

Horizons 2030

Equality at the Centre of
Sustainable Development

**Thirty-sixth
session
of ECLAC**

Mexico City,
23-27 May 2016



UNITED NATIONS

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Explanatory notes

- Three dots (...) indicate that data are not available or are not separately reported.
- A minus sign (-) indicates a deficit or decrease, unless otherwise indicated.
- A full stop (.) is used to indicate decimals.
- The term "dollars" refers to United States dollars, unless otherwise specified.
- A slash (/) between years (e.g. 2013/2014) indicates a 12-month period falling between the two years.
- Figures and percentages in tables may not necessarily add up to the corresponding totals due to rounding.

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I. A new development pattern: the 2030 Agenda for Sustainable Development

A. A change of era

The world must change its pattern of development. Economic slowdown and instability, the inequalities and tensions arising from the concentration of wealth and income among and within countries, and the risk of a serious environmental crisis are increasingly at the forefront of public debate. The search for a new development pattern and a new policy agenda is under way, and the relevance and urgency of this task has been confirmed by the recent evolution of the world economy and of the region in particular.

The prevailing pattern is showing signs of exhaustion that are jeopardizing common resources and the well-being of future generations. At the same time, a consensus is emerging in the international system regarding a different path, with an emphasis on combating inequality and protecting the environment. The 2030 Agenda for Sustainable Development and the Sustainable Development Goals, adopted in September 2015 by the United Nations, reflect this consensus, and constitute a political and conceptual advance with regard to the agenda previously set in the Millennium Development Goals. They represent progress politically, because they are the outcome of a broad-ranging debate conducted in a context of democratic multilateralism actively involving governments and social stakeholders, and they vindicate the principle of common but differentiated responsibilities between countries,

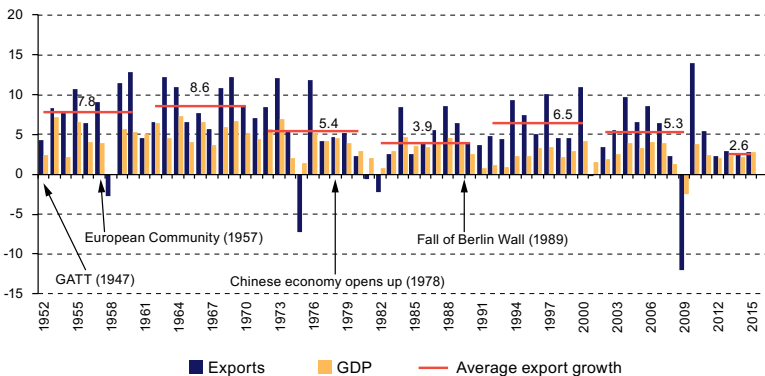
in environmental as well as social and economic matters. Conceptually, the progress lies in the wider range of themes covered in the new Agenda. Equality and environmental sustainability are the main pillars of the Sustainable Development Goals, but they also embrace other initiatives, such as the right to productive and good-quality employment, citizen participation and transparency.

B. The recessionary bias in the international economy: lack of demand and excess liquidity

The prevailing development pattern has encountered limits and is creating imbalances in the form of a recessionary bias in the global economy, the instability attendant upon the deregulation of the financial system, rising inequality and environmental degradation.

Growth rates for the international economy and trade have trended downwards since the mid-1970s (see figure I.1). This reflects the weakness of global aggregate demand in an international economic system that has no mechanisms to enable economies to expand in a coordinated manner or to correct competitive asymmetries between countries. It also reflects the fall in trade elasticity to output growth, which has brought down exports as a proportion of global output.

Figure I.1
World economic slowdown, measured by the annual variation in the volume of goods exports and in GDP, 1952-2015
(Percentages)

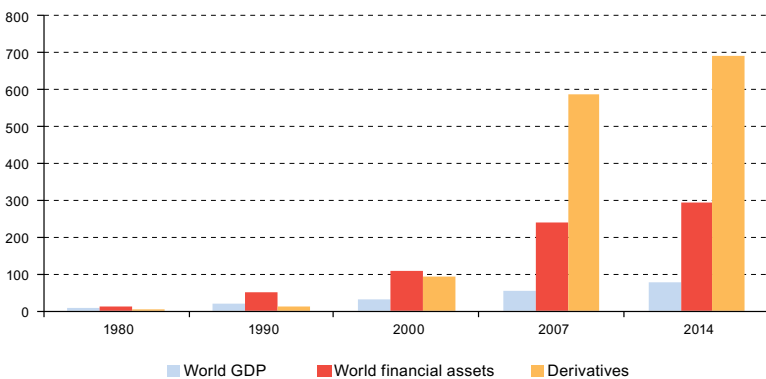


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of figures provided by the World Trade Organization (WTO) and the International Monetary Fund (IMF).

The world economy's weak and uncertain recovery following the international financial crisis of 2008 and 2009 is linked to the build-up of trade imbalances in the first half-decade of the 2000s and high external debt in some cases. In the absence of coordination, deficit countries allow their economies to slow or contract (to reduce the deficit), while surplus countries do nothing to boost growth or wages (thereby keeping their imports level). In conjunction with greater financialization and uncertainty, this has brought about a global slowdown in aggregate demand, leading to a lower rate of economic growth. In this game, the countries that come under the greatest pressure are the less developed countries running a deficit, which have fewer financial resources and fewer technological capacities to mitigate the impact of the adjustment or to reduce imports or increase exports.

