access markets (SUTEL, 2015). This drastic increase in competition resulted in a large expansion of telecommunications services and lower prices (Figure 2.14). In addition, between 2010 and 2014, employment in the telecommunications sector increased by 40%, against 10% for the whole economy.

Figure 2.14. **The telecommunications sector has expanded since opening up to competition**



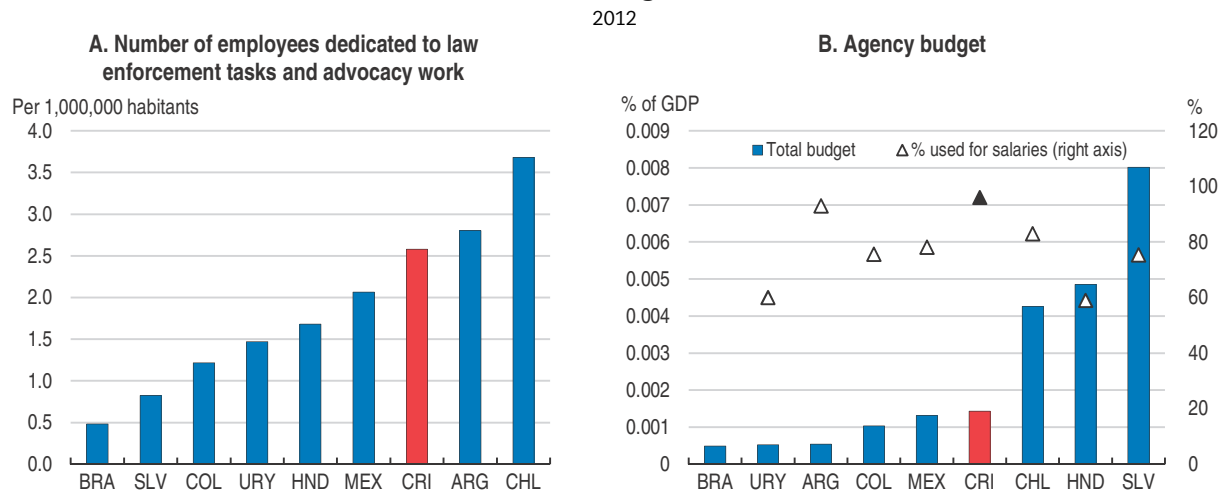
Source: International Telecommunications Union, *World Telecommunication/ICT Indicators Database* 2015.

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The government should also grant COPROCOM more decisional, administrative and budgetary independence in addition to enhancing its financial resources. Being an “*órgano desconcentrado*” (“de-concentrated” body) of the MEIC, COPROCOM already enjoys some decisional autonomy in conducting investigation and decisions to impose fines. However, unlike SUTEL and ARESEP COPROCOM does not have administrative independence and a separate budget from the ministry to which it is attached. The resignation of three commissioners of COPROCOM in mid-2015 following a restructuring of the commission led by MEIC (Arias, 2015) attests to the inadequacy of the present institutional set up that weakens effective implementation of the competition law.

COPROCOM should also be granted the power to conduct market studies. Market studies consist of research projects aimed at improving authorities’ understanding of how sectors and markets work. Market studies may conclude that the market is working satisfactorily or highlight problems, which can then be used as an input in specific investigations on anti-competitive practices (OECD, 2015b). COPROCOM’s powers should also be enhanced by establishing a leniency programme for whistle-blowers, which currently does not exist, increasing fines and sanctions, as their current levels do not appear to have deterrent effects, consider establishing criminal offences for the most serious cases of misconduct and banning the possibility of notifying mergers after they have taken place, as un-doing those considered illegal could be difficult or impossible (OECD, 2014a).

COPROCOM financial and human resources should be increased. Nearly all its budget is devoted to wages and salaries (Figure 2.15). The budget and resources of COPROCOM

Figure 2.15. **COPROM has a low budget compared with other competition authorities in the region**

Note: Chile includes the sum of the Tribunal de Defensa de la Libre Competencia and Fiscalía Nacional Económica. Budget data for Brazil is provided in Brazil Real and converted to USD using 2012 average exchange rate.

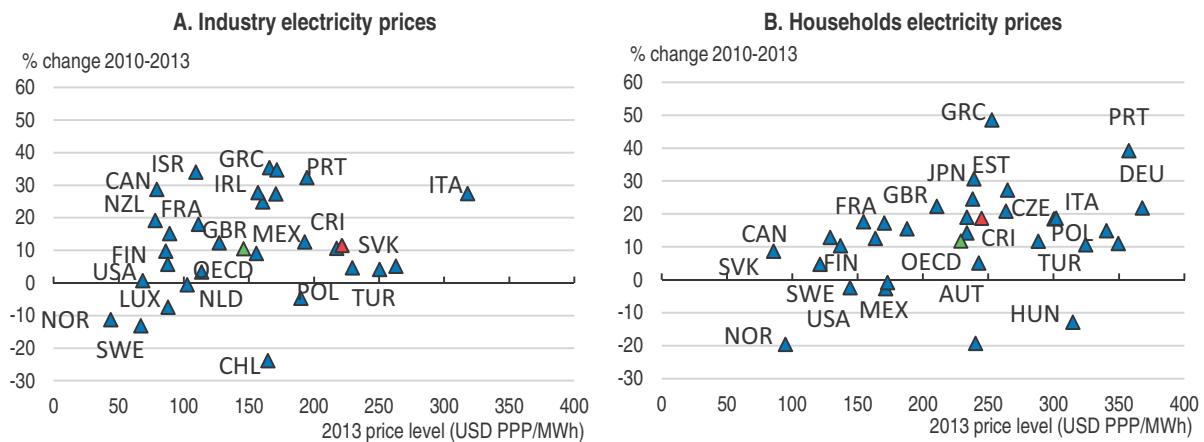
Source: Centro Regional de Competencia para América Latina and World Bank World Development Indicators.

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compare unfavourably even with those of SUTEL and ARESEP. Nevertheless, COPROCOM has shown a strong commitment to enforce competition laws by sanctioning, between 1995 and 2014, 25 absolute and relative monopolistic practices among different firms, including telecom operators, pension funds, container carriers, pharmacies and car dealers (OECD, 2014a).

The way tariffs of regulated services – energy, transport and water – are set by ARESEP limits competitive pressures and results in fast-rising costs for users. The law instituting and regulating ARESEP clearly mandates that tariffs be based on the (reasonable) costs incurred by service providers and to ensure their financial viability (i.e. cost-based pricing or rate-of-return regulation), which guarantee a certain rate of return on the capital invested. While this type of price regulation ensures tariffs are set at cost recovery levels, it provides no incentives for productivity improvements because cost increases can be easily passed onto consumers. Between 2006 and 2014, tariffs of regulated services rose more than any other business cost (CAATEC, 2014). Because of past price increases, in 2013 electricity tariffs were higher than the OECD average – especially for industry (Figure 2.16).

Setting tariffs for public service in a way to encourage productivity improvements and the adoption of cost saving technologies would lead to lower prices. The experience of OECD countries, such as the UK, the Netherlands and France, show that such alternative tariff-setting methodologies – such as price- and revenue-cap regulation – strengthens competitive pressures and contribute to curtail tariff inflation (Sappington and Weisman, 2010; Mirrlees-Black, 2014). By setting limits to the tariffs regulated companies may charge, or the revenues they may earn, price- and revenue-cap regulation replicate the discipline of competitive market forces and compel regulated firms to search for productivity gains.

