

Sustainable social and economic transition: Some evidence from Latin America

José-Eduardo Alatorre



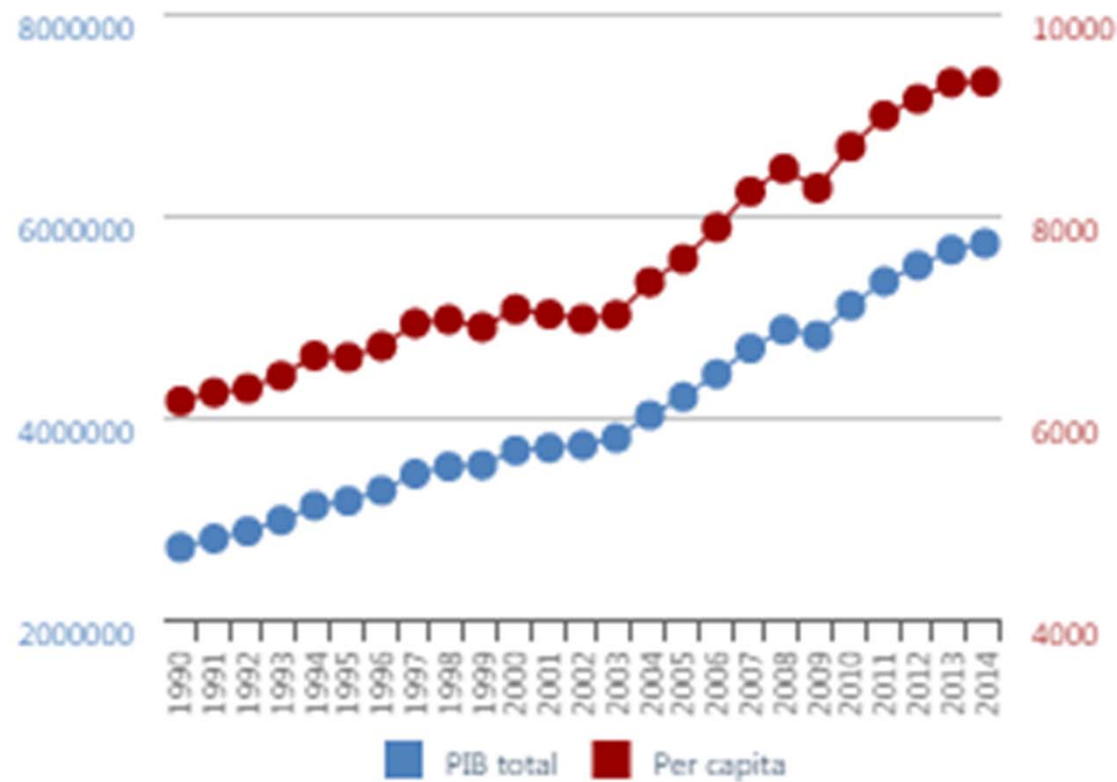
Economics of Climate Change Unit
Sustainable Development and Human
Settlements Division

Economic Commission for Latin America and the
Caribbean

Workshop on sharing views and experiences on “economic diversification and transformation” and
“just transition of workforce and creation of decent work and quality jobs” in the context of sustainable development
Doha, Qatar – October 2016

Economic growth

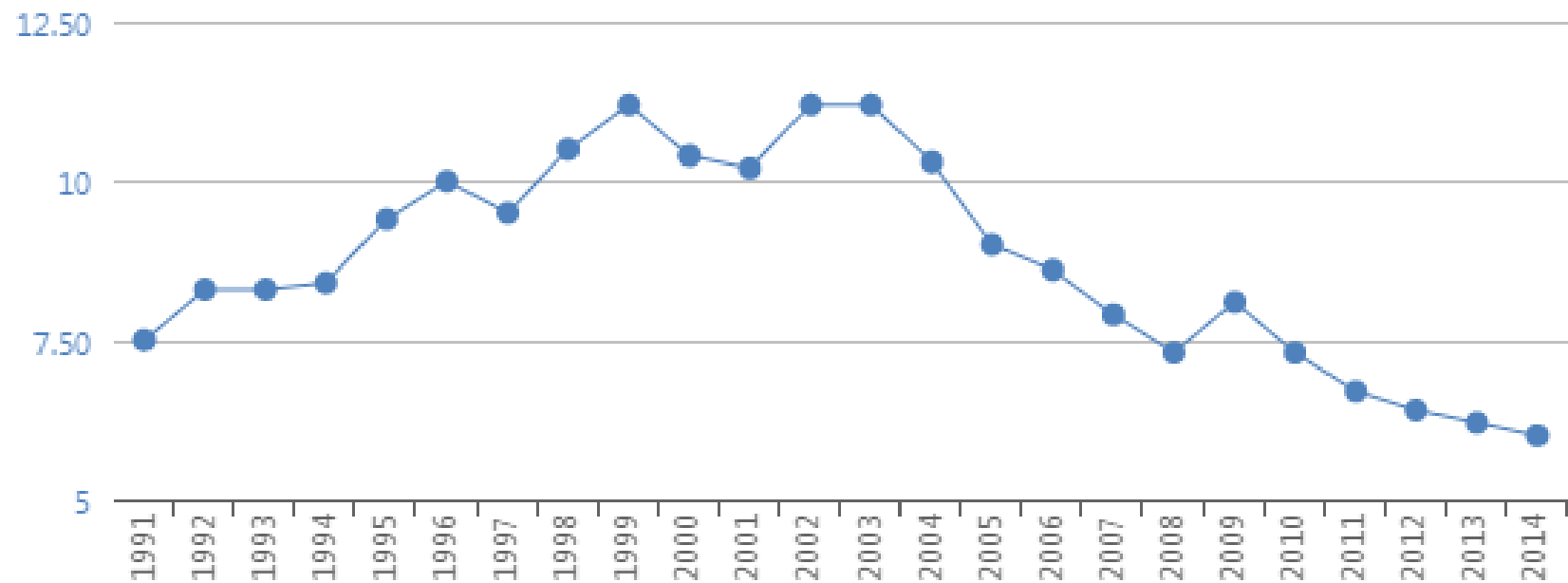
Latin America and the Caribbean: GDP and GDP per capita (2010 Million Dollars and Dollars)



Source: CEPALSTAT

Unemployment

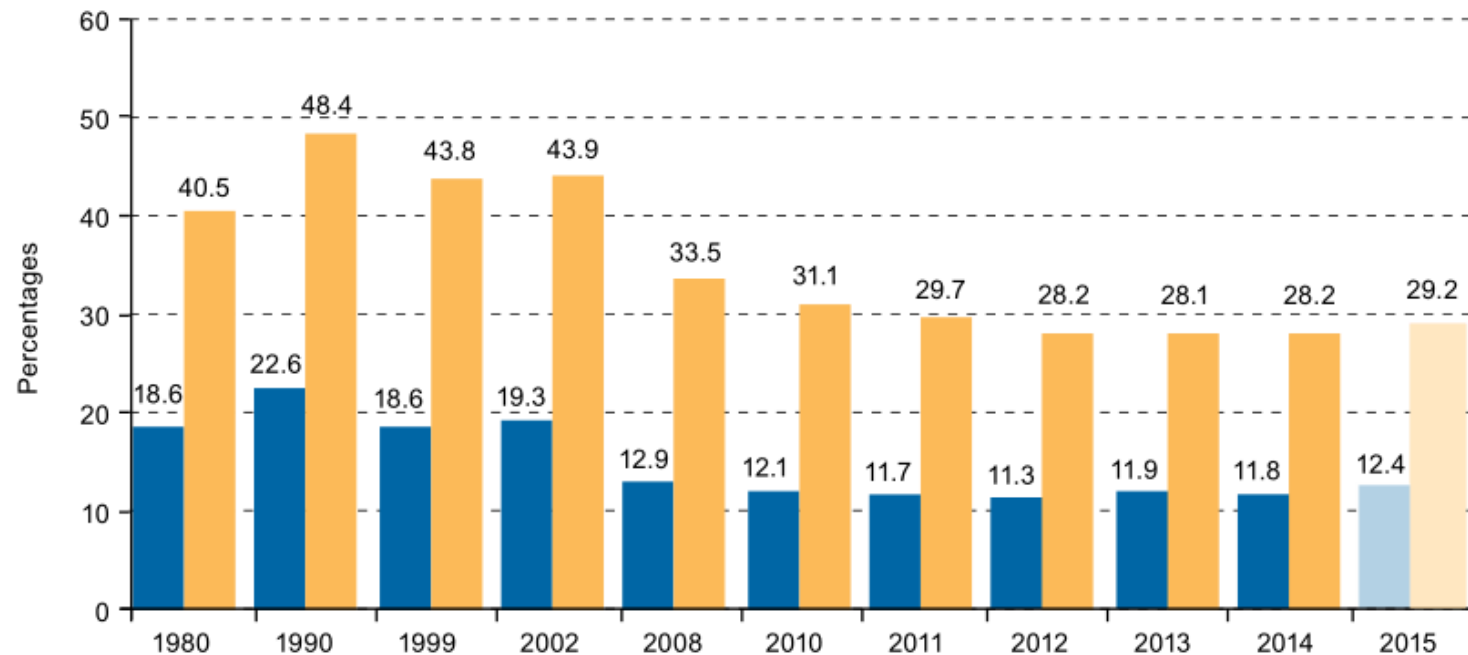
Latin America and the Caribbean: Unemployment rate (percentage)



Source: CEPALSTAT

Poverty

Latin America: poverty and indigence, 1980-2015 ^a
(Percentages and millions of persons)

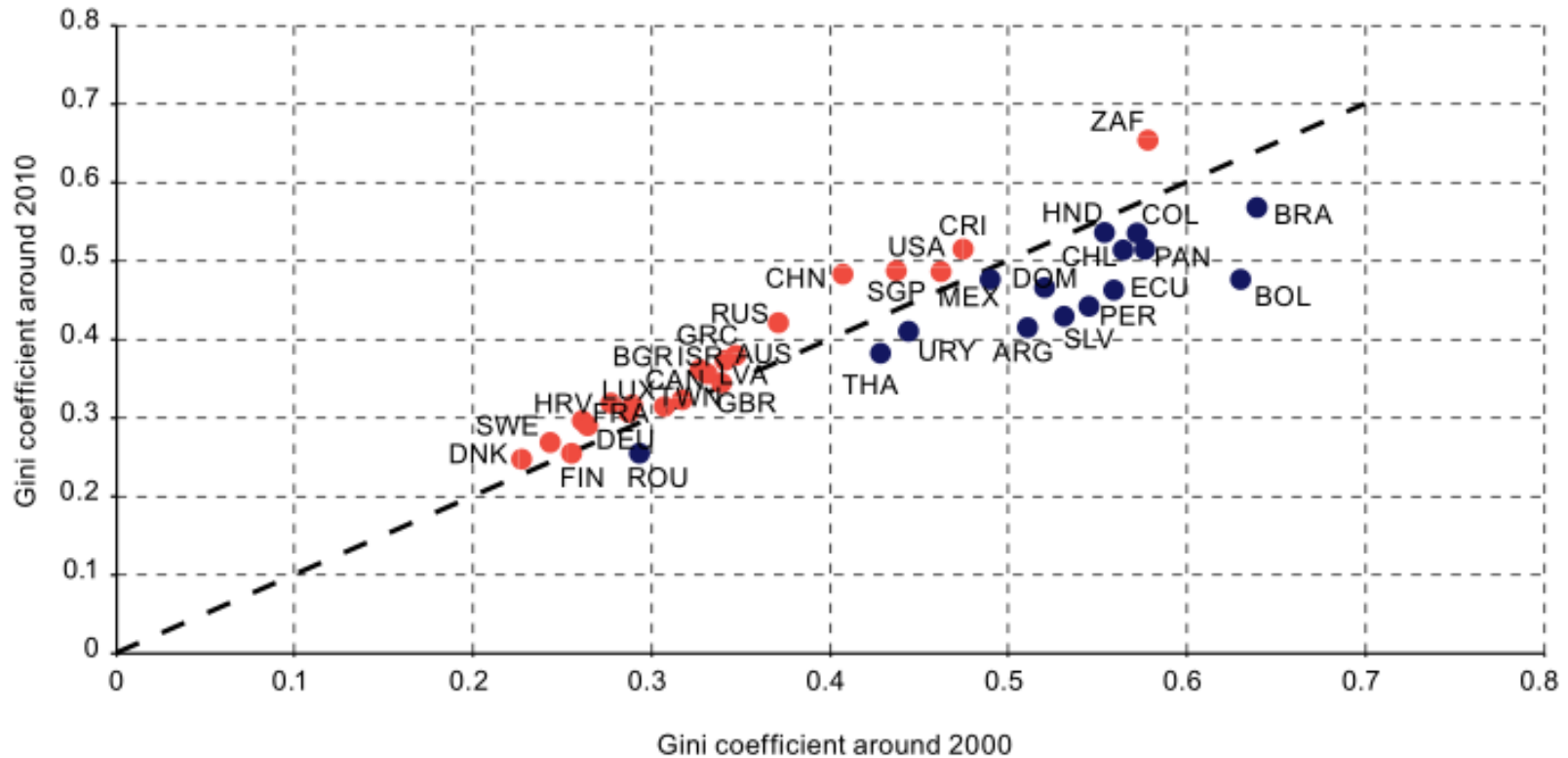


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys conducted in the respective countries.

a Estimates for 19 countries of the region, including Haiti. Cuba is not included. The 2015 figures are projections.