Weak aggregate demand coexists with an excess of liquidity. The financial system is on a self-sustaining path of asset multiplication, to which current account imbalances and the resulting issuances of debt securities have contributed. Figure I.2 illustrates the jump in global finance compared with world production: financial assets, in particular derivatives, are growing exponentially relative to world GDP. Rapidly expanding financial wealth that far exceeds production and trade volumes has tremendous disruptive potential (Ocampo, Rada and Taylor, 2009).

Figure I.2
The dissonance between international finance and the real economy:
world nominal GDP, financial assets and financial derivatives, 1980-2014
(Trillions of dollars)



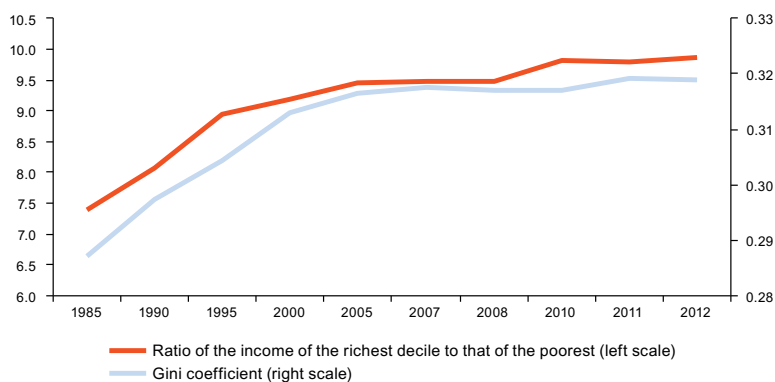
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of figures provided by the Bank for International Settlements (BIS) and World Bank, World Development Indicators, 2015.

These imbalances are not simply due to trade and financial factors; the existing technology and production asymmetries between countries are at the root of the disparities in competitiveness and the trade imbalances. The Latin American and Caribbean countries are particularly affected by low international growth and liquidity cycles, given their specialization in a small number of low-tech goods and their limited capacity to diversify their exports and enter new markets.

C. A more integrated but more unequal world

Income distribution inequality rose sharply between the early 1980s and the year 2000, and still slightly more thereafter. In the developed world and in several developing regions, inequality is at its highest level in more than three decades (see figure I.3). The Gini coefficient of the member countries of the Organization for Economic Cooperation and Development (OECD) increased from 0.29 in the 1980s to 0.32 in 2013, and this trend is found both in developed countries that have traditionally recorded higher levels of inequality (such as the United States, whose coefficient rose from 0.34 in 1985 to 0.39 in 2013), and in countries with a strong egalitarian tradition, such as the Scandinavian countries (OECD, 2015a).¹

Figure I.3
OECD member countries: Gini coefficient and ratio of average incomes of the richest and poorest deciles, 1985-2012



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Organization for Economic Cooperation and Development (OECD), *In It Together: Why Less Inequality Benefits All*, Paris, 2015.

¹ The Gini coefficient increased from 0.21 to 0.26 in Finland; from 0.22 to 0.25 in Norway; and from 0.20 to 0.27 in Sweden.

D. “The greatest market failure the world has ever seen”

The imperative to care for the environment, another key dimension of the 2030 Agenda for Sustainable Development, places economic growth in an entirely different light, and its negative externalities can no longer be ignored. Any efforts to recover global growth and to reduce income disparities between developed and developing countries must be measured and accompanied by an even greater effort to decouple growth from environmental impact.

The impacts of climate change are considerable, may be irreversible and call for an urgent collective response. These effects have translated into persistent rises in the earth’s surface temperature and changes in ocean dynamics, including a marked loss of the ice cap. There is also evidence of a sharp increase in the percentage of species at risk of extinction.

Because it does not internalize the externalities of environmental pollution, a country that pollutes can increase its own production and employment, while the negative effects are felt elsewhere. The benefit of greater production accrues directly to the producer, whereas its negative externalities are diffuse and are sometimes felt more intensely in regions far from the source of pollution. The incentives can be such that to pollute becomes the prevailing strategy. For this reason, Nicholas Stern (2006) has referred to pollution and climate change as “the greatest market failure the world has ever seen”. For that very reason, the response from the international community and national policy in respect of a new development pattern is a matter of unprecedented urgency and legitimacy, especially in the wake of the Paris Agreement, adopted in December 2015.

E. A new international consensus

Awareness of the environmental, economic and social limits of the prevailing development pattern has grown considerably in recent years. The 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals represent an emerging consensus in the search for a new development paradigm. The Agenda and the Goals are based on the following core concepts: a rights-based approach; a substantive

equality and the closing of gaps between and within countries; promotion of full and productive employment of good quality; full mainstreaming of the gender perspective; progressiveness; common but differentiated responsibilities (insofar as the developing economies are not historically speaking the main culprits in the environmental crisis); the indivisibility and interdependence of objectives; citizen participation and transparency.

In spite of the progress they represent, the 2030 Agenda for Sustainable Development and the SDGs may be challenged in three areas. The first concerns the means of implementation. The 2030 Agenda is not supported by an institutional framework or effective or sufficient global governance. This was reflected in recent decisions on financing for development enshrined in the Addis Ababa Action Agenda. The second relates to internal consistency: there is no analysis of how the Sustainable Development Goals interconnect, nor of their relationship with the economic variables that will determine whether or not they can be achieved.