Figure 2.16. **Electricity tariffs are higher than in most OECD countries**

Note: For Costa Rica data comes from CEPAL and refers to the average price.

Source: IEA, *Energy Prices and Taxes Database*; CEPAL, *Centroamérica: Estadísticas del Subsector Eléctrico*, 2013.

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The experience of OECD countries also suggests that price cap regulation coupled with independent regulators promotes infrastructure investment (Égert, 2009).

State-owned enterprises still play a dominant role in many key sectors of the economy, such as banking, network industries (excluding airlines) and petroleum products. A preliminary count of SOEs by the government following OECD criteria reaches about 40 SOEs. Most of these SOEs have been created by specific laws determining their way of work, and regulations and procedures for reporting to the central government. They have drastically different organisational forms as some are public corporations – such as ICE (electricity and telecommunications), RECOPE (petroleum products), INS (insurance) – while others are non-state public enterprises and entities – such as (non-state-owned) public banks and financial institutions, the trade promotion agency and professional associations – or non-corporatised decentralised institutions – such as CCSS (the social security funds). Setting a more uniform set of regulations and procedures for reporting to the central government would be a start to rationalise their operations. Adherence to the *OECD Guidelines on Corporate Governance of State-owned Enterprises* (OECD, 2015c) would represent the first step to institute more transparent communication channels between the executive and the board and strengthen incentives to improve performance and accountability of senior management.

Boosting access to credit through stronger competition in the banking sector

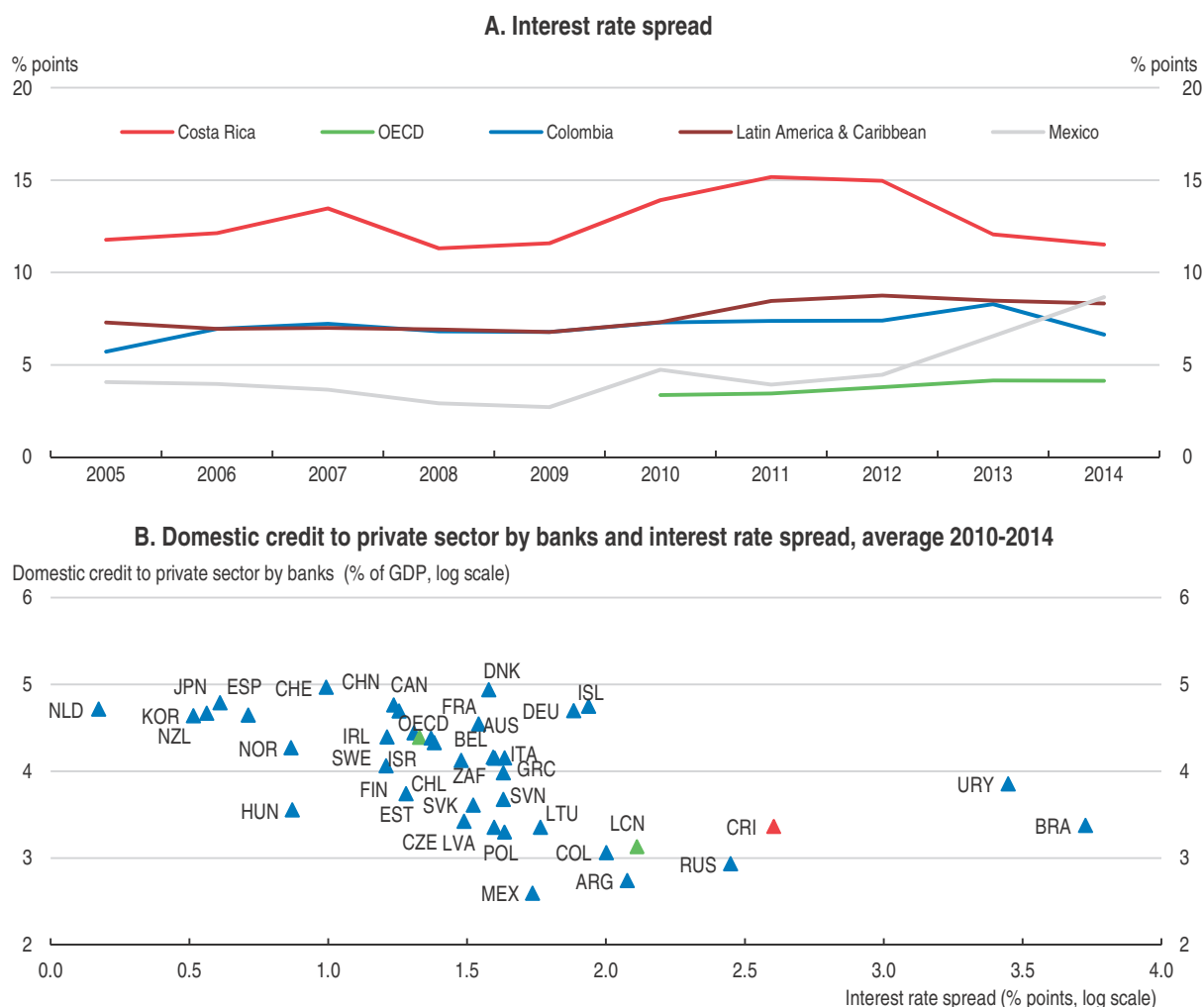
In the banking sector, significant regulatory asymmetries hinder full competition between public and private banks contributing to high interest rates for borrowers. Empirical evidence suggests that high interest rate spreads can be ascribed to limited competition in the banking sector (Demirguc-Kunt and Huizinga, 1999; Demirguc-Kunt, Laeven, and Levine 2004). Costa Rican interest rate spreads are indeed among the highest in Latin America, just after Brazil, and substantially higher than the OECD country average (Figure 2.17). Also, the negative correlation between interest rate spreads and bank lending

(as percentage of GDP) suggests that the lack of competition in the Costa Rican banking sector is curtailing access to bank credits (Figure 2.17).

A large micro-econometric literature has shown that a more competitive banking sector is positively associated with access to bank credits (World Bank, 2013). For instance Demirguc-Kunt and Huizinga (1999) find that weak bank competition is positively associated with high bank spreads and profits across countries. Using data on net interest margins and overhead costs for over 1 400 banks in 72 developed and developing economies, Demirguc-Kunt, Laeven, and Levine (2004) find that tighter regulations on bank entry and bank activities lead to higher costs of financial intermediation.

Restricted access to bank credits is especially problematic for small firms – as they need external capital to grow. Also, difficulties in accessing credit inhibit export market participation – as fixed costs of exports are an important barrier to start exporting for

Figure 2.17. **High banking interest rate spreads curtail credit availability**



Note: Interest rate spread is calculated as the lending rate minus the deposit rate. LCN stands for Latin America and Caribbean (all income levels) as defined by the World Bank.

Source: World Bank, World Development Indicators.