Inequality

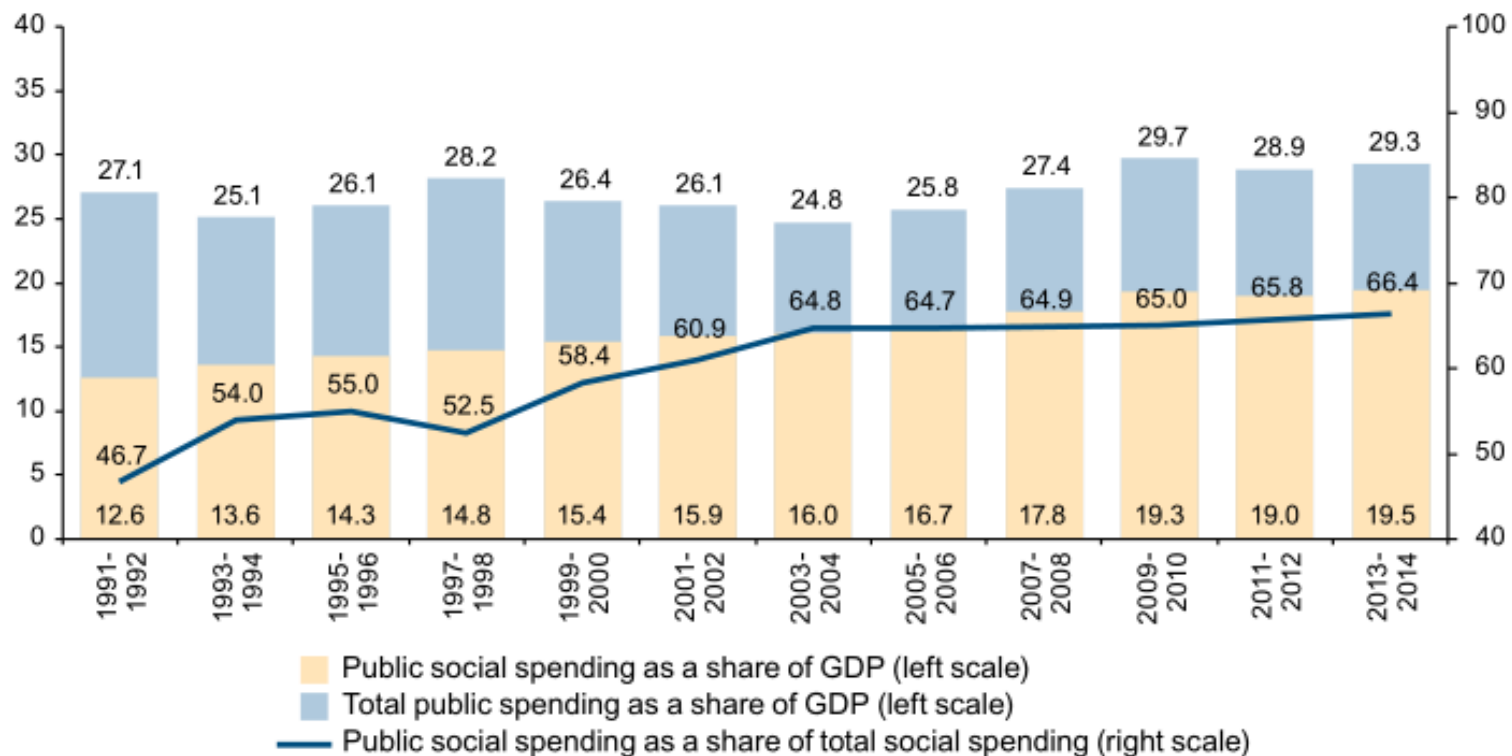
**Latin America (14 countries) and other selected countries:
Gini coefficient, around 2000 and 2010**



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators, 2015 and All the Ginis Dataset, Organization for Economic Cooperation and Development (OECD) and Luxembourg Income Study Database (LIS).

Public social spending

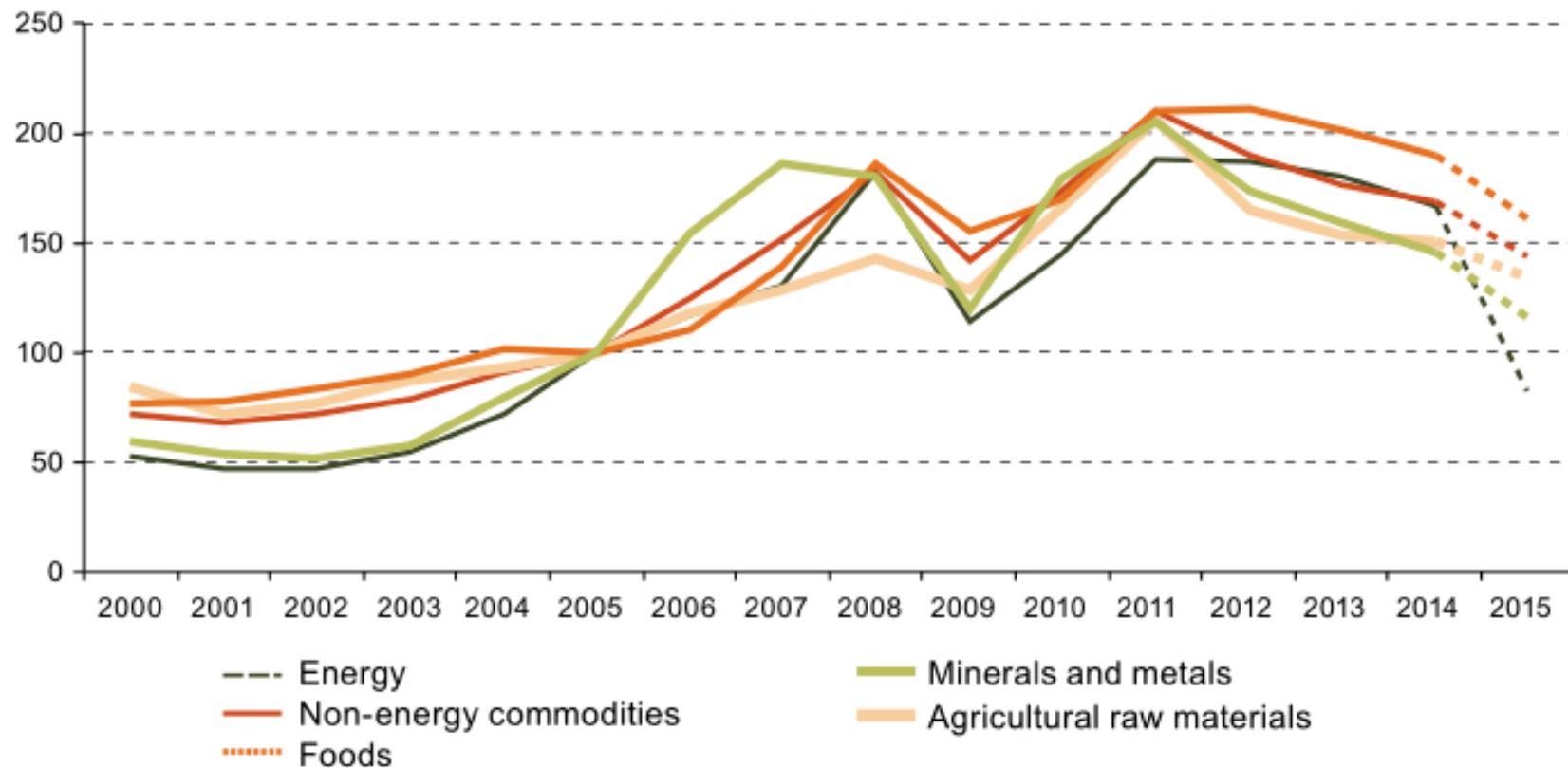
Latin America and the Caribbean (21 countries):^a public social spending and total public spending as shares of GDP, and public social spending as a share of total public spending, 1991-1992 to 2013-2014^b
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries.
a Argentina, Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Plurinational State of Bolivia, Trinidad and Tobago and Uruguay.
b Weighted average of the countries.

Commodity prices

World prices for selected commodity groups, 2000-2015 ^a
(Indices, 2005=100)

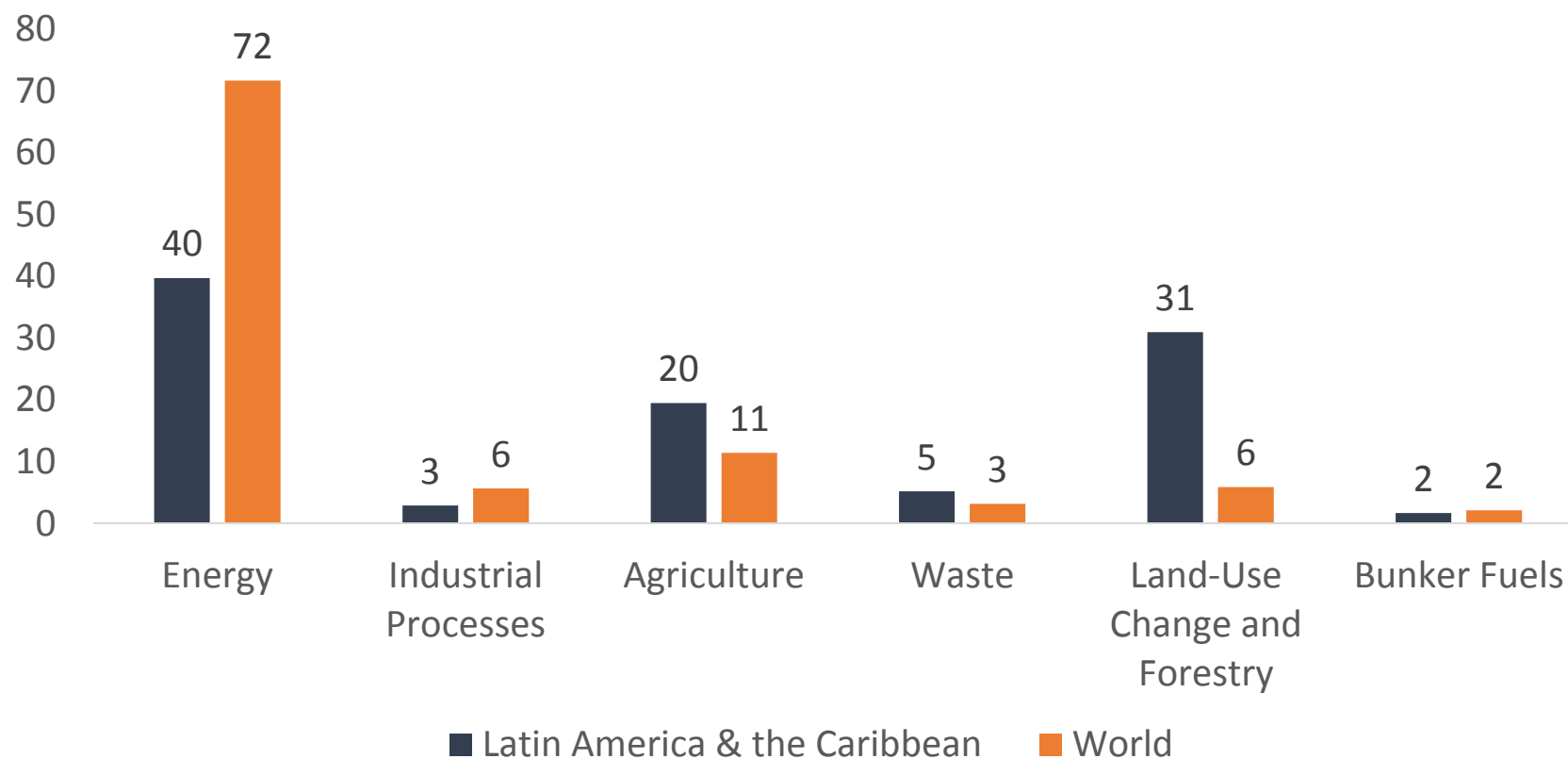


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of figures from the World Bank, the International Monetary Fund (IMF) and The Economist Intelligence Unit (EIU).