There must be an analytical framework and an assessment connecting and explaining those variables and how they evolve; here, we propose a return to the development thinking tradition of the Economic Commission for Latin America and the Caribbean (ECLAC), as set up and updated in the position documents that make up the trilogy of equality: *Time for Equality: Closing Gaps, Opening Trails* (ECLAC, 2010a); *Structural Change for Equality: An Integrated Approach to Development* (ECLAC, 2012) and *Compacts for Equality: Towards a Sustainable Future* (ECLAC, 2014a). The policies proposed in the trilogy are based on multidimensional equality as a value for which the development model should strive, progressive structural changes to generate quality employment in low-carbon growth trajectories, and interdependence between conjuncture and structure—between the economic cycle and the long-term growth trend—as the key to a macroeconomic policy for development.

The third, and most important unresolved issue concerns political economy. There is a very high risk that, as happened to a great extent with the Millennium Development Goals, which were in any case minimalist in aim, the 2030 Agenda and the Sustainable Development Goals turn

into declarations of intent which are then systemically overridden by market forces and realpolitik. Implementing the 2030 Agenda calls for a new political economy—a new equation between the State, the market and society—and new international and national coalitions.

Policies capable of advancing the Sustainable Development Goals must take into account the major shifts occurring in the global economy and in regional conditions, as will be discussed in the following sections.

II. Global tectonic shifts are intensifying

The rise of China, mega trade agreements, demographic change, environmental crisis and technological revolution are driving a global transformation of economies and societies, repositioning countries and shifting the balance of power between economic blocs and between developed economies and the emerging world. The dynamics and outcomes of these processes have fuelled growing demand for the global public goods needed to achieve the Sustainable Development Goals by 2030.

A. China is redefining spaces and strategies in the international economy

One of the greatest changes of recent decades has been China's consolidation as a foremost economic and geopolitical power, thus recovering the status it held until the end of the eighteenth century (Toynbee, 1961). Its capacity to absorb technical progress and to change its production structure has allowed China to narrow its per capita GDP gap with respect to the most advanced economies. In 2014, the Chinese and United States economies each accounted for 16.6% of global GDP, with China responsible for the bulk of emerging and developing economies' increased contribution to global output. Between 1993 and 2014, this contribution rose from 42% to 57%; without China, the increase would have been just four percentage points (from 37% to 41%).

China's new role has been felt strongly in Latin America, because China has financed numerous projects and has become an alternative source of funding for countries with current account difficulties, but also because the commodities boom gave the South American economies extra scope for autonomous decision-making. However, the prevailing relationship between China and Latin America and the Caribbean has been of a North-South nature. China has expanded its presence in the region through projects in infrastructure and natural-resource exploitation. The region's exports to China consist mainly of low-tech or natural-resources-intensive goods, with a more negative environmental impact (measured in terms of carbon dioxide emissions and water consumption per dollar exported) than its exports to the rest of the world.

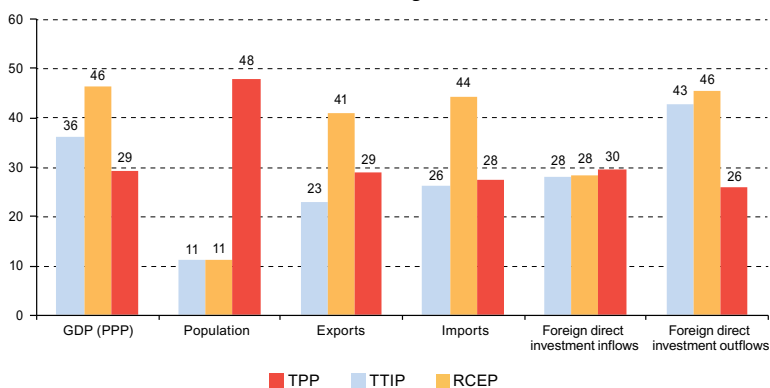
The region should create the conditions to negotiate on the opportunities that arise in its relations with China from a more advantageous position. While the world is moving towards megaregional trade agreements and is structured around a few major actors (China, the European Union and the United States), which are integrated into the different regions and have considerable bargaining power, the Latin American and Caribbean region remains fragmented and lacking in a common strategy.

B. Megaregional agreements are creating megaregional markets

Integration initiatives in Asia, Europe and North America—which have achieved much higher levels of trade and production coordination than those in Latin America—have been supplemented recently by megaregional initiatives such as the Trans-Pacific Partnership (TPP) between the United States and 11 economies of the Pacific Rim, including three in Latin America (Chile, Mexico and Peru), on which negotiations concluded in October 2015, as well as other agreements that are still at the negotiating stage. Among the latter are the Transatlantic Trade and Investment Partnership (TTIP) between the United States and the European Union, and the free trade agreement between the European Union and Japan. Also in this category is the Regional Comprehensive Economic Partnership, which is expected to compete with TPP as a model to set the ground rules in Asia for the coming years.

The existing megaregional agreements cover a significant share of the world's population, output, trade and foreign direct investment (see figure II.1). They all extend beyond the bilateral approach of most existing regional free trade agreements by aiming to create vast integrated economic spaces, whether Asian, trans-Pacific or transatlantic. Moreover, their thematic agenda is far more extensive and complex than has traditionally been the case, and it includes a number of areas not covered by agreements concluded in the framework of the World Trade Organization (WTO) (ECLAC, 2013; Rosales and Herreros, 2014).