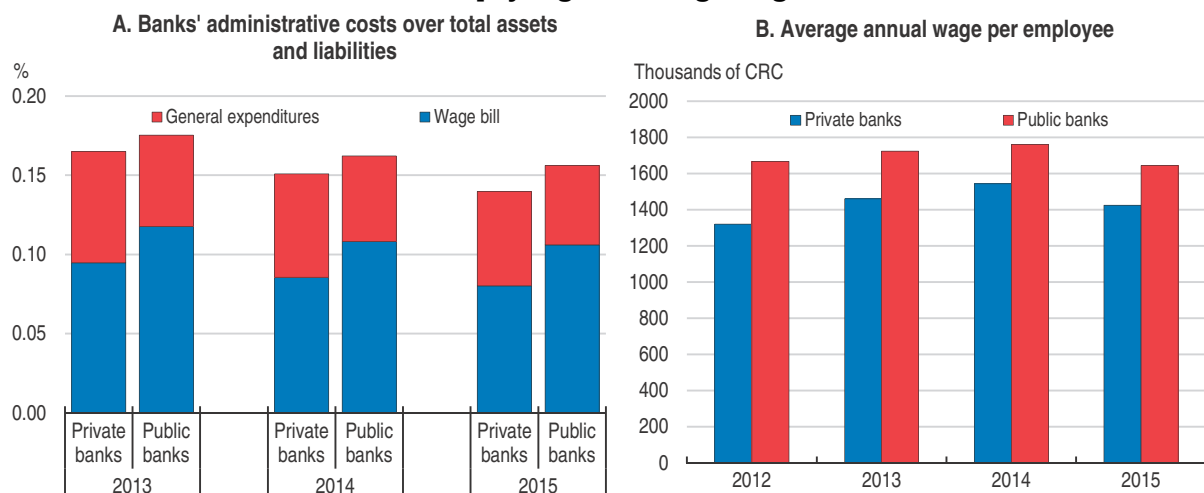
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financially constrained firms (Dalberg, 2011; Manova, 2013; Manova et al., 2014); Costa Rican companies also cite difficult access to credit as an obstacle to establish links with foreign affiliates (Monge-González et al., 2010).

One factor limiting competition in the banking sector is the large role that state-owned banks still play. The three state-owned banks (Banco Nacional de Costa Rica, Banco de Costa Rica, Banco Crédito Agrícola de Cartago) are less efficient than private banks, as gauged for example by their higher ratio of administrative costs to total assets and liabilities, and pay higher average wage (Figure 2.18). Despite this, in mid-2015 state-owned banks still managed more than 50% of the assets and liabilities of the banking sector. The pervasive role of state-owned banks is attributable to regulatory asymmetries, which hinder full competition between public and private banks. State-owned banks enjoy a government guarantee on bank deposits (amounting to more than 20% of GDP) that private banks do not; also private banks are obliged to lend to the *Fondo de Crédito para el Desarrollo* (Development Credit Fund) for an amount equivalent to 17% of their demand deposits and all public institutions are obliged by law to deposit their cash with one of the state-owned banks. That in November 2015 the government issued a directive instructing state-owned banks to increase their efficiency – mainly by cutting administrative expenses – and reduce their intermediation margin by at least one percentage point by 2018 (La Gaceta, 2015) is indicative of the lack of strong competitive pressures in the banking sector. Regulatory asymmetries favouring state-owned banks should be eliminated as they also violate the OECD competitive neutrality principle, whereby no entity operating in an economic market must be subject to undue competitive advantages or disadvantages because of its ownership (OECD, 2012d).

Costa Rica has ample room to enhance banking competition by promoting market contestability. Studies on the banking sector suggest that contestability is more important than market structure in explaining the strength of competition (OECD, 2010b). With the right regulatory framework, strong competition among banks need not undermine financial

Figure 2.18. **State-owned banks are less efficient than private banks and pay higher average wage**



Note: The bars show the median of private and public banks' monthly administrative costs (general and personnel expenditures) expressed as percentage of the sum of total assets and liabilities; the ratio of the monthly administrative costs to the sum of total assets and liabilities are averaged over the year; data for 2015 are from January to September.

Source: Superintendencia General de Entidades Financieras (SUGEF).

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stability. The OECD Competition Committee has indeed argued that designing and applying effective regulations and supervisory practices – rather than limiting bank competition – is the best conduit to banking stability, although striking the right balance between strong competition in and stability of the banking sector remains a challenge (OECD, 2010b; OECD, 2011).

The state can facilitate bank competition in different ways (World Bank, 2013; OECD, 2011). First it can facilitate the entry of well-capitalised institutions and timely exit of insolvent ones. Fewer restrictions to entry and activity lead to stronger competition. In this respect Costa Rica fares well compared to peers as restrictions to entry are limited. In the five year up to 2010 no request for a banking licence was denied (Cihak et al., 2012). However, the financial sector is outside the purview of the competition agency. The latter can express only non-binding opinions on mergers between banks, which are eventually approved or not by the Regulatory Authority of Financial Entities (SUGEF). As underlined in a previous OECD (2014a) study, to strengthen the competitive setting of the banking sector it is opportune to transfer to a reformed COPROCOM the power to authorise merger transactions between market players in the financial sector and leaving to SUGEF the authority to issue non-binding opinions and forbid mergers only on financial stability grounds.

Second, the state can promote credit-information sharing services on potential borrowers and consumers and institute depositor protection schemes. Credit bureaus increase competitive pressures by reducing asymmetric information between banks' current customers and other potential financial service suppliers (Dell'Ariccia, Friedman, and Marquez, 1999). In this respect Costa Rica fares well as it has private and public credit bureaus providing comprehensive information on potential borrowers. As highlighted above, Costa Rica, however, has yet to establish a system-wide deposit insurance scheme, as the current one covers only state-owned banks. Establishing a system-wide deposit insurance scheme would contribute to a level-playing field among banks and reinforce banking sector's stability (Anginer et al., 2014). Only few OECD or Latin America countries do not have an explicit deposit insurance scheme (Demirguc-Kunt et al., 2014).

Third, improving the governance and management of state-owned banks, similarly to other SOEs, would improve transparency and efficiency. A large literature has shown that since state-owned banks often enjoy a dominant position and benefit from implicit or explicit government subsidies they undermine the banking sector's competition, stability and the degree of financial development of the country (Barth et al., 2004; La Porta et al., 2002). Adherence to the *OECD Guidelines on Corporate Governance of State-owned Enterprises* (OECD, 2015c) would be a first step to improve state-owned banks' corporate governance.

Eventually, once public banks are operating according to higher standards of governance and corporate performance, the authorities should assess whether or not maintaining public ownership of a large share of the banking industry is justified on economic, social and financial stability grounds. Reducing the State's equity stake in reformed state-owned banks could free resources that could be used more effectively to pursue economic and social objectives. The government should eventually consider keeping only a single state-owned bank with an explicit and clear public mandate to overcome market failures, such as promoting infrastructure investment. A survey of development banks (i.e. state-owned banks with a public mandate) reveals that to be effective developing banks need to have a clear and sustainable mandate and sound corporate governance practices (de Luna-Martinez and Vicente, 2012). The UK's Green Investment Bank is an example of a recently established and well-managed development bank.