^a Figures for 2015 are projections.

GHG emissions

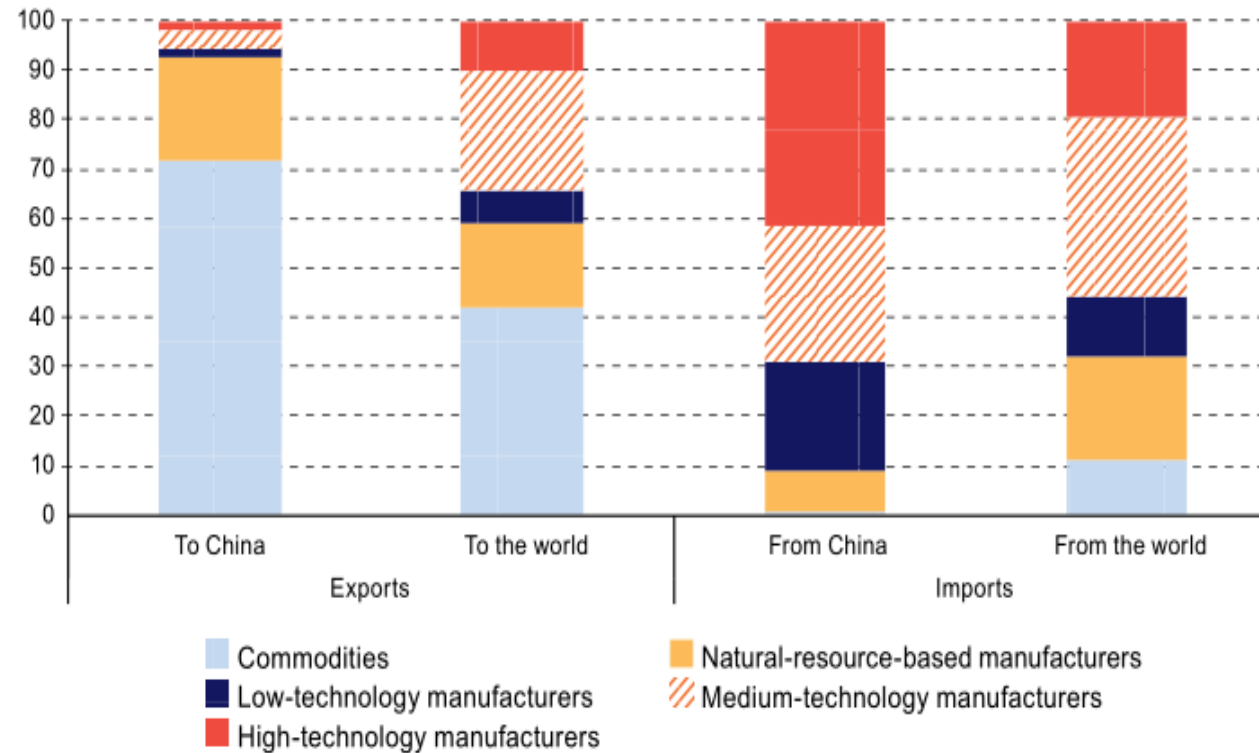
Latin America and the Caribbean and World: GHG emission by sector, 2012 (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Climate Analysis Indicators Tool (CAIT) 2.0. ©2015, Washington, D.C., World Resources Institute [online] <http://cait2.wri.org>.

Structure of trade

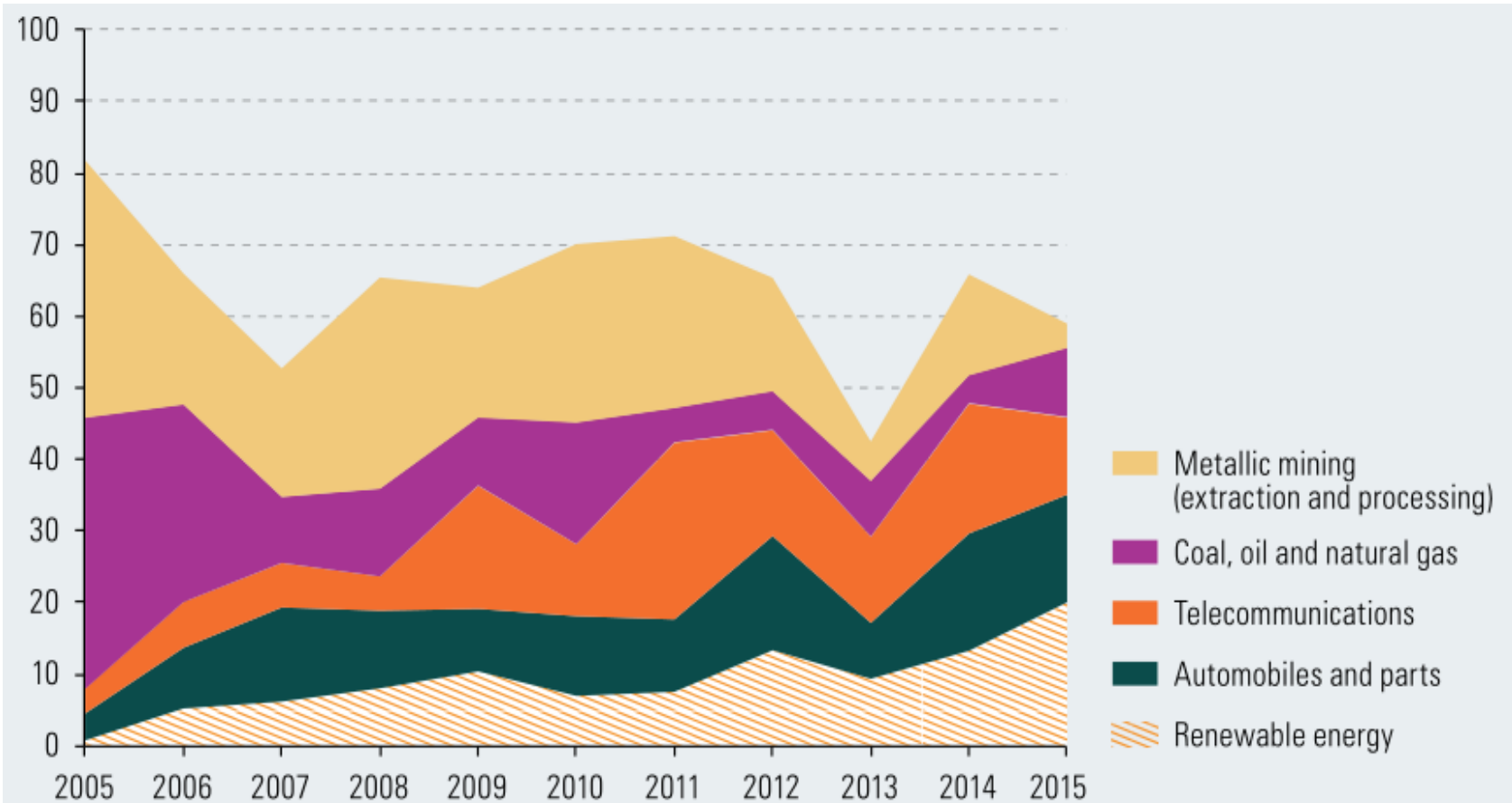
Latin America and the Caribbean: structure of trade with the world and China by technology intensity, 2013
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

Announced FDI by sector

**Latin America and the Caribbean: distribution
of announced FDI projects by sector, 2005-2015**
(Percentages)

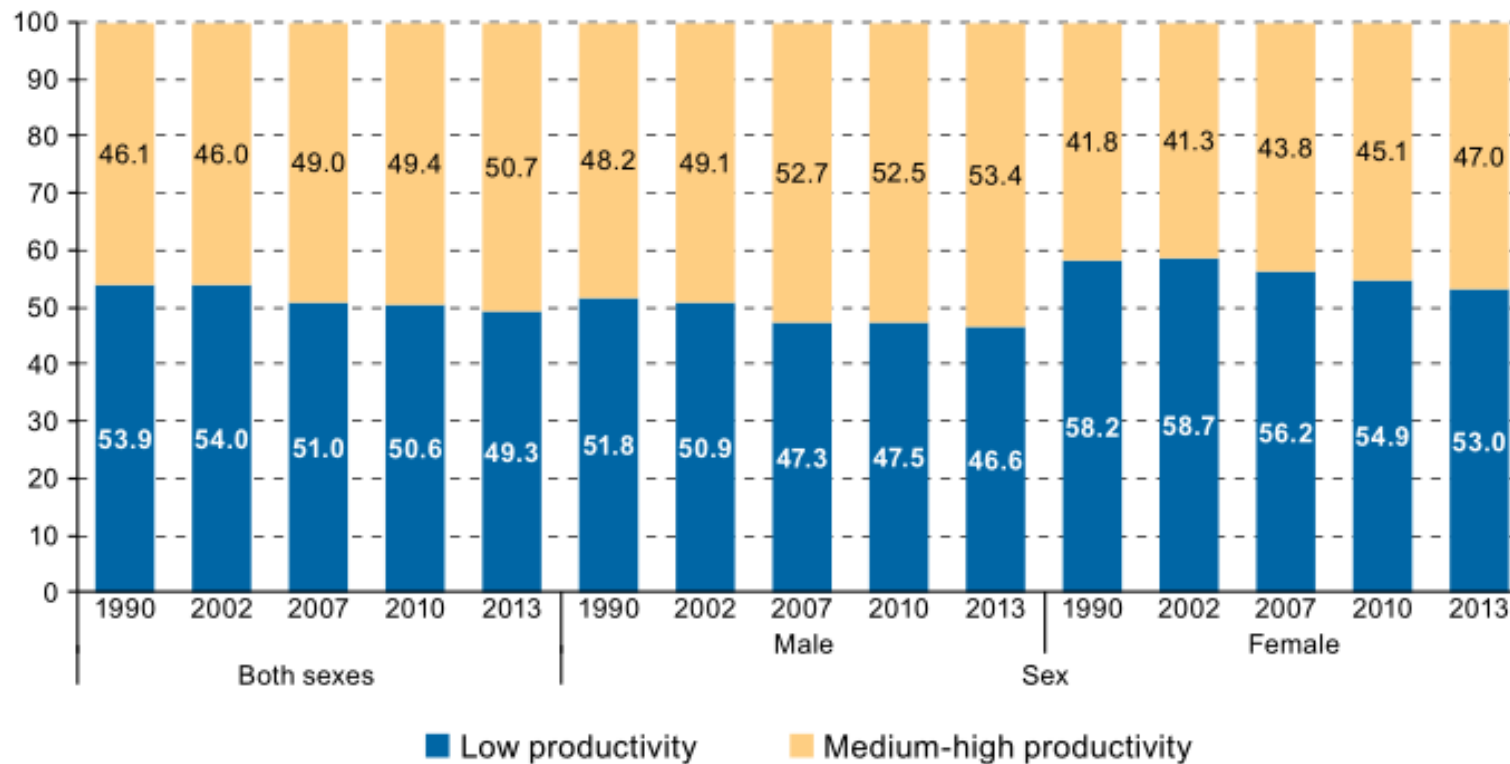


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Financial Times, fDi Markets.