Figure II.1
Selected groupings: share of world GDP, population,
trade and foreign direct investment flows, 2013
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of International Monetary Fund (IMF), World Economic Outlook (WEO) Database, April 2015 [online] <https://www.imf.org/external/pubs/ft/weo/2015/01/weodata/index.aspx>, GDP and population; United Nations Commodity Trade Statistics Database (COMTRADE) and World Trade Organization (WTO), exports and imports and United Nations Conference on Trade and Development (UNCTAD), foreign direct investment.

Note: Transatlantic Trade and Investment Partnership (TTIP), Trans-Pacific Partnership (TPP) and Regional Comprehensive Economic Partnership (RCEP).

The prolonged impasse in the WTO Doha Round negotiations is one of the factors accounting for the raft of megaregional negotiations which, if successful, will have a strong impact on the geographical distribution and governance of world trade and investment flows. In particular, the Transatlantic Trade and Investment Partnership between the United States and the European Union may set new rules for emerging international trade

issues, given the parties' economic weight and regulatory influence. In that context, there is a risk that TTIP will negotiate environmental, quality or traceability rules or requirements that are hard for the region's exporters to comply with. The new rules that have been agreed or are currently being negotiated in the Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership on intellectual property, capital flows, the handling of personal information on the Internet, State-owned enterprises and labour and environmental issues are just some examples. Thus, among other things, the region's governments could have less leeway to apply capital controls for prudential purposes, independently define their levels of labour or environmental protection, or ensure access to the Internet for educational purposes and to stimulate innovation.

Latin American countries participating in megaregional negotiations will directly experience the impact of these new rules, while those which are not participants will probably be exposed to them indirectly, since the results of these negotiations may ultimately provide the basis for future multilateral agreements at WTO.²

C. Slower population growth and demographic ageing

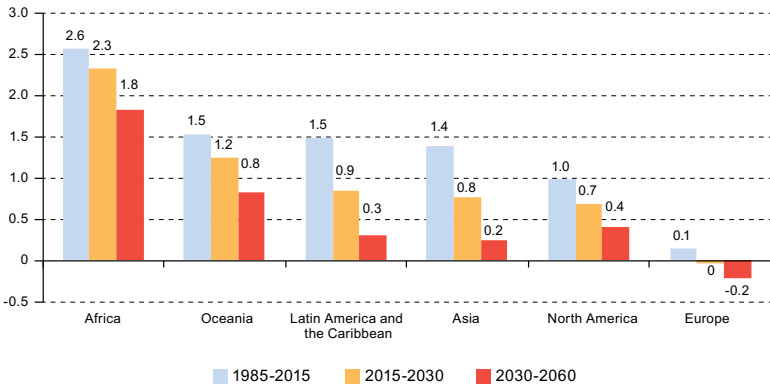
Population growth has slowed in all regions of the world. Annual growth rates of below 1% are expected in most regions during the period of the Sustainable Development Goals (2015-2030), whereas they exceeded 1.5% in the past two decades (see figure II.2). This trend shift is the outcome of a steep fall in the fertility rate. At the same time, population growth rates vary sharply between regions, with still very high rates in Africa and very low ones in Europe. Differences in fertility and degrees of development between regions suggest that the advanced economies will continue to attract immigrants in the next few decades.

In the three regions that receive the most immigration (Europe, North America and Oceania), the percentage of the foreign-born population continues to increase, while this percentage has either fallen or remained stable in Latin America and the Caribbean, Asia and Africa. Immigration makes up for the declining birth rate in the three regions that receive most

² Chile, Mexico and Peru are already bound by several of the commitments established in the Trans-Pacific Partnership, through their existing free trade agreements with the United States. In principle, therefore, the legislative and policy changes that they are required to make are less extensive than those facing Asian countries such as Malaysia and Viet Nam, which have no prior agreement with the United States.

immigrants, although the same movement has the opposite effect in Latin America and the Caribbean.³ Growing political angst over fertility and migration is especially worrying because it may fuel xenophobia; amid low fertility rates, nationalist groups have associated national identity with the native-born population and regard immigrants as a threat. There has thus been an upsurge in xenophobic political parties and groups with platforms that are hostile and discriminatory to immigrants, refugees and religious and ethnic minorities.

Figure II.2
Population growth rates by region, 1985-2015,
2015-2030 and 2030-2060
(Percentages)



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. ESA/P/WP/241, Population Division, 2015 [online] <http://esa.un.org/unpd/wpp/>.