Improving transport infrastructure

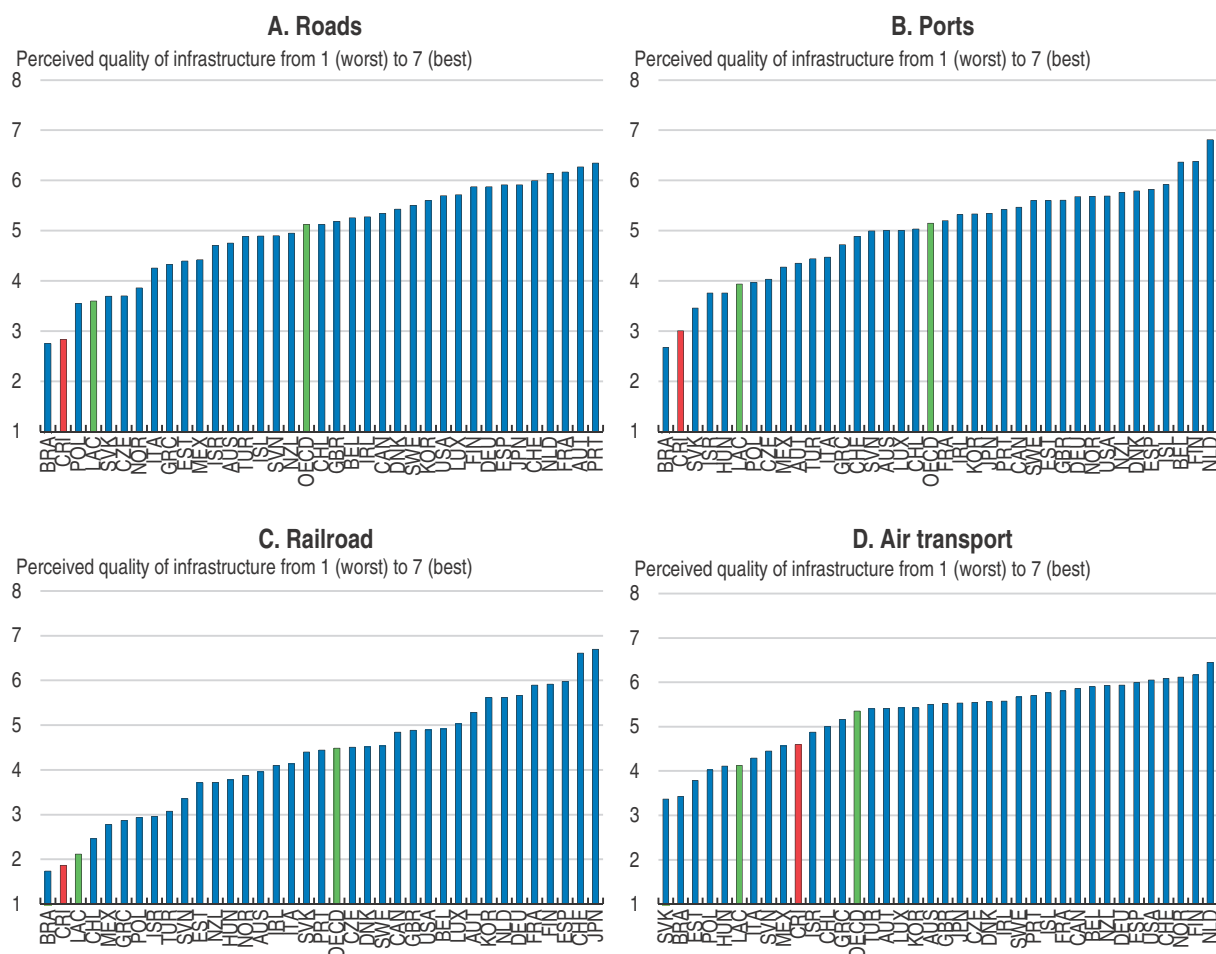
Better transport infrastructure can contribute to higher productivity through various channels. First, it can boost the productivity of private inputs because of complementarities with labour and the private capital stock. For instance, improved transport links will widen employment opportunities, resulting in a more efficient allocation of labour. Second, the higher productivity of the private capital stock would boost private investment (Agénor and Moreno-Dodson, 2006). Third, better transport infrastructure can support more environmentally sustainable growth and mobility patterns. Better integrating physical transport infrastructure plans with land-use and social policies can raise well-being and social welfare, by reducing commuting times and contributing to green and inclusive growth (OECD, 2014b,c). People with longer commuting time report systematically lower subjective well-being (Stutzer and Frey, 2008).

Assessing the quality and quantity of infrastructure is notoriously difficult, as there are no comprehensive internationally comparable data based on objective criteria (Pisu et al., 2012). Survey data on the perceived quality of infrastructure rank Costa Rica 103rd worldwide. It is also below Latin America average for roads, ports and railroads, although above it for airports (Figure 2.19).

The road network is well developed and is nearly 43 000 km long (Table 2.1). Nearly 20% (8 000 km) of the road network are part of the national road network which is maintained by the National Roads Council (CONAVI). The remaining roads are part of the cantonal road network, maintained by municipalities (Table 2.1). Compared to peers, Costa Rican road network is extensive as it counts 84 km per 100 square km of land, four times the average for Latin America (World Bank, 2012). However, road quality is low; according to a national inventory, 62% of roads show deficient or very deficient conditions, 33% are in regular condition, 5% in good condition and none is in very good condition (LANAMMEUCR, 2015). Most bridges are at structural risk of collapsing due to natural deterioration. Despite the low quality of the road network, the number of vehicles in circulation rose to by 68% from 2003 to 2014 (MOPT, 2014).

Accordingly, one of the main priorities of the National Transport Plan 2011-35 is the rehabilitation and expansion of the road network. This is welcome given the importance of roads in Costa Rican transport system as the railways system is underdeveloped. In urban areas, there are no realistic alternative to cars and buses. Besides, dedicated bicycle lanes and wide sidewalks are rare. The maintenance programme appears to be working well as between 2011 and 2014 it has reached and surpassed its goals (CONAVI, 2015).

In the second half of the 1990s, the government decided to close the railways system down. The decision was reversed some years later (MOPT, 2011) and railways tracks are being rehabilitated and routes reopened. Since 2005, limited urban and interurban railways services have started again in the metropolitan area of San Jose (Table 2.2). However, improvements in railways services have been uneven as routes were reopened without performing demand analyses, there are no procedures to collect and compute demand statistics, no clear standards to ensure quality of services and no modern information and communication technologies (CGR, 2014).

Figure 2.19. **There is scope to improve the quality of transport infrastructure**

Note: Figures refer to the following question: How would you assess general infrastructure in your country (from 1 = extremely underdeveloped – among the worst in the world to 7 = extensive and efficient – among the best in the world)? The OECD and Latin America & Caribbean (LAC) aggregate are calculated as an unweighted average.

Source: World Economic Forum, *The Global Competitiveness Index Historical Dataset*, © 2005-15.

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A long standing plan of developing a sorely needed mass rapid transit system in the Great Metropolitan Area (GAM) of San Jose – where half of the population lives – has made no actual progress. The latest proposal by INCOFER would cost USD 1 400 million and be completed by October 2022 (INCOFER, 2014). About 75% of all passenger traffic in the GAM relies on public transport, mostly buses as the role of railways is marginal (MOPT, 2011). The mass rapid transit system and, more generally, the improvement of the railway, are paramount to reduce road transport congestion and pollution.

Positive steps have recently been taken to ameliorate seaports and airports. In 2015, the Grain Terminal of Caldera Port was inaugurated and the construction phase of the Moin Container Terminal was started in the Caribbean coast. Both projects were executed through concession schemes. In airports, the private-sector participation has also been relevant. The Juan Santamaria International Airport (USD 138 million) was modernised and expanded, and the Passenger Terminal of the Liberia International Airport (USD 35 million) was inaugurated.

Table 2.1. **Costa Rica road network is extensive**
2014

Road Network	National (km)	Municipal (km)	Total (km)
Paved	5 269	6 547	11 816
Graved or Dirt	2 512	28 540	31 052
Total	7 781	35 087	42 868

Source: MOPT (2014) and LANAMMEUCR (2015).