Note: This analysis excludes the 2013 announcement of the Nicaragua Canal, for a value of US\$ 40 billion.

Productivity

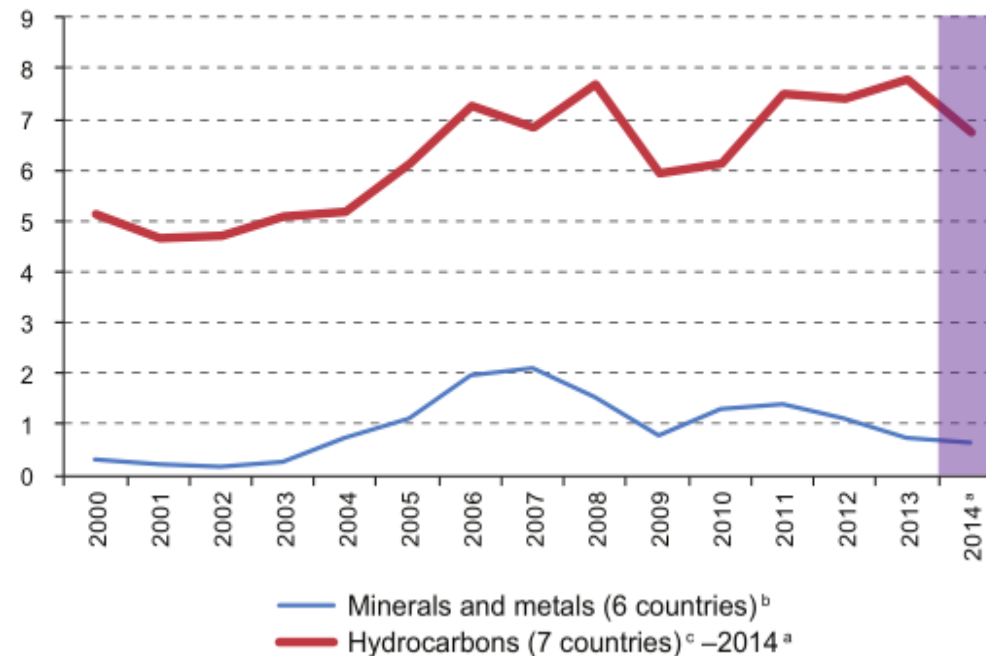
Latin America (18 countries): distribution of employed persons aged 15 and over by productivity and sex, national totals, 1990-2013^a
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of household surveys conducted in the respective countries.
a Weighted averages.

Fiscal revenues

Latin America: fiscal revenues from non-renewable natural resources, by country groupings
based on raw material exports, 2000-2014
(Percentages of GDP)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

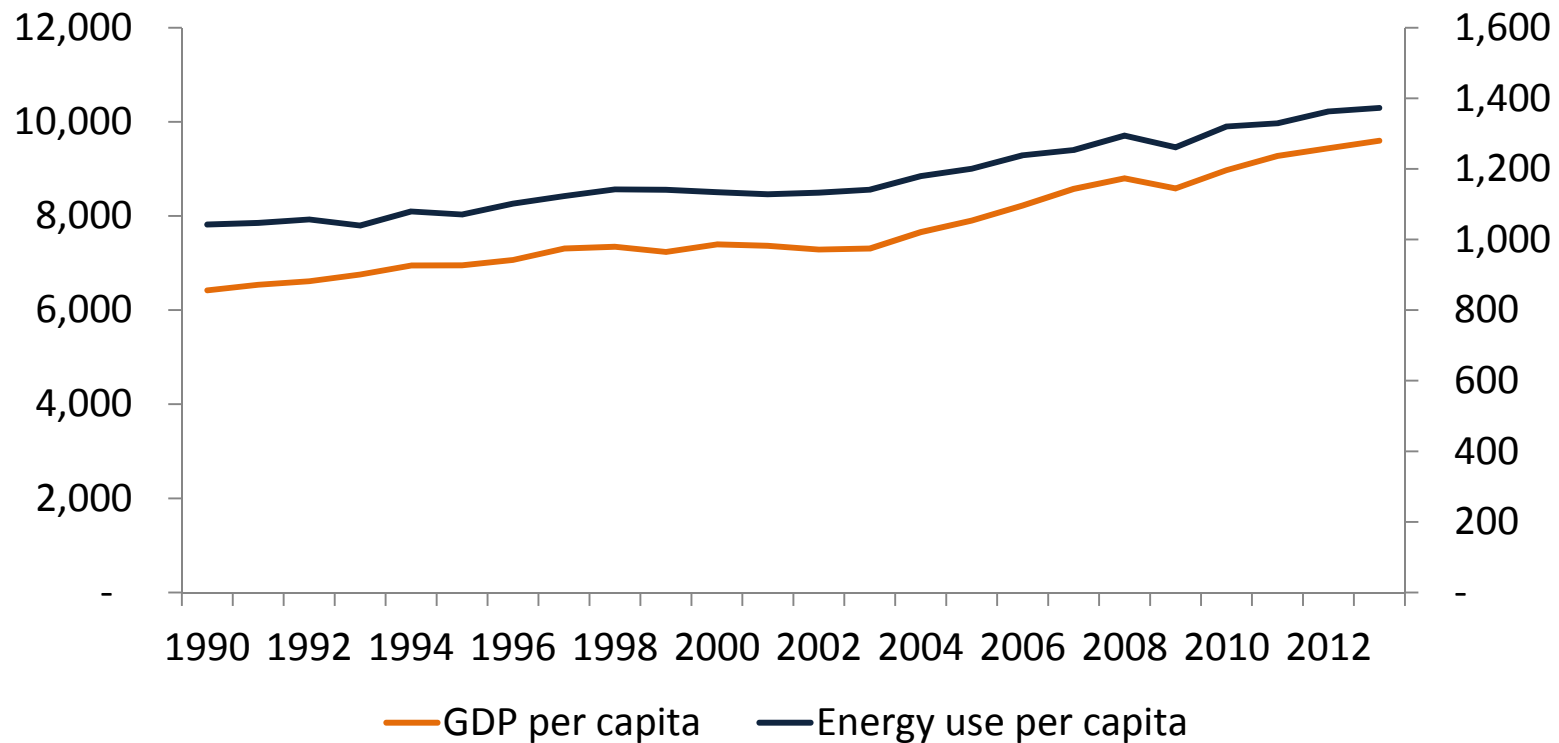
a The data for 2014 are taken from government forecasts or ECLAC estimates based on commodity price and nominal exchange-rate forecasts, assuming that output remains constant. Commodity price forecasts were taken from the Economist Intelligence Unit (EIU) and the International Monetary Fund (IMF); nominal exchange-rate forecasts from national budgets, and nominal GDP forecasts from ECLAC.

b Brazil, Chile, Colombia, Mexico, Peru and Plurinational State of Bolivia.

c Bolivarian Republic of Venezuela, Brazil, Colombia, Ecuador, Mexico (including revenues from Petróleos Mexicanos, PEMEX), Peru and Plurinational State of Bolivia.

Growth and energy consumption

Latin America: GDP per capita and Energy use per capita (Dollars and Koe)

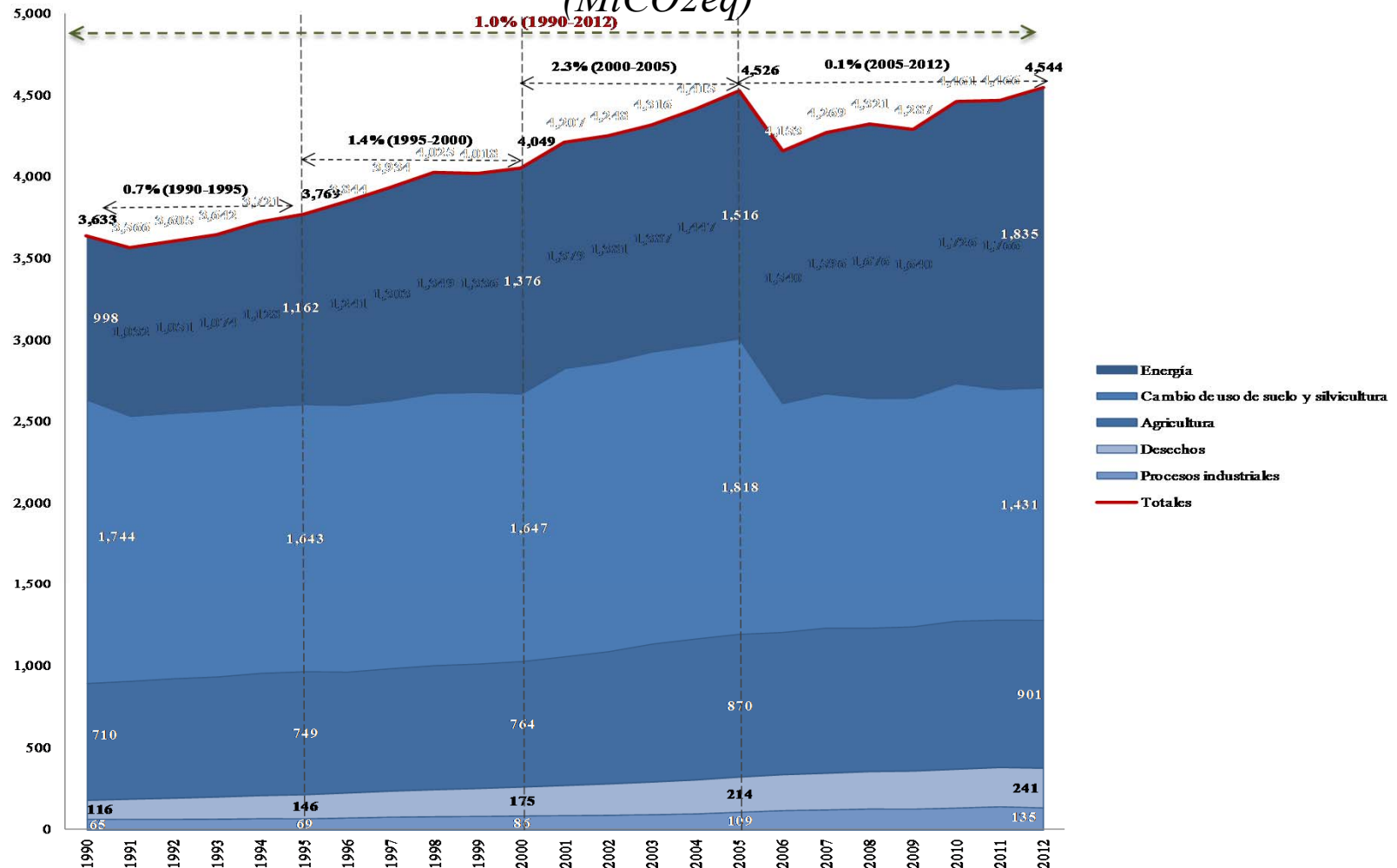


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators.