Another two demographic trends with heavy economic impacts are urbanization and ageing. In 2008, urban-dwellers became the majority of the world population for the first time. In 1950, there were just 2 megacities, New York and Tokyo, and 77 millionaire cities (those with over 1 million inhabitants). Today, there are 29 megacities and 501 millionaire cities, with a further 12 megacities and 160 millionaire cities projected to be added during the period of the Sustainable Development Goals. Longevity and lower fertility rates have resulted in the ageing of the world's population,

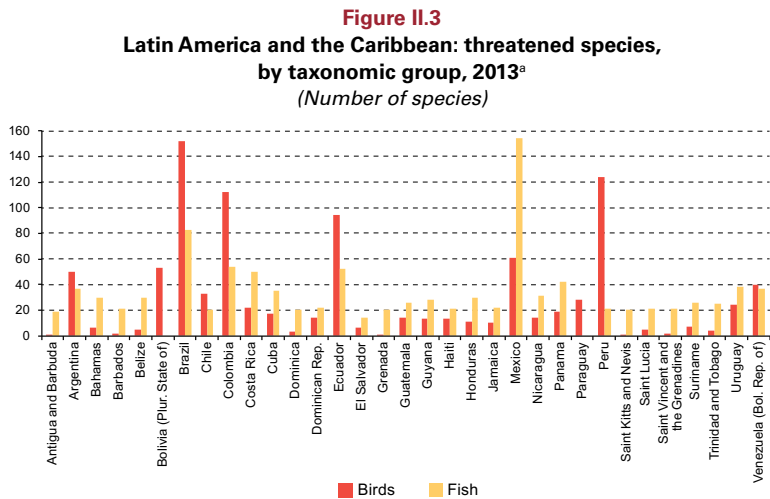
³ During the period 2005-2010, for every 100 births, 10 emigrants left the region. This average figure conceals the magnitude of emigration in several countries. For example, El Salvador reported 46 emigrants per 100 births, while Jamaica had 39, Cuba 32, Nicaragua 29 and Peru 24.

which has in turn changed patterns of consumption and investment. For example, the health care and its financing will come to account for a larger share of the economy during the period covered by the Goals.

New technologies are crucial for responding to the challenges of an increasingly aged, more urbanized population. In particular, the Internet of Things may improve the provision of health services and help to build environmentally sustainable, smart and integrated cities. This is part of a new Schumpeterian frontier for innovation and structural change, and has strong synergies with the objectives of equality and environmental stewardship.

D. A world in environmental crisis

Humanity has reached a point of no return: the environmental impact of the prevailing development pattern is endangering both its own survival and that of other species. The balance of ecosystems is unique and may be irreversibly damaged by anthropogenic causes. Figure II.3 depicts the number of endangered bird and fish species in Latin American and Caribbean countries.



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

^a The threatened species shown here refer to the number of species classified on the basis of the International Union for Conservation of Nature categories: critically endangered, endangered and vulnerable.

If current trends are maintained, the economic losses incurred as a result of climate change, could amount to upwards of 1% of GDP per year by 2100. The costs would be highest in Andean, Central American and Caribbean countries, and are in addition to those caused by extreme hydrometeorological phenomena and rising sea levels. Moreover, cases involving the loss of biodiversity or human life have irreversible consequences that cannot be quantified in economic terms.

The scientific consensus suggests that the world needs to move from its current emissions level of about 40 gigatons of greenhouse gases per year, equivalent to an average of 7 tons per capita, to average global emissions of 2 tons per capita by 2050. Latin America and the Caribbean is moving in the opposite direction, since its emissions have risen by 0.6% per year. Energy consumption in the region produces 4.6 tons of emissions per capita, almost equal to the figure for the European Union, with the difference that Europe is decoupling emissions from growth at an annual rate of -0.9% (see figure II.4). Achieving the level of 2 tons per capita in the Latin American and Caribbean region—considering its unequal income distribution and the fact that its highest income sectors make a disproportionate contribution to emissions—will require considerable improvement in the coverage and quality of urban public services such as mass transit, waste management and street lighting infrastructure, greater penetration and diversification of renewable energies (currently averaging 24% of the energy mix) and preservation measures in agriculture and forest cover, besides meeting the additional costs of adapting to rising sea levels, water stress and changes in agriculture.

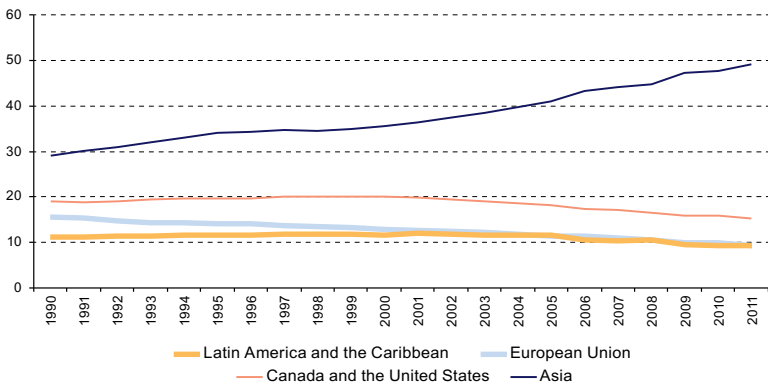
In light of the Paris Agreement, it is to be hoped that the currently inadequate global measures to slow climate changes may be vastly improved and that the countries of the region will tackle the rising costs associated with mitigation and, especially, adaptation with innovative, growth-boosting investment proposals (ECLAC, 2010b).

Efforts to move to a low-carbon growth path will not yield fruit without a package of supporting investments—an environmental big push⁴—in which every investment is coordinated with parallel investments in other sectors so that all are viable and profitable. No investments will be made in new energy sources unless they are accompanied by investments in

⁴ The concept of a big push as a cornerstone of development policy was proposed by Rosenstein-Rodan (1943).

industry and consumption that will enable these new sources to operate efficiently. Neither can new transport systems be created without a simultaneous expansion of road infrastructure, support services, smart networks and cities, physical and virtual interconnections, and the capacity to operate, maintain, repair and, in some cases, produce the necessary equipment and vehicles. Consumption and production patterns will not change unless the cost and price structure (including subsidies and eco-taxes) penalizes polluting processes and goods. An investment package centred on a new sustainable development pattern can and must be part of the solution to the global economy's problems of weak aggregate demand. An environmental big push would be a natural counterpart of global environmental Keynesianism.