Table 2.2. **The railways system is slowly being reactivated**
Routes in the Great Metropolitan Area of San Jose, 2014

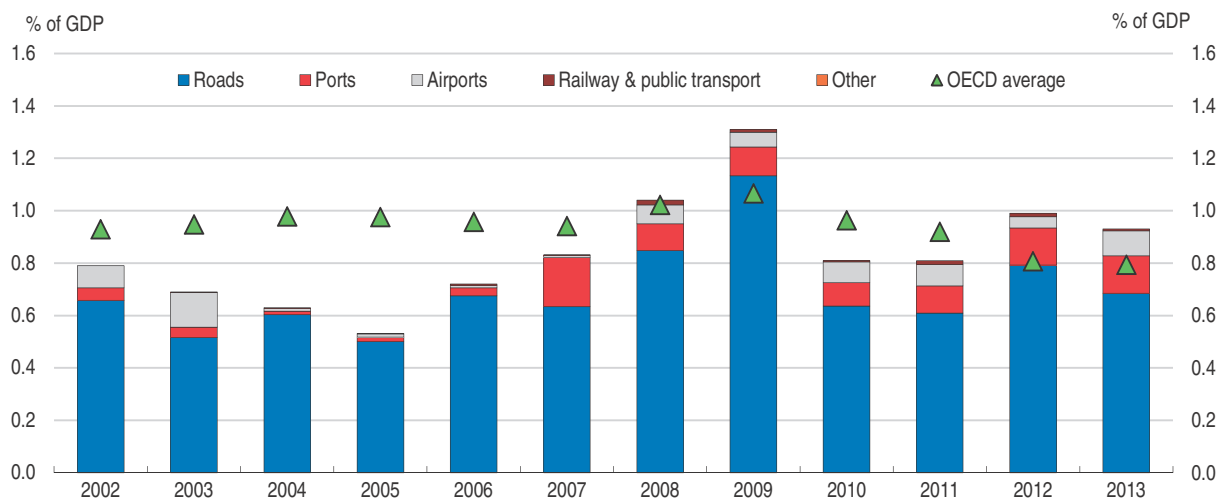
Locations connected	Km	Started operations
Pavas-San Pedro	8.0	2005
Heredia-San José	9.6	2009
San Pedro-Curridabat	6.8	2010
Belén-San José	14.4	2011
Cartago-San José	20.6	2013
Total	59.4	

Source: CGR (2014).

The transport-infrastructure spending gap is large

The overall low quality of Costa Rica's transport infrastructure is attributable to chronic underspending compounded by deficient strategic planning and lack of a long-term vision for the sector. From 2002 to 2013, transport infrastructure spending averaged 0.8% of GDP less than the OECD average (Figure 2.20). In addition, spending has been irregular as in the absence of a multiyear budgeting process, public investment in transport infrastructure is negotiated every year and subject to cuts (MOPT, 2011).

Figure 2.20. **Transport infrastructure spending has been below OECD average**



Note: Data for Chile and Israel is not available. OECD is an unweighted average.

Source: OECD calculations based on MOPT (2014, 2011), ECLAC (2014) and OECD Transport Infrastructure Investment and Maintenance Spending Database.

StatLink <http://dx.doi.org/10.1787/888933318975>

The government is aware of the transport infrastructure spending shortfall and the National Transport Plan 2011-35 (MOPT, 2011) projects annual infrastructure spending needs of about 4% of GDP to 2035 (2.45% of GDP between 2011-18 and 4% between 2019-35). According to the Plan, one third of the estimated spending needs should be financed by the public budget with the remaining part coming from the private sector.

The institutional framework needs be simplified

The transport infrastructure planning and decision making processes are highly fragmented among different ministries and government agencies (Table 2.3). The Ministry of Public Works (MOPT) is the institution that has historically been in charge of planning, building, maintaining and operating transport infrastructure. The creation in the late 1990s of independent and semi-independent agencies with ample administrative freedom and decision powers over specific issues has diminished its role. The rationale of this move was to free the Ministry of Public Works from project execution so as it could focus on policy developments. The agencies that were created are: CONAVI, with responsibilities for extending and maintaining the national road network; CNC, which promotes and manages concession projects – across the whole infrastructure sector; and CTP, responsible for policies relating to public road transport (i.e. taxis, buses and coaches). Other important government bodies having crucial roles in transport infrastructure are: the National Railways Institute (INCOFER), which manages and operates the railways system; the Costa Rican Institute for Pacific Ports (INCOP) and the Port Management Board of the Atlantic Coast Development (JAPDEVA), which are port authorities and operators of the Pacific and Caribbean seaports, respectively; the Technical Civil Aviation Council (CETAC) and the Road Safety Council (COSEVI) formulate policies for civil aviation and road safety. Finally, other public institutions have horizontal roles. These include the Regulatory Authority of Public Services (ARESEP), with responsibilities for fixing tariffs for buses, taxis, trains and ports, and the National Environmental Office (SETENA) – within the Ministry of Environment and Energy for assessing infrastructure projects' environmental impacts. Finally, the Ministry of Finance plays a marginal role in the transport infrastructure as it does not actively participate in setting policy directions, project preparation, evaluation and prioritisation. Its role is mainly limited to authorizing tax exemptions to incentivise private-sector participation.

The establishment of executing agencies as distinct from policy-design agencies (i.e. ministries) is in line with the New Public Management ideas developed in the 1980s and 1990s in the attempt to boost the efficiency of the public administration (OECD, 2015a). In general, such a separation between policy design and execution, although sensible and based on sound governance principles, can undermine the ability of the ministry to steer and control executing agencies based on their outputs (OECD, 2015a). In the case of Costa Rica, this may be one of the reasons why public infrastructure projects are often the result of individual institutional efforts, do not follow common approaches and suffer from inadequate preparation (CGR, 2012).

The numerous public agencies and bodies involved in transport infrastructure contribute to excessive policy fragmentation and uncertainty. This impinges negatively on the overall policy coherence of the sector and contributes to delay projects execution. An analysis of 15 transport infrastructure projects found delays between three and ten years from the time the contractor is selected to the start of the construction (CGR, 2012). Some of the projects included in the CGR's study have accumulated over 20 years of delay since

the project inception (e.g. San Jose-San Ramon project). Projects financed with funds from multilateral institutions are no exception, resulting in large amount of available but unspent funds (Pisu and Villalobos, forthcoming). The current administration is aware of the problem and is trying to recover MOPT's sector stewardship, through better planning, management, coordination, monitoring and evaluation of sector agencies.

Simplifying the complex institutional setting of the transport sector is a priority. Different agencies could be merged. At the minimum, better articulating the policy mandate of the different ministries and agencies on transport policies and coordinating the development and execution of policies would result in a more coherent policy framework and reduce delays. To overcome institutional fragmentation, some OECD countries have created dedicated agencies to develop long-term strategies and plans, such as Australia (Infrastructure Australia) and the United Kingdom (Infrastructure UK), with good results. In the Costa Rican institutional setting, an enhanced Presidential Council on Competitiveness and Innovation (CPCI) with a more strategy role could be tasked, with the Ministry of Public Works, to design long-term transport infrastructure strategies and policies, consistent with other long term economic and social objectives, and track progresses towards them. Strategic planning could help link transport infrastructure objectives with wider socio-economic and environmental benefits, making it less likely that public transport infrastructure spending be cut because of short-term budget and political pressures.

Additionally, the role of SOEs operating in transport infrastructure, especially in maritime and railways transport, should be reconsidered and their corporate governance improved following the *OECD Guidelines on Corporate Governance of State-Owned Enterprises*. A clear functional separation of SOEs' activities – between the regulation and the provision of infrastructure services in addition to vertical separation – can better prepare them for and encourage increased private-sector participation.