Growth and GHG emissions

GHG emissions in Latin America and the Caribbean: 1990-2012

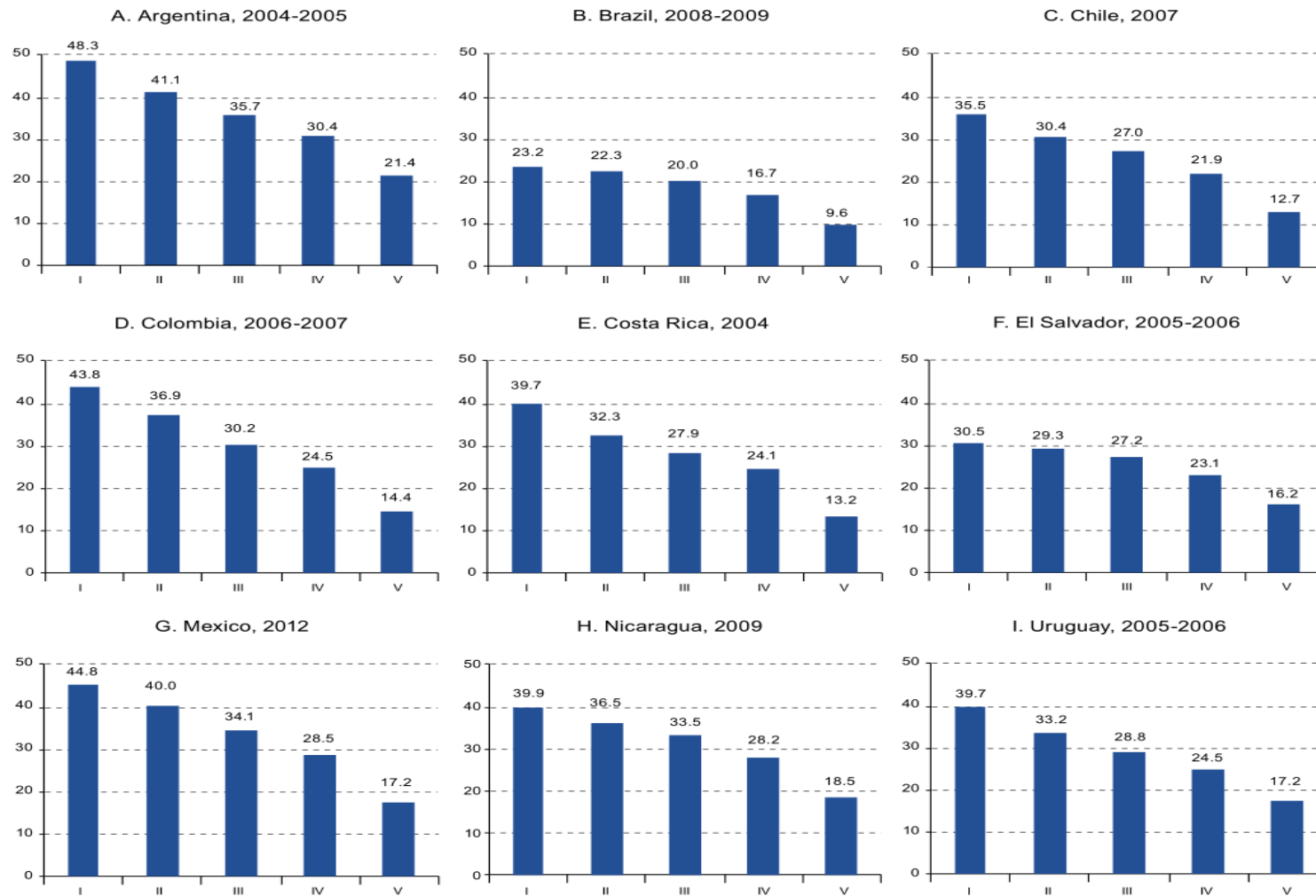
(MtCO₂eq)



Source: Own elaboration with information from WRI en <http://cait.wri.org/indc/>

Consumption patterns

Latin America (9 countries): proportion of total household expenditure represented by expenditure on food and beverages, by income quintile
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the following surveys: Argentina: National Household Expenditure Survey, 2004-2005; Brazil: Household Budget Survey – Expenditure, Income and Living Conditions, 2008-2009; Chile: Family Budget Survey, 2007; Colombia: National Income and Expenditure Survey, 2006-2007; Costa Rica: National Household Income and