Figure II.4
Greenhouse gas emissions, by region, 1990-2011
(Percentages of world total)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Resources Institute (WRI), Climate Analysis Indicators Tool (CAIT) 2.0., 2014, Washington, D.C. [online] <http://cait2.wri.org>.

E. The new technology revolution

The current trajectory of technology is based on the ability to understand the structure and behaviour of materials from their most basic elements and scales to their aggregation in complex structures and systems. These features are the building blocks of the four scientific-technological platforms that make up the NBIC (nano-bio-info-cogno) convergence paradigm: nanoscience and nanotechnology, biotechnology and life sciences,

information and communications technologies and sciences, and cognitive science and related technologies (Roco and Bainbridge, 2003).

The concept of NBIC convergence has now been extended to the convergence of knowledge, technology and society (CKTS), defined as “the escalating and transformative interaction among seemingly distinct scientific disciplines, technologies, communities and domains of human activity to achieve mutual compatibility, synergism, and integration, and through this process to create added value and branch out into emerging areas to meet shared goals” (Roco and others, 2014). CKTS is important for the Sustainable Development Goals. For example, interactions between platforms on a human scale (local food systems), a global scale (water cycle, nitrogen cycle, climate) and an NBIC scale (genetic improvement, for example) will have significant implications for the goals relating to hunger eradication and sustainable food production (Goal 2), climate action (Goal 13) and the protection of life on land (Goal 15).

1. Bio- and nanotechnologies

Since its beginnings in the mid-twentieth century, the biotechnology revolution has made a giant contribution to improved living standards, especially thanks to its agricultural and medicinal uses. Today, its applications lie mainly in the following areas: agriculture and related spheres; aquaculture and coastal and marine areas; health, medicine and diagnostics; food and nutrition; industrial applications; deserts and arid zones; combating bioterrorism, biowarfare and biocrimes; and addressing pollution problems.

The most recent applications in agriculture are geared towards improving productivity and developing varieties with desirable characteristics. Biotechnological applications for addressing environmental problems include improving soil quality through nutrient recycling and sustainable biomass production, imitating nature to obtain bioactive components and enzymes from plants and microorganisms, and the substitution of petrochemical products with biochemical alternatives. Industrial applications are also surging, giving rise to new concepts such as biobased industries (European Commission, 2013) and biorefineries, especially those that use waste as a raw material (Venkata Mohan and others, 2016).

Nanotechnology has grown exponentially in many areas, including agriculture and agro-industry, textiles, electronics, medicine and clinical diagnostic processes, pharmaceuticals, robotics and manufacturing. As a very recent development, nanotechnology is little regulated. This poses a significant regulatory challenge in such areas as the manufacture of new products and the protection of workers and the environment (Commission of the European Communities, 2008).

2. Universalization of the digital economy

Latin America and the Caribbean has experienced an unprecedented expansion in digital technologies, with 51% of the region's inhabitants classed as Internet users in 2014. Convergence between Internet-based devices, applications, networks and platforms has become a key factor in economic growth and competitiveness, to the point that the world economy is now a digital economy.

The greatest change in the economy is seen in business models based on the connectivity of objects, or the Internet of Things, with the greatest advances emerging in health (applications for monitoring, medication dispensers and tele-medicine) and manufacturing (robotization, advanced manufacturing and the development of next-generation machine-to-machine (M2M) services), as well as in areas such as energy, transport, natural resources and smart grids, all of which are clearly linked to the Sustainable Development Goals (ECLAC, 2015a). The resulting rapid changes in consumption and production patterns are challenging Latin America, for which the production of new technologies is largely exogenous.

The Internet of Things is having disruptive effects in all sectors. The boundaries between industries and markets are changing rapidly as smart, connected products emerge (Porter and Heppelmann, 2014) and cyber-physical production systems are created. Manufacturing will have a newly valuable role to play through combination with digital services: advanced manufacturing is revolutionizing the industry by enhancing its knowledge content, flexibility and competitive potential. Some developed countries have bolstered their industrial and technology policies through initiatives such as Industrie 4.0 (in Germany), Advanced Manufacturing (in the United States), and Made in China 2025.

Countries' competitiveness and growth will depend largely on their integration into global digital infrastructure. This will force them to improve their infrastructure, build up human capital and enhance the business environment. Consideration must also be given to the definition of global standards, the regulation of data flows, intellectual property rights and security and privacy of users. These issues should be addressed from a regional perspective and, as discussed in chapter VI, a common digital bloc or market could significantly support regional efforts to expand the digital economy in Latin America and the Caribbean (ECLAC, 2015a).

III. The international economic environment has been deteriorating

The world economic situation will be less auspicious over the next few years, with global GDP growth rates below the averages for previous decades. This is due to the weakening of the engines of growth (investment, productivity and, more recently, trade), mainly in the developed countries. Although emerging economies, particularly China, have managed to sustain high growth rates, they have not been able to pick up the baton to become the leaders of global growth.