Careful cost-benefit analyses can improve project preparation and selection, but no agencies in Costa Rica perform them. The government should develop precise guidelines to conduct cost-benefit analyses in transport infrastructure and apply them systematically. The OECD report *Cost-Benefit Analysis and the Environment* (OECD, 2006) provides general principles to perform cost-benefit analysis taking into account environmental constraints. Overall no single model exists to perform reliable cost-benefit analyses but OECD countries have accumulated a diverse set of experiences (Persson and Song, 2010) that the government could draw upon.

Getting ready for more private investment

Costa Rica has traditionally financed infrastructure projects via the government budget. The construction is often outsourced to a private contractor, while the government retains full ownership and management responsibility of the infrastructure stock. Only more recently, has Costa Rica used private participation in stages other than design and construction, as in the recent concessions of seaports and airports. Private participation in transport infrastructure requires a regulatory and institutional environment conducive to low regulatory and policy uncertainty. On a general level, international evidence suggests that private participation has been encouraged by a sound and transparent legal and institutional framework allowing for ample consultation with all stakeholders (Siemiatycki, 2013).

Only four projects involving private participation have materialised since the General Concession Law was passed in 1998 and updated in 2008 (Pisu and Villalobos, forthcoming). Two projects, the Metropolitan Electric Train and Route San Jose-San Ramon, were suspended because of political and popular discontent. Furthermore, the projects that were signed suffered from up to 11-year delays from the bidding process to the beginning of the construction phase. Often delays were due to a slow and confusing expropriation process resulting in judicial proceedings (MOPT, 2011).

The National Concession Council (CNC) is responsible for promoting private-sector participation in infrastructure. Its roles involve the approval of tender documentation, designing and managing the bidding selection process, signing concession contracts as representative of the central government, acting as regulator by managing and monitoring concession contracts. Its budget (USD 15 million for 2015) is funded for 90% by central government with the remaining part coming from fees charged on concessionaries. This contrasts with OECD best practice as the funding, scope and assessment of dedicated PPP units should not create incentives favouring the creation of PPPs (OECD, 2010a). CNC should be funded 100% by the central government.

The weak performance of CNC in promoting concessions and PPPs is partly attributable to it being an agency within the Ministry of Public Works. This differs from OECD practice, where PPP units mostly depend on the Ministry of Finance (OECD, 2010a). The current arrangement in Costa Rica may create a bias against private participation in infrastructure because the Ministry of Public Works also promotes public-funded infrastructure projects that can be in direct competition with privately funded ones.

In addition to promoting private participation in transport infrastructure, CNC should be directly involved in project preparation and selection – with inputs from the Ministry of Public Works covering projects' technical aspects – and perform or coordinate cost-benefit analyses. Moving CNC to the Ministry of Finance could improve performance and would facilitate the accounting of implicit liabilities arising from private-sector participation, which currently Costa Rica does not undertake (Irwin, 2007; Posner et al., 2009). It is important to ensure PPPs are affordable over the long term, which requires a clearer link between the PPP procurement process and the central authority's budget process.

A more widespread deployment of user charges would encourage higher private sector involvement in infrastructure. Currently, user charges are underutilised in Costa Rica, especially in the road sector where they could be highly beneficial from both an economic and environmental standpoint. In addition to providing a revenue stream to road operators user-paid tolls would promote a more rational use of infrastructure and alternative mode of transport. User paid toll roads – and more in general cost-recovery-level user charges – are often opposed on equity grounds as they tend to be regressive. Targeted social transfers are an effective way to tackle these concerns. The recent VAT refund envisaged in the context VAT reform is a promising step in this direction, which could also be extended to compensate poor families for higher user charges.

Developing a transport-infrastructure project pipeline would be conducive to higher private sector participation by lowering investment uncertainty and facilitate investors' planning and decision-making process. It would help de-politicise decisions on project selection and execution, and instead base them on engineering and economic considerations. The United Kingdom is a recent example of a successful attempt to create

an infrastructure project pipeline managed by an agency (Infrastructure UK) within the Ministry of Finance (Pisu, Pels and Bottini, 2015).

Overall, the OECD Principles for Private Sector Participation in Infrastructure (OECD, 2007) offers basic broad rules that can be useful to attract more private investment in infrastructure while also managing the ensuing risks. Table 2.4 shows that in many respects Costa Rica falls short of these principles and the reforms needed to move towards them.

Table 2.3. **The transports sector suffers from institutional fragmentation**

Institution	Type (budget allocation)	Year of creation	Governing Law	Responsibilities
Institutions with specific responsibility for the transport infrastructure sector				
Ministry of Public Works (MOPT)	Ministry (Central government)	1963	No.3155	Planning agency; issue the National Transport Plan
Technical Civil Aviation Council (CETAC)	De-concentrated agency under MOPT	1973	No.5150	Issuing regulations on civil aviation and national airports
Road Safety Council (COSEVI)	De-concentrated agency under MOPT	1979	No.6324	Issuing regulations to increase the safety of the road transports
National Concessions Council (CNC)	De-concentrated agency under MOPT	1998	No.7762	Promoting private participation through concessions and PPPs
National Road Council (CONAVI)	De-concentrated agency under MOPT	1998	No.7798	Building and maintaining the road network
Public Transportation Council (CTP)	De-concentrated agency under MOPT	1999	No.7969	Issuing regulations relating to public road transport (i.e. taxis, buses and coaches)
Costa Rican Institute of Pacific Ports (INCOP)	Non-financial public company	1953	No.1721	Port authorities for Pacific ports
Port Management Board of the Atlantic Coast Development (JAPDEVA)	Non-financial public company	1963	No.3091	Port authorities for Atlantic ports
National Railway Institute (INCOFER)	Non-financial public company	1985	No.7001	Managing the railways system (stations, tracks and rolling stock)
Institutions with an horizontal role				
Regulatory Authority of Public Services (ARESEP)	De-centralised institution	1928	No.7593	Setting tariffs for buses, taxis, trains and ports
Ministry of Planning (MIDEPLAN)	Ministry	1974	No. 5525	Coordinating agency and issuing the National Development Plan
Ministry of Finance	Ministry	1885	Decree No. 55	Authorizing tax exemptions to incentivise private-sector participation
Ministry of Environment and Energy (MINAE)	Ministry	1990	No.7152	
National Environmental Office (SETENA)	De-concentrated agency under MINAE	1995	No. 7554	Issuing environmental permits

Source: Elaboration based on MIDEPLAN (2007) and Ministry of Finance (2014).

Table 2.4. **OECD Principles for Private Sector Participation in Infrastructure and Costa Rica's practices**

Principle	OECD Guidelines	Costa Rica
Deciding on public or private provision of infrastructure services		
1	The choice by public authorities between public and private provision should be based on cost-benefit analysis taking into account all alternative modes or delivery, the full system of infrastructure provision, and the projected financial and non-financial costs and benefits over the project lifecycle.	No cost-benefit analyses are performed in Costa Rica. Choices are is susceptible to political interference and changes following government changes.
2	No infrastructure project-regardless of the degree if private involvement –should be embarked upon without assessing the degree to which its costs can be recovered from end-users and, in case of shortfalls, what other sources of finance can be mobilised.	The role of Ministry of Finance has been traditionally limited to authorizing tax exemptions for project development.
3	The allocation of risk between private parties and the public sector will be largely determined by the chosen model of private sector involvement, including the allocation of responsibilities. The selection of a particular model and an associated allocation of risk should be based upon an assessment of the public interest.	Lack of mandatory guidelines for public sector institutions to decide whether a project is procured by concession or through the traditional scheme and how to allocate risks

Table 2.4. **OECD Principles for Private Sector Participation in Infrastructure and Costa Rica's practices** (cont.)