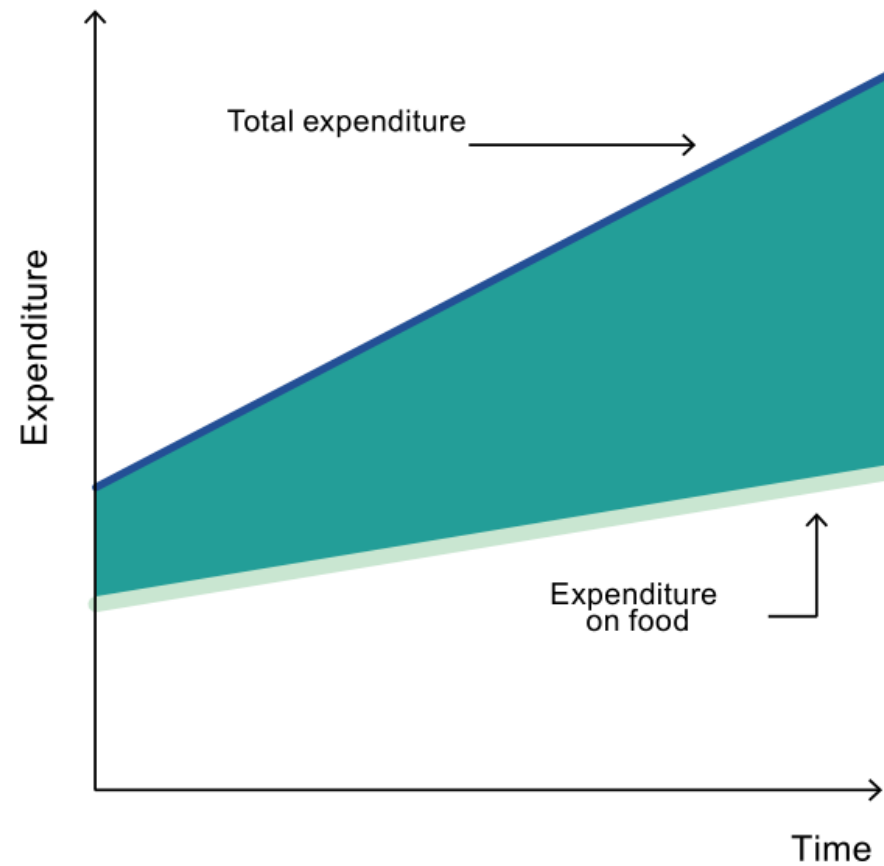


UNITED NATIONS

ECLAC

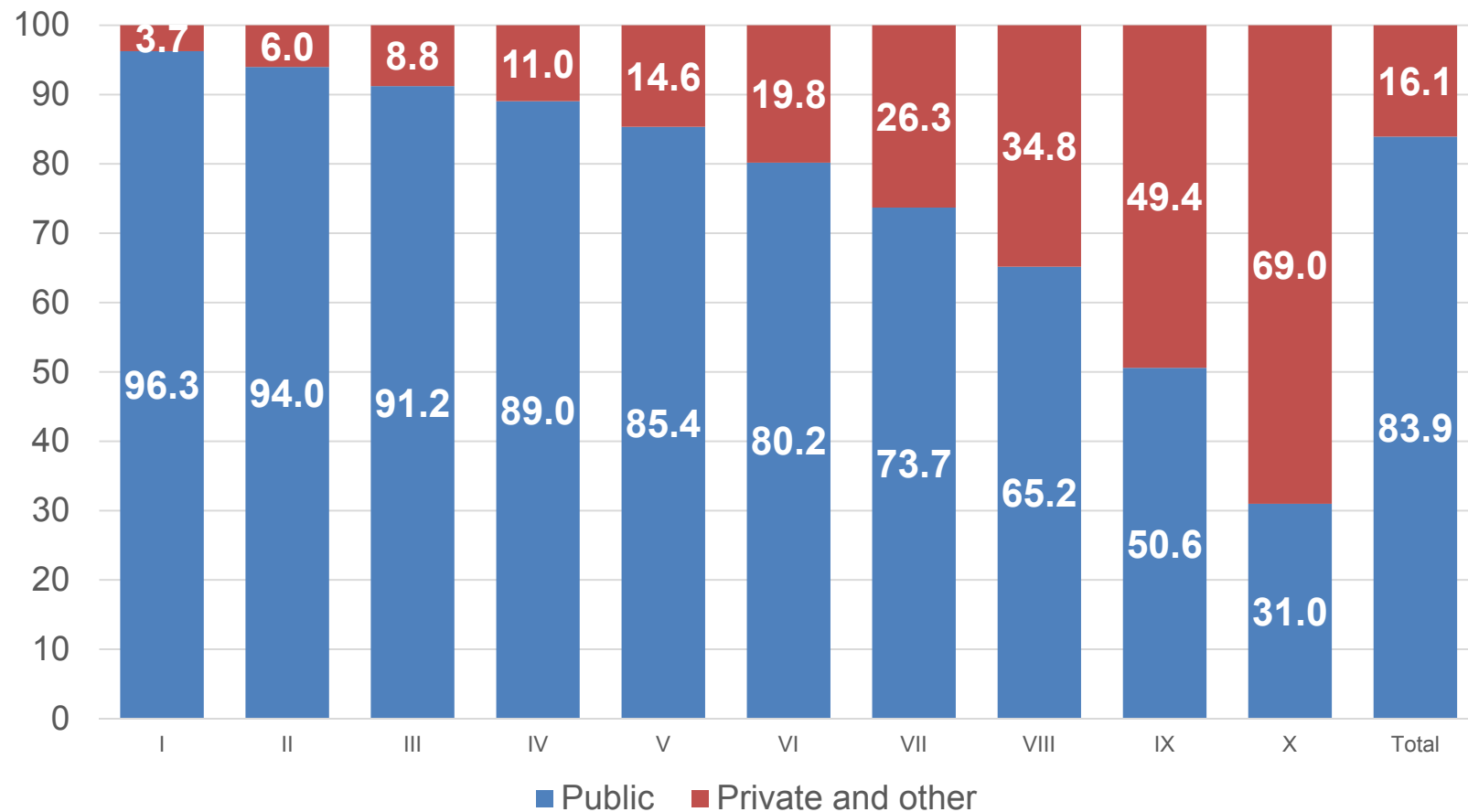
Consumption patterns

Latin America and the Caribbean: expenditure trend



Attendance in public and private education

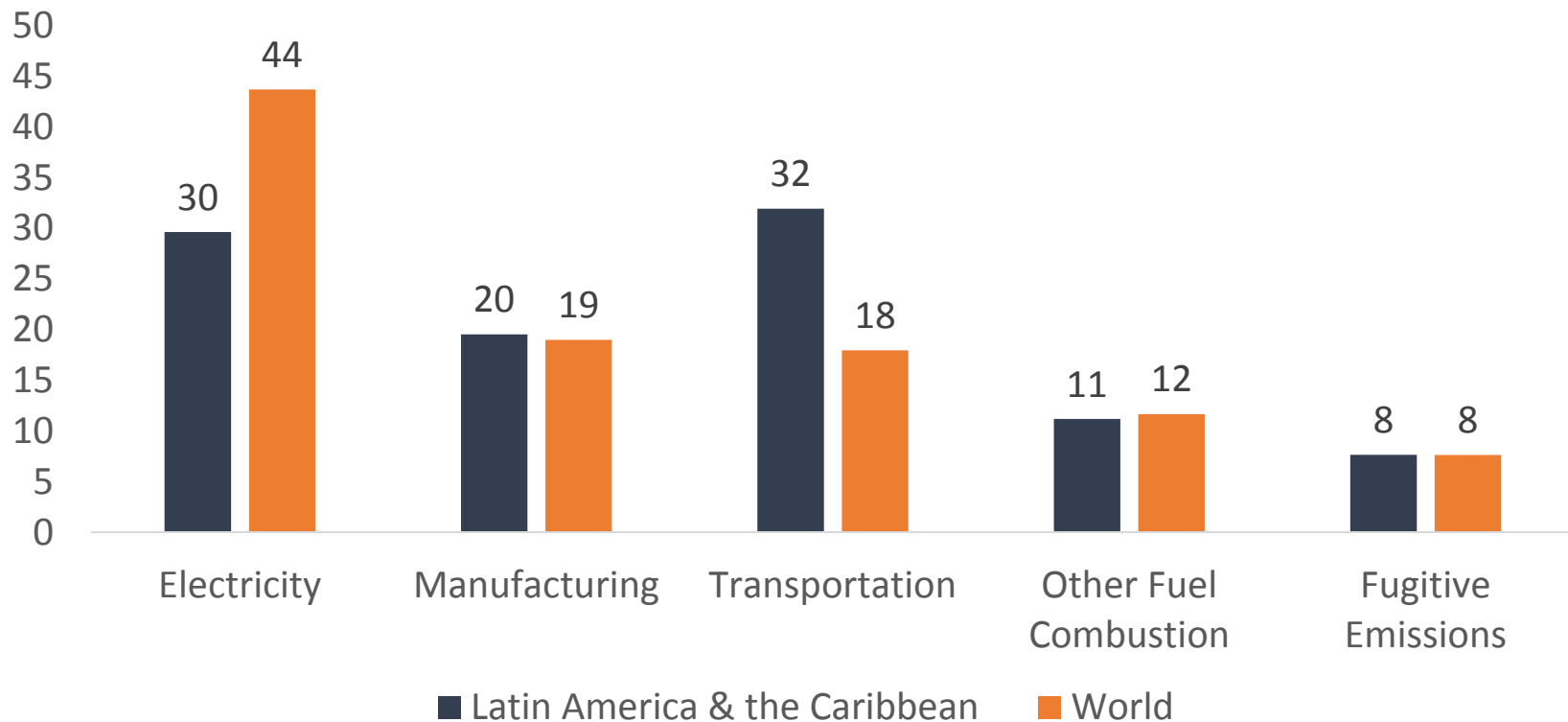
Latin America: attendance at public or private education establishments by income decile, Children aged 4 - 18, 2011



Source: ECLAC, on the basis of income and expenditure surveys conducted in the respective countries.

GHG energy emissions

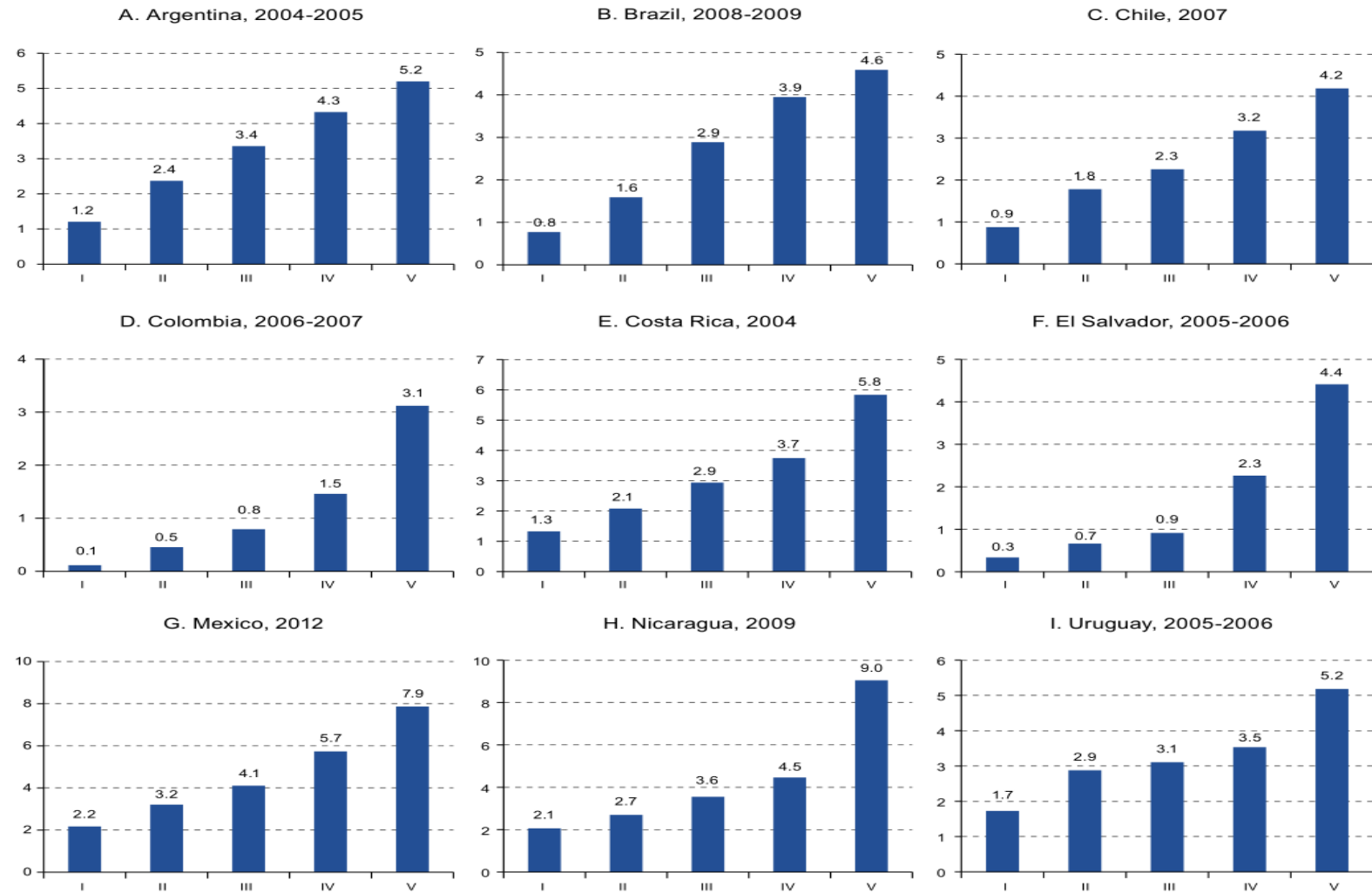
Latin America and the Caribbean and World: GHG emission energy sector, 2012 (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Climate Analysis Indicators Tool (CAIT) 2.0. ©2015, Washington, D.C., World Resources Institute [online] <http://cait2.wri.org>.

Consumption patterns

Latin America (9 countries): proportion of total household expenditure represented by expenditure on transport fuels (gasoline, diesel, biodiesel), by income quintile
(Porcentajes)

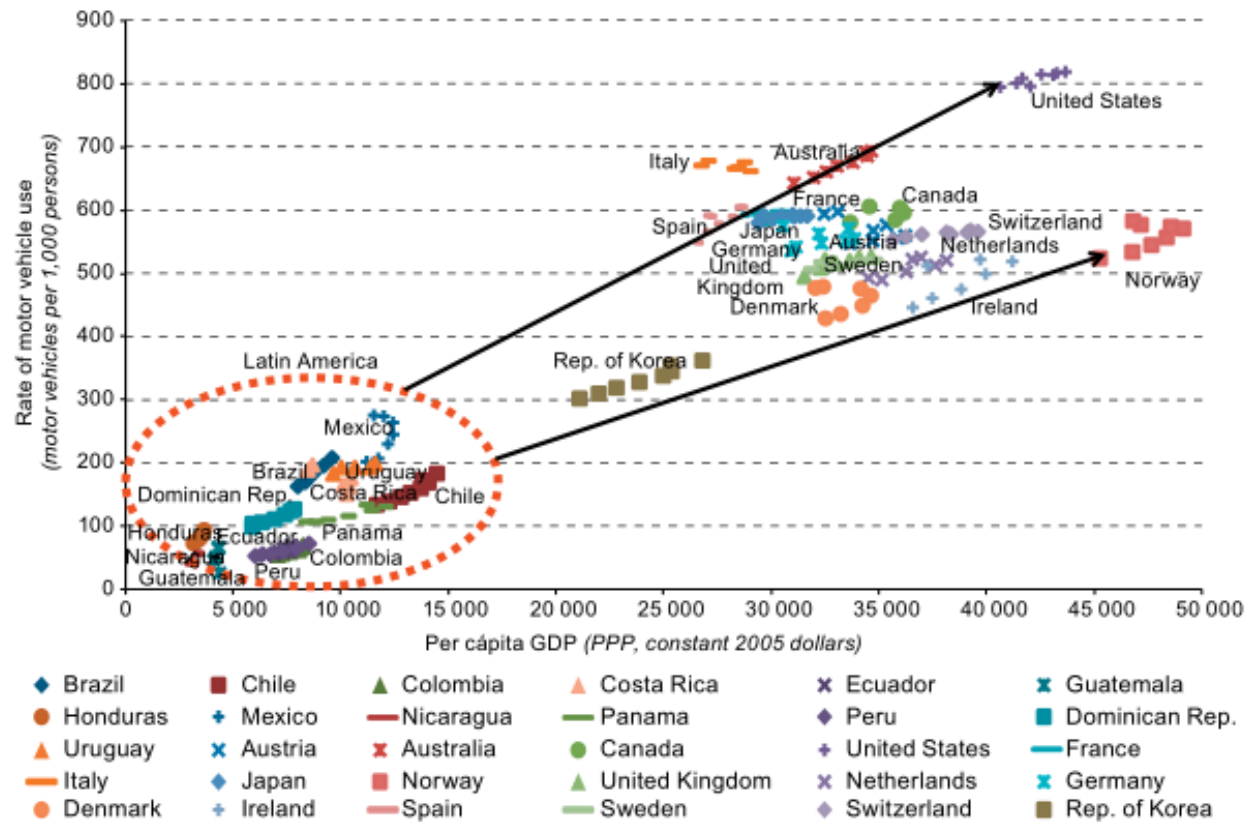


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the following surveys: Argentina: National Household Expenditure Survey, 2004-2005; Brazil: Household Budget Survey – Expenditure, Income and Living Conditions, 2008-2009; Chile: Family Budget Survey, 2007; Colombia: National Income and Expenditure Survey, 2006-2007; Costa Rica: National Household Income and Expenditure Survey, 2004; El Salvador: National Household Income and Expenditure Survey, 2005-2006; Mexico: National Household Income and Expenditure Survey, 2012; Nicaragua: National Household Income and Expenditure Survey, 2009; Uruguay: National Household Income and Expenditure Survey, 2005-2006.

Motor vehicle use and gdp per capita

Relationship between the rate of motor vehicle use and per capita GDP in developed countries and Latin American countries, 2003-2010^a

(Motor vehicles per 1,000 persons and PPP dollars at constant 2005 prices)

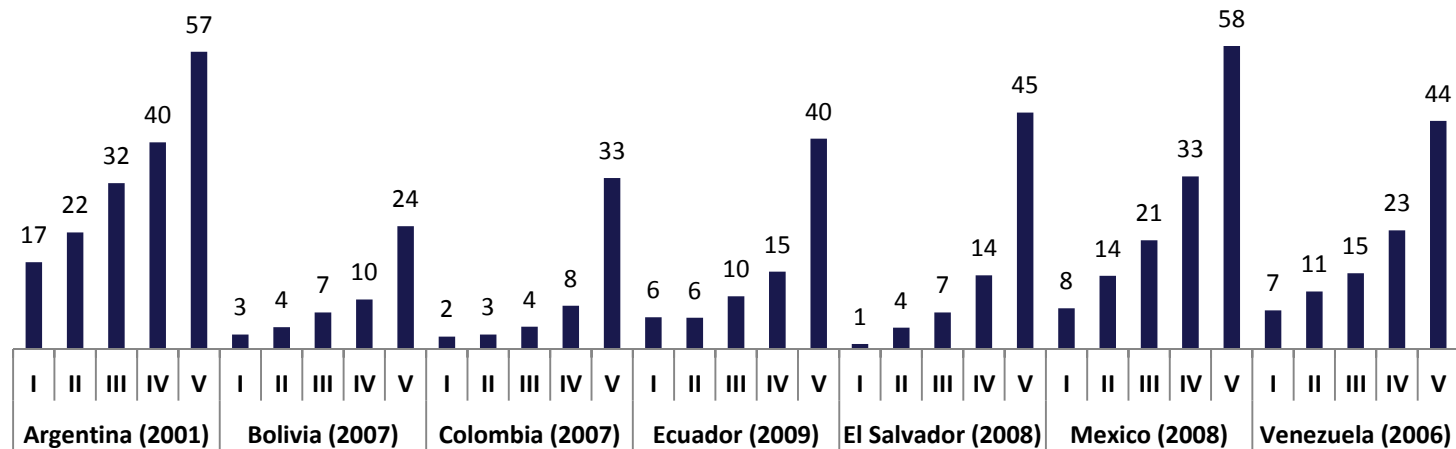


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators.