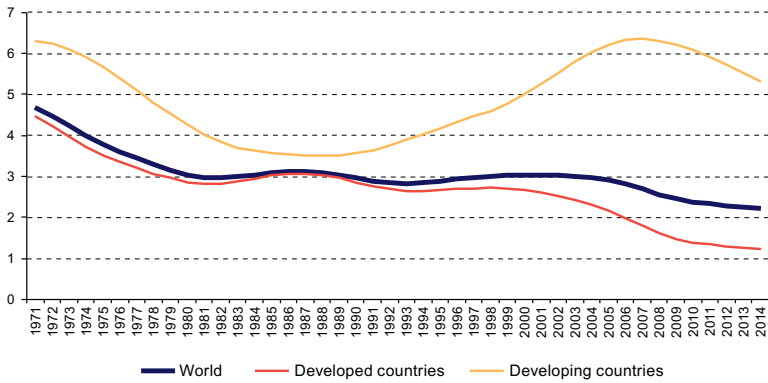
A. The global economy has weakened

Global economic growth has been tending to slow for over two decades now, with the real trend GDP growth rate dropping from 5.4% in 1961-1969 to 3.8% in 1971-1979 and 2.9% in 1990-1999, which was also roughly the rate from 2000 to 2014 (see figure III.1).

This tendency reflects secular decline in the most developed economies, whose growth rates dropped between 1961-1969 and 2000-2014. Conversely, developing regions have grown by more than the average and more than the developed countries, but still not strongly enough to make up for the decline in the latter.

The trend towards slowdown in the world economy has been associated, first, with a decline in the rate of gross fixed capital formation (GFCF) growth, which dropped from 4.0% in the early 1970s to 3.2% in the 1980s and 1990s. It picked up only temporarily in the early 2000s and has been below 3% since the global financial crisis.

Figure III.1
Trend in gross domestic product growth rates, 1971-2014
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators, 2015.

The downward trend in investment and capital formation has hurt productivity growth, since the most modern technological innovations are embedded in the most recent capital stock. Matching the declining trend of economic growth and investment, the productivity growth rate has also tended to fall or stagnate, especially in the developed world. In the United States, it increased in the 1990s (from 1.4% to 2.6% on average between 1990-1995 and 1996-2000), only to drop below 1% in the first half of the 2000s and then hover at around 1% between 2010 and 2015. The eurozone and the other industrialized economies experienced a clear decline in productivity growth in the 1990s. Productivity rose in the developing economies between the 1990s and the 2000s, largely because of the performance of China and India, where it more than doubled between the second half of the 1990s and the 2000s. However, productivity stagnated in the developing countries of Asia (excluding China and India), the Middle East and North Africa, and Latin America.

The behaviour of aggregate demand is crucial to investment decisions because of its impact on expected returns. The rise in inequality and the growing weight of the financial sector are two factors that have done much to weaken demand.

In the developed economies and some developing ones, inequality is at its highest in three decades (OECD, 2011 and 2015b), as indicated by the rise in the Gini coefficient (see figures I.3 and I.4) and the ratio between average incomes in the richest and poorest deciles. In the OECD countries, the average income was 7 times as great in the richest decile as in the poorest in 1985, but 10 times as great in 2013. Another indicator of the rise in inequality is the wage share of GDP, which dropped from 63% in 1960-1980 to 56% in 2012 in the most advanced economies. The rise in inequality has been even starker in wealth terms. According to Credit Suisse (2015), the richest 1% of the population of Western Europe owns 31% of all wealth, while the poorest 40% owns just 1%.

The greatest increase in inequality occurred in the 1980s and 1990s, a period characterized in the developed world by a simultaneous decline in the volatility of inflation and of GDP growth. The great moderation ended when Lehman Brothers collapsed in September 2008, marking the start of the global financial crisis. A similar trend can be seen in developing countries, where inequality levels are much higher than in developed ones, with the average Gini coefficient rising from 0.38 to 0.40 in developing regions between 1990 and the late 2000s.

Tax and social protection systems have not corrected these trends (Vieira, 2012), particularly in Latin America and the Caribbean. While the OECD countries reduce the Gini coefficient for household income by an average of 35% through taxes and transfers, the reduction in Latin America is just 6% (Amarante, 2015). Inequality results in a lower consumption capacity that acts as a drag on aggregate demand unless offset by higher investment.

In Latin America and the Caribbean, just a third of the profits share of GDP translates into investment, by contrast with a two thirds share in Asia. Latin America and the Caribbean is not only the most unequal region on the planet, but also the one whose elite is most reluctant to translate its position of privilege into the investment of profits (Palma, 2014).

B. International trade has been slowing

By contrast with the downward trend in output and investment growth since the 1970s, trade was highly dynamic until the start of the global

financial crisis. Since then, it has also shown signs of slowing, with the average rate of global trade growth dropping from 7.6% in 1992-1995 to 4.8% in 2001-2015. The extent of the slowdown has been heterogeneous, with Latin America and the Caribbean and Africa and the Middle East being worse affected than Asia and Eastern Europe and Central Europe (see table III.1).