Principle	OECD Guidelines	Costa Rica
4	Fiscal discipline and transparency must be safeguarded, and the potential public finance implications of sharing responsibilities for infrastructure with the private sector fully understood.	Limited involvement of Ministry of Finance in structuring concessions.
Enhancing the enabling institutional environment		
5	A sound enabling environment for infrastructure investment, which implies high standards of public and corporate governance, transparency and the rule of law, including protection of property and contractual rights, is essential to attract the participation of the private sector.	Weak leading institution (CNC) and no clear rules for investors. There are no standardised contracts; the government has often missed contract deadlines.
6	Infrastructure projects should be free from corruption at all levels and in all project phases. Public authorities should take effective measures to ensure public and private sector integrity and accountability and establish appropriate procedures to deter, detect and sanction corruption.	Strong institutional control by the Comptroller General.
7	The benefits of private sector participation in infrastructure are enhanced by efforts to create a competitive environment, including by subjecting activities to appropriate commercial pressures, dismantling unnecessary barriers to entry and implementing and enforcing adequate competition laws.	Barriers to competition are high in the infrastructure sector; the absence of a reliable project pipeline and weak institutional environment have resulted in limited offers in bidding processes.
8	Access to capital markets to fund operations is essential to private sector participants. Restrictions in access to local markets and obstacles to international capital movements should, taking into account macroeconomic policy considerations, be phased out.	There are no restrictions to access the capital market but the capital market is small. The long-standing tradition of funding projects through government budget has inhibited its development.
Goals, strategies and capacities at all levels		
9	Public authorities should ensure adequate consultation with end-users and other stakeholders including prior to the initiation of an infrastructure project.	Poor stakeholder management has resulted in opposition to private participation and project execution delays
10	Authorities responsible for privately-operated infrastructure projects should have the capacity to manage the commercial processes involved and to partner on an equal basis with their private sector counterparts.	CNC suffers from human capital limitations due to non-competitive pay scale; the Board of Directors does not contribute to CNC's effectiveness and efficiency.
11	Strategies for private sector participation in infrastructure need to be understood, and objectives shared, throughout all levels of government and in all relevant parts of the public administration.	CNC has limited communication and knowledge-sharing with other public sector institutions.
12	Mechanisms for cross-jurisdictional co-operation, including at the regional level, may have to be established.	There is no policy to strengthen local governments' capacity.
Making the public-private co-operation work		
13	To optimise the involvement of the private sector, public authorities should communicate clearly the objectives of their infrastructure policies and they should put in place mechanisms for consultations between the public and private partners regarding these objectives as well as individual projects.	There is no overall infrastructure strategy, reliable project pipeline, clear rules and certainty on the continuity of projects.
14	There should be full disclosure of all project-relevant information between public authorities and their private partners, including the state of pre-existing infrastructure, performance standards and penalties in the case of non-compliance. The principle of due diligence must be upheld.	No clear rules for information sharing with the private sector.
15	The awarding of infrastructure contracts or concessions should be designed to guarantee procedural fairness, non-discrimination and transparency.	Lack of credible pipeline, unclear rules and non-standardised contracts diminish competition.
16	The formal agreement between authorities and private sector participants should be specified in terms of verifiable infrastructure services to be provided to the public on the basis of output or performance based specifications. It should contain provisions regarding responsibilities and risk allocation in the case of unforeseen events.	There are no standardised contracts to guarantee that these elements are included.
17	Regulation of infrastructure services needs to be entrusted to specialised public authorities that are competent, well-resourced and shielded from undue influence by the parties to infrastructure contracts.	CNC's difficulties in promoting and executing Costa Rica's concession policy are due to poor project management and failure to comply with contract deadlines.
18	Occasional renegotiations are inevitable in long-term partnerships, but they should be conducted in good faith, in a transparent and non-discriminatory manner.	Unclear rules encourage contract renegotiation.
19	Dispute resolution mechanisms should be in place through which disputes arising at any point in the lifetime of an infrastructure project can be handled in a timely and impartial manner.	Dispute resolution mechanisms are included in contracts but deadlines are often not specified.
Encouraging responsible business conduct		
20	Private sector participants in infrastructure should observe commonly agreed principles and standards for responsible business conduct.	Private sector chambers do not clearly communicate to stakeholder their business conduct standards.

Table 2.4. **OECD Principles for Private Sector Participation in Infrastructure and Costa Rica's practices** (cont.)

Principle	OECD Guidelines	Costa Rica
21	Private enterprises should participate in infrastructure projects in good faith and with a commitment to fulfil their commitments.	Private sector participation is perceived negative by several citizen and political sectors.
22	Private sector participants, their subcontractors and representatives should not resort to bribery and other irregular practices to obtain contracts, gain control over assets or win favors, nor should they accept to be party to such practices in the course of their infrastructure operations.	Private sector chambers should develop a code of conduct for the participation in public infrastructure projects.
23	Private sector participants should contribute to strategies for communicating and consulting with the general public, including vis-à-vis consumers, affected communities and corporate stakeholders, with a view to developing mutual acceptance and understanding of the objectives of the parties involved.	Private sector does not always play a key role in promoting infrastructure projects (APM Terminals' communication strategy for the Moin Container Terminal mark a positive example).
24	Private sector participants in the provision of vital services to communities need to be mindful of the consequences of their actions for those communities and work, together with public authorities, to avoid and mitigate socially unacceptable outcomes	System overall does not promote a trustful partnership between public and private sector.

Source: Pisu and Villalobos (forthcoming).

Policy recommendations

Strengthen the institutional design to align policies and boost productivity by enhancing the strategic role of the Presidential Council on Competitiveness and Innovation, strengthening its technical unit and streamlining its organisation through merging its three different sub-councils.

Improving links between foreign and domestic firms and encouraging innovation

- Increase the share of public R&D spending channeled to higher education institutions to strengthen links with local innovative enterprises and enhance job prospects for technical graduates.
- Scale up the programmes PROPYME and CR Provee and create a one-stop agency to manage and better coordinate them; swiftly approve the creation and establish the FOMPRODUCE agency.
- Continue efforts to better enforce intellectual property rights (IPRs) along with initiatives to strengthen awareness and the effective use of IPRs in universities and local firms.

Enhancing competition, state-owned enterprises and access to finance

- Improve the business environment by reducing barriers to entrepreneurship.
- Eliminate antitrust exemptions.
- Grant the competition commission more independence and the power to conduct market studies, and increase its financial resources.
- Introduce a leniency programme to encourage collaboration with competition authorities.
- Improve the governance of state-owned banks and enterprises by adopting the *OECD Guidelines on Corporate Governance of State-owned Enterprises*.
- Introduce a deposit-insurance scheme covering the whole banking sector and eliminate regulatory asymmetries favouring state-owned banks.
- After having improved the governance of state-owned banks and their efficiency levels, consider the opportunity of reducing government's equity stakes in banks and having a single state-owned bank with a clear public mandate.
- Adopt tariff-setting methodologies for regulated services encouraging productivity improvements.

Policy recommendations (cont.)

Improving transport infrastructure

- To achieve better policy design and execution in transport and other infrastructure sectors, streamline the institutional and legal framework of public-works agencies, by reducing their number and better coordinate their policy and project-execution mandates.
- Establish a clear separation of SOEs' activities in the transport sector distinguishing between the regulation and the provision of infrastructure services and between the management of and access to the infrastructure network.
- Move the National Concession Council within the Ministry of Finance; start fully recording contingent liabilities arising from private participation in infrastructure.
- Define clear standards for cost-benefit analysis for infrastructure projects and start performing them.
- Define and update a clear and reliable infrastructure project pipelines.