^a The upper limit corresponds to countries such as Australia, Italy, Spain and the United States. The lower limit corresponds to Denmark, the Netherlands and Norway. The black arrows indicate possible trends depending on what growth style the region adopts; they are not projections.

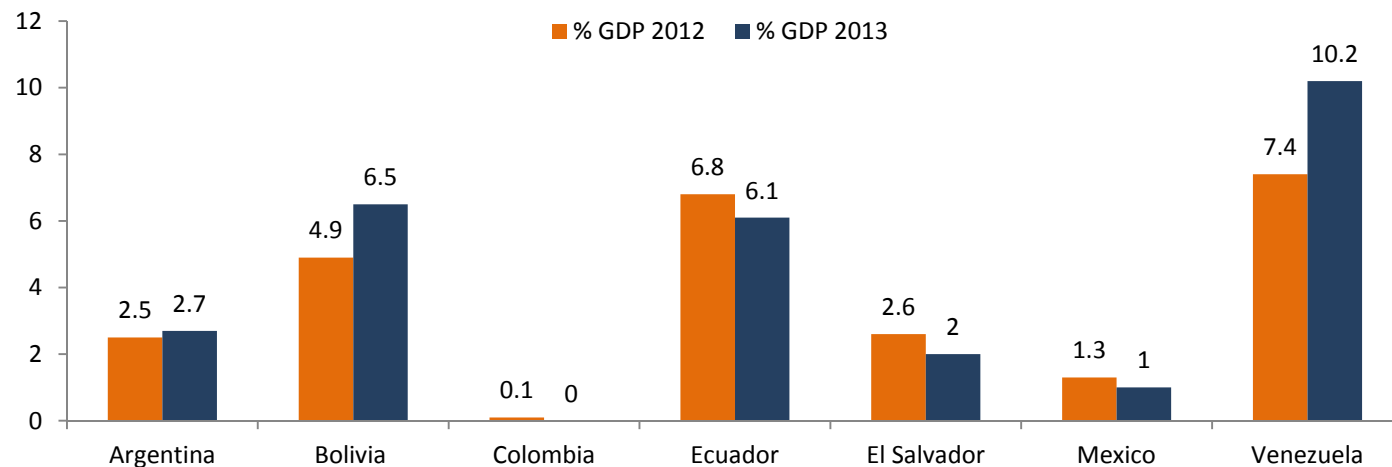
Subsidies

Car ownership or access, by income quintiles



Source: Own elaboration base on data from the Socio-Economic Database for Latin America and the Caribbean (CEDLAS and The World Bank)

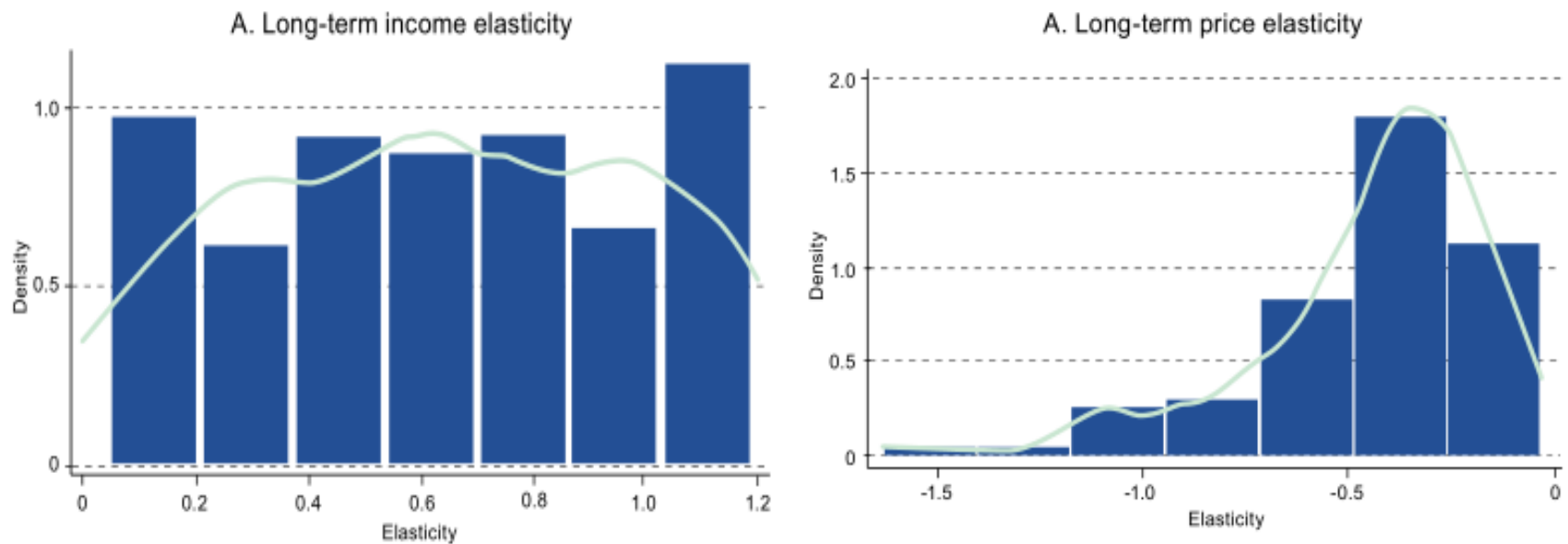
Fossil fuel consumption subsidy rate as proportion of full cost of supply



Source: Own elaboration based on data from <http://www.iea.org/subsidy/index.html>

Elasticities of gasoline demand

Latin America and the Caribbean: distribution of income and price elasticities of gasoline demand



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of a review of the statistical data reported in international studies.
^a The histograms show the distribution of 343 estimates of the price elasticity of gasoline demand published in the international literature.

Consumption patterns

Latin America and OECD countries: income and price elasticity of gasoline demand ^a (Elasticities)

	OECD countries	Latin America
Income elasticity		
Long-term elasticity	0.55	0.69
Short-term elasticity	0.24	0.26
Price elasticity		
Long-term elasticity	-0.41	-0.31
Short-term elasticity	-0.22	-0.17

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

^a The estimate of elasticity, weighted by the standard deviation, was calculated on the basis of the random effects model. In all cases, the Q test rejected the null hypothesis of homogeneity of the estimates. By the same token, for the long- and short-term income and price elasticities, the I2 statistical factor indicates that the variation observed in the size of the effects attributable to the heterogeneity of the studies is greater than 85%. "OECD countries" refers to the member countries of the Organization for Economic Cooperation and Development, except Mexico and Chile. In these results, individual estimates have been corrected for potential biases.

Fiscal proposals

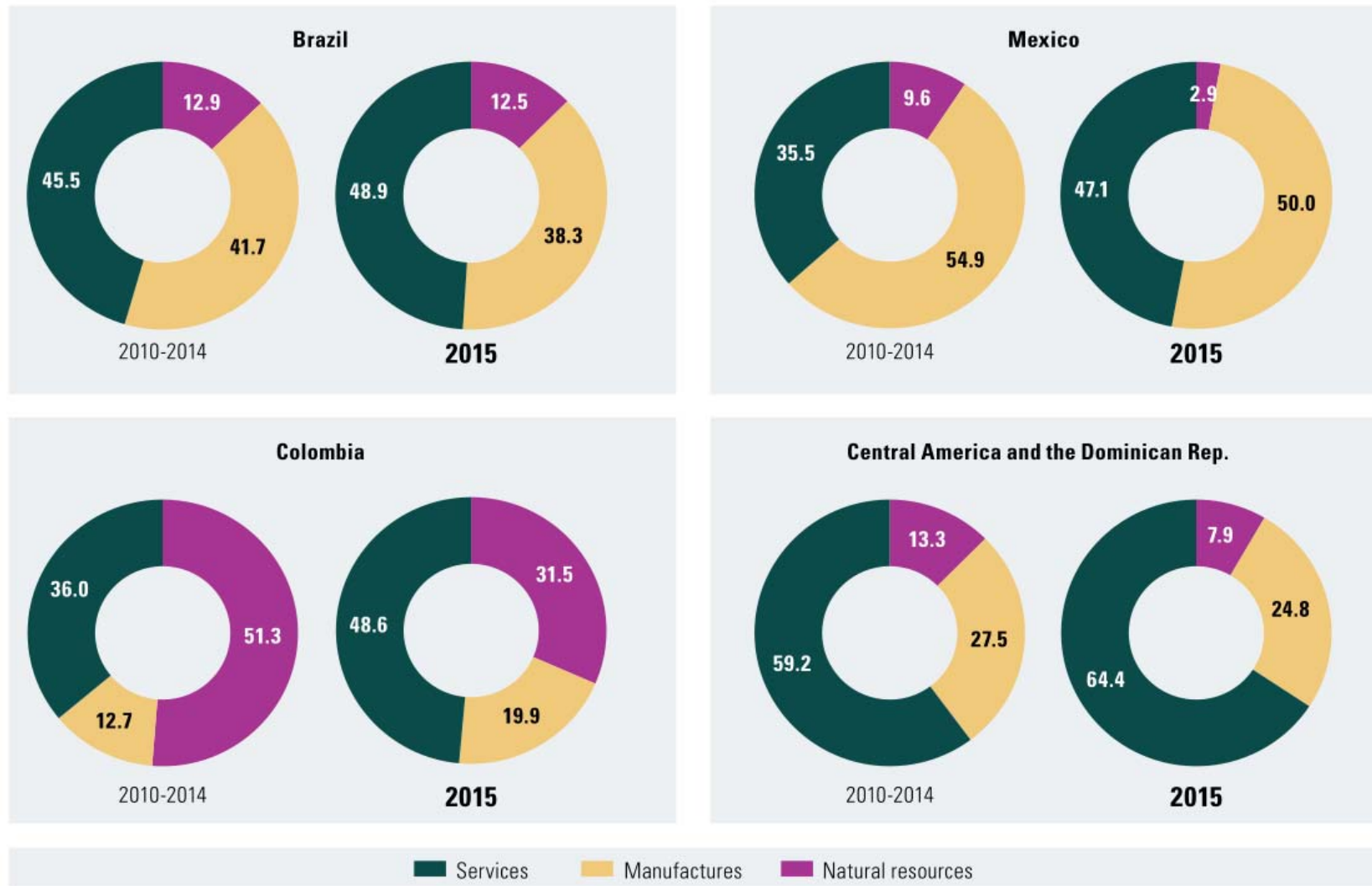
- Reduce evasion
- Higher Progressivity of the fiscal system.
- Increase income tax steps and raise maximum tax rate.
- Introduce new taxes: capital gains, inheritance taxes, green taxes.
- Progressively eliminate regressive subsidies.
- Maintain fiscal equilibriums.

Recommendations

Industrial Policy

A new public/private matrix that provides high quality health, transport and education services with universal coverage. These positively impact income distribution, inclusiveness and the environment.

Foreing Direct Investment

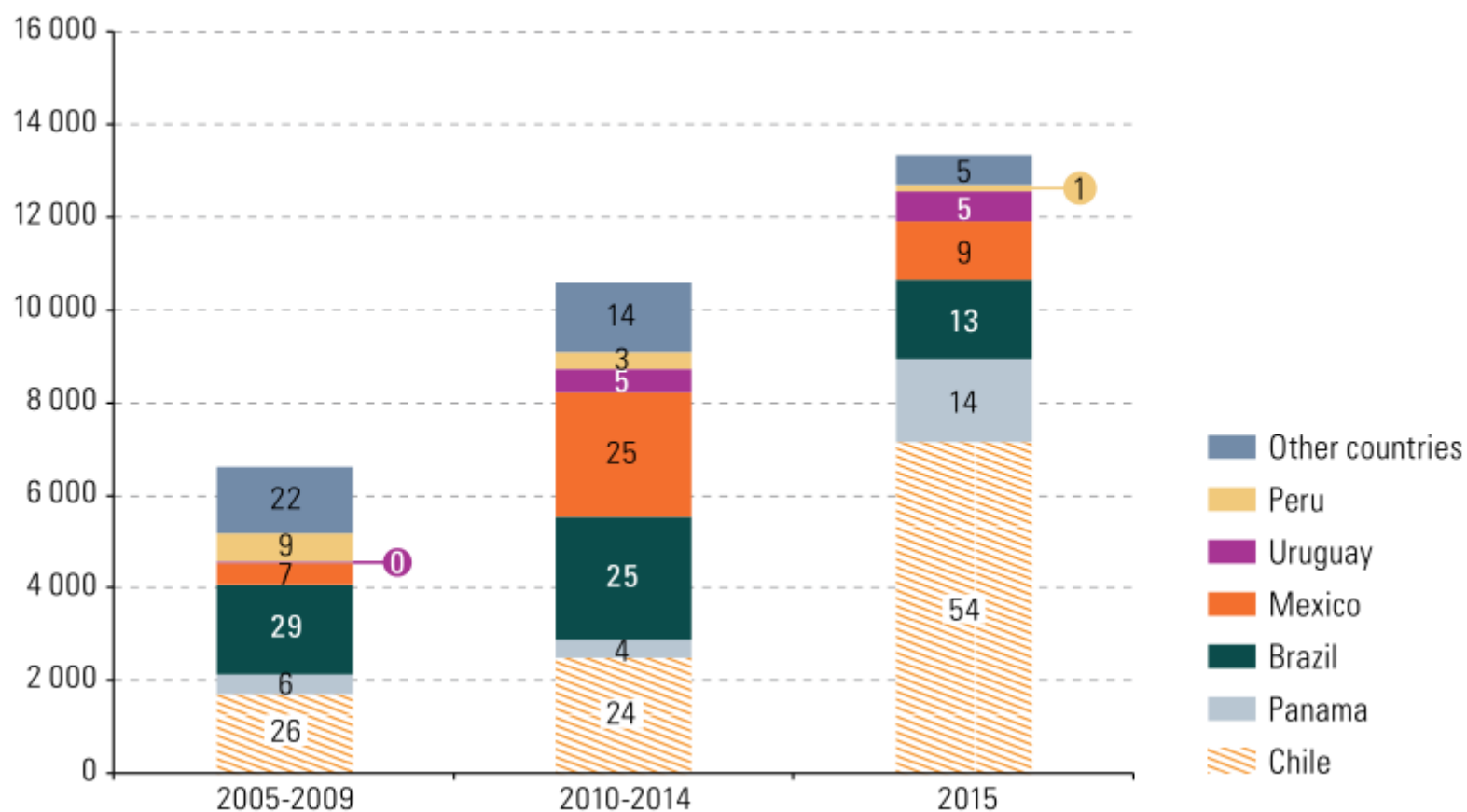


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates as of 27 May 2016.

a The data for Central America do not include Panama.

FDI in renewables

Latin America and the Caribbean: FDI projects announced in renewable energies, by country, 2005-2015 (Millions of dollars and percentages of the total)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Financial Times, fDi Markets.

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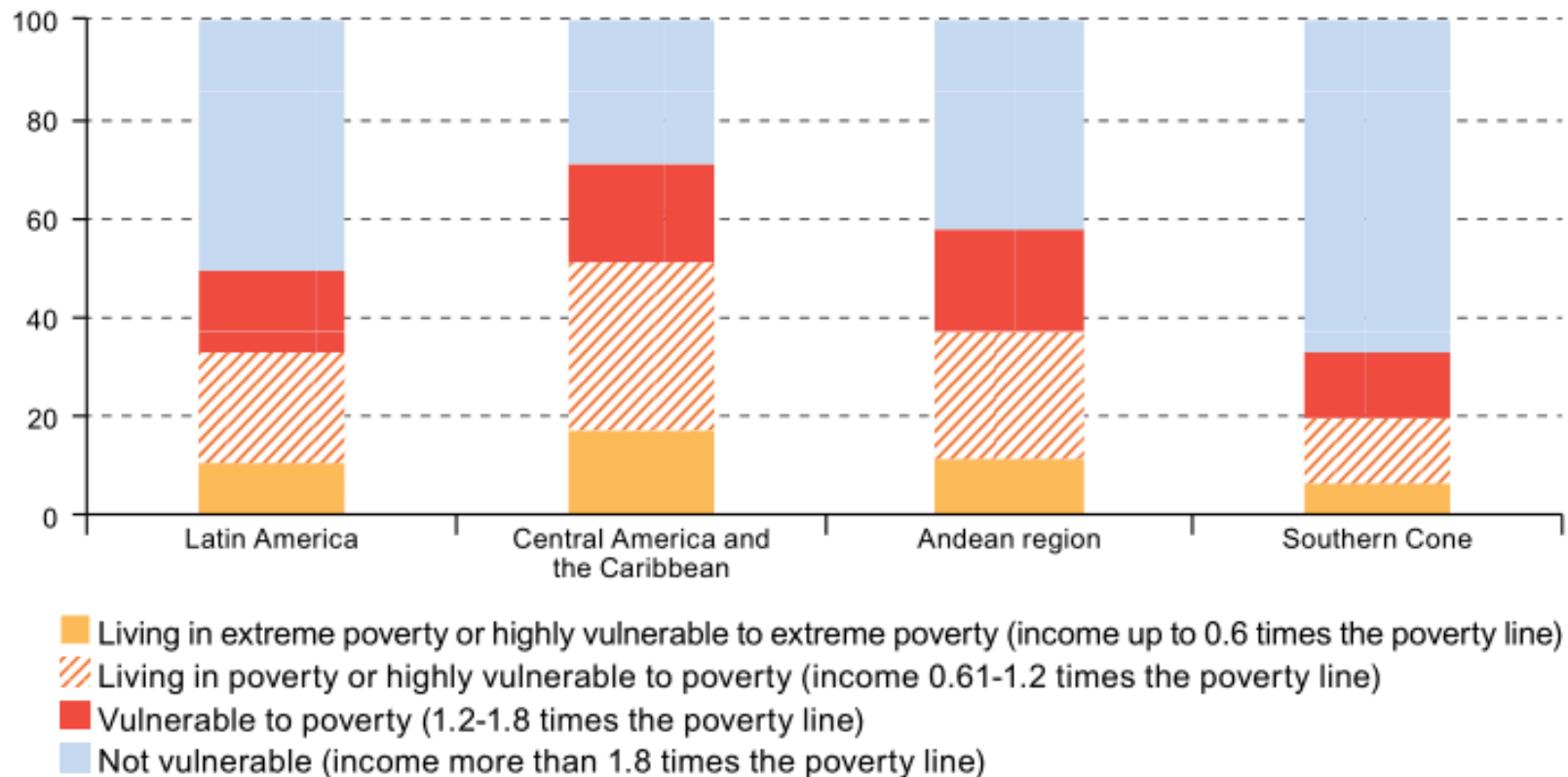


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Vulnerability

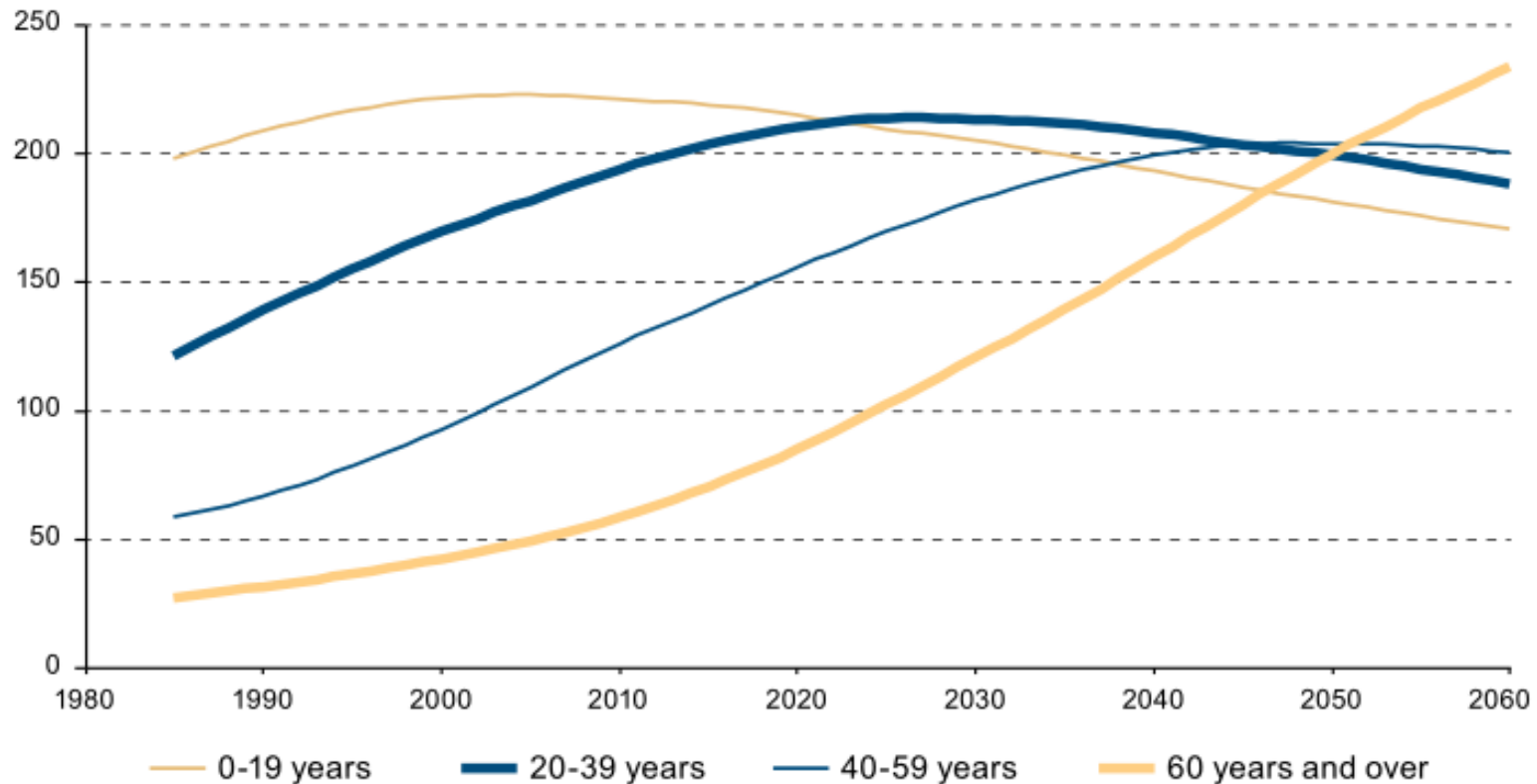
Latin America and the Caribbean: vulnerability to poverty by subregion, 2014
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys.

Aging population

Latin America: population by age group, 1985-2060
(Millions of persons)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, “World Population Prospects: The 2015 Revision, Key Findings and Advance Tables”, Working Paper, No. 241 (ESA/P/WP.241), New York, Population Division, 2015 [online] <http://esa.un.org/unpd/wpp/>.