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Glossary

ARESEP	<i>Autoridad Reguladora de los Servicios Públicos</i> (Public Services Regulatory Authority)
BCCR	<i>Banco Central de Costa Rica</i> (Central Bank of Costa Rica)
BEPS	Base Erosion and Profit Shifting
BLI	Better Life Index
CAATEC	<i>Comisión Asesora en Alta Tecnología</i> (Advisory Commission in High Technology)
CAFTA-DR	Dominican Republic–Central America Free Trade Agreement
CCSS	<i>Caja Costarricense de Seguro Social</i> (Social Security Agency)
CETAC	<i>Consejo Técnico de Aviación Civil</i> (Civil Aviation Technical Council)
CGR	<i>Contraloría General de la República</i> (Office of the Comptroller General of the Republic)
CIAT	Inter-American Centre of Tax Administrations
CINDE	<i>Coalición Costarricense de Iniciativas de Desarrollo</i> (Costa Rican Coalition for Development Initiatives)
CNC	<i>Consejo Nacional de Concesiones</i> (National Concessions Council)
CNFL	<i>Compañía Nacional de Fuerza y Luz</i> (National Power and Light Company)
COMEX	<i>Ministerio de Comercio Exterior</i> (Ministry of Foreign Trade)
CONARE	<i>Consejo Nacional de Rectores</i> (National Council of University Chancellors)
CONARROZ	<i>Corporación Arrocera Nacional</i> (National Rice Corporation)
CONAVI	<i>Consejo Nacional de Vialidad</i> (National Roads Council)
COPROCOM	<i>Comisión para Promover la Competencia</i> (Competition Promotion Commission)
COSEVI	<i>Consejo de Seguridad Vial</i> (Road Safety Council)
CPCI	<i>Consejo Presidencial de Competitividad e Innovación</i> (Council on Competitiveness and Innovation)
CRC	Costa Rica Colon
CRGAL	<i>Centro Regional de Competencia para América Latina</i> (Regional Competition Centre for Latin America)
CRP	Costa Rica Provee (Costa Rica Provides)
CTP	<i>Consejo de Transporte Público</i> (Public Transportation Council)
ECE	<i>Encuesta Continua de Empleo</i> (Continuous Employment Survey)
ECI	Economic Complexity Index
ECLAC	Economic Commission for Latin America and the Caribbean
ENAHO	<i>Encuesta Nacional de Hogares</i> (National Households Survey)
ENIGH	<i>Encuesta Nacional de Ingresos y Gastos de los Hogares</i> (National Income and Expenditure Survey)
FANAL	<i>Fábrica Nacional de Licores</i> (National Liquor Factory)
FAO	Food and Agriculture Organisation of the United Nations

FDI	Foreign Direct Investment
FODESAF	<i>Fondo de Desarrollo Social y Asignaciones Familiares</i> (Family Allowances Fund)
FOMPRODUCE	<i>Agencia de Fomento Productivo, Innovación y Valor Agregado</i> (Agency of Productive Advancement, Innovation, and Added Value)
FONABE	<i>Fondo Nacional de Becas</i> (National Fund for Scholarships)
FSI	Financial Soundness Indicators
FTZ	Free Trade Zones
FX	Foreign Exchange
GAM	<i>Gran Área Metropolitana</i> (Great Metropolitan Area)
GDP	Gross Domestic Product
GERD	Gross Expenditure in Research and Development
GST	Goods and Services Tax
HERD	Higher Education Research and Development
ICE	<i>Instituto Costarricense de Electricidad</i> (Costa Rican Electricity Institute)
ICT	<i>Instituto Costarricense de Turismo</i> (Costa Rican Tourism Institute)
IICE	<i>Instituto de Investigaciones en Ciencias Económicas</i> (Institute for Research in Economics of the University of Costa Rica)
ILOSTAT	International Labour Organisation Statistics
IMAS	<i>Instituto Mixto de Ayuda Social</i> (Institute of Social Welfare)
INA	<i>Instituto Nacional de Aprendizaje</i> (National Learning Institute)
INCOFER	<i>Instituto Costarricense de Ferrocarriles</i> (National Railway Institute)
INCOP	<i>Instituto Costarricense de Puertos del Pacífico</i> (Costa Rican Institute for Pacific Ports)
INEC	<i>Instituto Nacional de Estadística y Censos</i> (National Institute of Statistics and Censuses)
INS	<i>Instituto Nacional de Seguros</i> (National Insurance Institute)
IPR	Intellectual Property Rights
ITU-D	Telecommunication Development Sector
JAPDEVA	<i>Junta de Administración Portuaria y de Desarrollo Económico de la Vertiente Atlántica</i> (Port Management and Economic Development Board of the Atlantic Coast)
LAC	Latin America & Caribbean (developing only) as defined by the World Bank
LAICA	<i>Liga Agrícola Industrial de la Caña de Azúcar</i> (Industrial Agricultural League of Sugar Cane)
LANAMMEUCR	<i>Laboratorio Nacional de Materiales y Modelos Estructurales</i> (National Laboratory of Materials and Structural Models)
LCN	Latin America and Caribbean (all income levels) as defined by the World Bank
MEIC	<i>Ministerio de Economía, Industria y Comercio</i> (Ministry of Economy, Industry and Commerce)
MIDEPLAN	<i>Ministerio de Planificación Nacional y Política Económica</i> (Ministry of National Planning and Economic Policy)
MINAE	<i>Ministerio de Ambiente y Energía</i> (Ministry of Environment and Energy)
MOPT	<i>Ministerio de Obras Públicas y Transportes</i> (Ministry of Public Works)
NAMAs	Nationally Appropriate Mitigation Actions

PES	Payments for Environmental Services
PISA	Programme for International Student Assessment
PMR	Product Market Regulation
PPP	Purchasing Power Parity
PROCOMER	<i>Promotora del Comercio Exterior de Costa Rica</i> (The Foreign Trade Corporation of Costa Rica)
PROPYME	<i>Programa de Apoyo a la Pequeña y Mediana Empresa</i> (Support Programme for the Small and Medium Enterprise)
R&D	Research and Development
RECOPE	<i>Refinadora Costarricense de Petróleo SA</i> (Costa Rican Oil Refinery)
ROA	Return on Assets
SETENA	<i>Secretaría Técnica Nacional Ambiental</i> (National Environmental Office)
SINIRUBE	<i>Sistema Nacional de Información y Registro Único de Beneficiarios</i> (National Information System and Unique Registration of Beneficiaries)
SME	Small and Medium Enterprise
SOE	State-Owned Enterprise
STEM	Science, Technology, Engineering and Mathematics
SUGEF	<i>Superintendencia General de Entidades Financieras</i> (General Superintendence of Financial Institutions)
SUGEVAL	<i>Superintendencia General de Valores</i> (General Superintendence of Securities)
SUPEN	<i>Superintendencia de Pensiones</i> (Superintendence of Pensions)
SUTEL	<i>Superintendencia de Telecomunicaciones</i> (Superintendence of Telecommunications)
TSE	<i>Tribunal Supremo de Costa Rica</i> (National Electoral Tribunal)
UIS	UNESCO Institute for Statistics
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNStats	United Nations Statistic Division
WTO	World Trade Organisation

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