Table III.1
Export volume growth, worldwide and by region, 1990-2015^a
(Annual percentages)

	1992-1995	1996-2000	2001-2007	2008-2011	1992-2000	2001-2015
World trade	7.4	8.1	5.7	2.8	7.8	4.1
World exports	7.3	8.1	5.6	3.1	7.8	4.1
Industrialized economies	6.2	7.6	3.6	0.8	7.0	2.3
United States	8.6	8.2	3.7	3.8	8.3	3.4
Japan	2.7	5.5	6.5	1.3	4.2	3.6
Eurozone	6.0	8.3	4.4	0.3	7.3	2.5
Other industrialized economies	-	-	0.7	0.0	-	0.9
Emerging economies	9.7	9.2	9.0	6.0	9.4	6.8
Asia	12.4	10.5	12.1	8.1	11.4	8.9
Eastern and Central Europe	11.3	10.1	11.7	4.4	10.6	7.9
Latin America	11.0	10.2	4.7	2.4	10.5	4.2
Africa and the Middle East	3.5	4.7	2.0	2.0	4.2	1.8

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Netherlands Bureau of Economic Policy Analysis (CPB), *World Trade Monitor*, 2015.

^a The data for 2015 are to September.

The trade slowdown has been due to both cyclical factors and structural causes, as indicated by the decline in the long-run elasticity of global exports to global output. The long-run elasticity of the index of export volumes relative to industrial production dropped from 2.0 in 1991-2000 to 1.6 in 2002-2008 and 1.0 in 2010-2015.

The lower income elasticity of trade reflects three factors. The first is a decline in the components of aggregate demand that have a larger imported component, such as investment (CEPR, 2015; Bussiere and others, 2013; Anderton and Tewolde, 2011). Secondly, the growth of value chains has lost momentum worldwide (Constantinescu, Matto and Ruta, 2015). This reflects the fact that the fragmentation of the

production between countries has been encountering limits, something also confirmed in the debate about the importance of reshoring. Lastly, the international system embodies a recessionary tendency, especially in the eurozone, because of the predominant adjustment mechanism used when balance-of-payments disequilibria arise. The surplus countries of the eurozone have been reluctant to adopt expansionary fiscal policies and this shifts the entire weight of adjustment to the deficit countries, which thus tend to experience slower growth or contractions.

C. A financial sector that is decoupled from the real economy

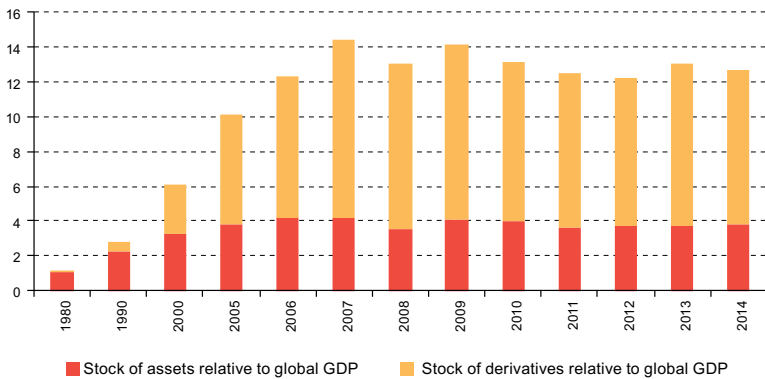
Besides transformations in the real sector, the international context is characterized by a financial sector whose transaction volumes are far larger than those of the real economy, led by large and complex financial institutions (LCFIs) that tend to be highly interconnected and concentrated and have a liability structure skewed towards procyclical leverage. In addition, this sector has a large segment that is little regulated, the shadow banking system, which increases uncertainty. This is part of a process of financialization, defined as a situation where financial markets, financial institutions and financial elites are increasingly important in the workings of economies and their institutions of governance, both nationally and internationally (Epstein, 2006).

The financial sector has expanded in an unprecedented manner in the past three decades. Between 1980 and 2014, worldwide assets (not including derivatives) expanded from US\$ 12 trillion to US\$ 294 trillion (1.1 and 3.7 times global GDP, respectively). In the same period, the value of derivatives contracts rose from US\$ 1 trillion to US\$ 692 trillion, thus coming to represent about 70% of the global stock of financial assets. The value of derivatives, having been roughly equal to global GDP in 1980, came to represent more than 10 times this by the second half of the 2000s (see figure III.2).

Governments responded to the 2008 and 2009 crisis with expansionary fiscal and monetary policies that prevented the crisis from worsening or being yet further prolonged. As fiscal space diminished (because public debt was increasing as a share of GDP or, in the United States, because of the political problems that increased spending

generated), the predominant course of action was an expansionary monetary policy in the form of quantitative easing (QE), adopted first by the United States and Japan and latterly by the European Union. Monetary expansion has helped keep long-term interest rates very low. However, aggregate demand has not picked up significantly, confirming the pattern of plentiful liquidity and low effective demand.

Figure III.2
Global financial deepening, 1980-2014



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of McKinsey, *Investing in Growth: Europe's next challenge*, McKinsey Global Institute (MGI), 2012; McKinsey, *Mapping Global Capital Markets*, McKinsey Global Institute (MGI), 2011; Deutsche Bank, *The Random Walk. Mapping the World's Financial Markets 2014*, 2015; Bank for International Settlements (BIS), "Statistical Release. OTC derivatives"; 2015; and World Bank, World Development Indicators, 2015.

Financial sector growth has been led by large groups, particularly LCFIs, which operate in different countries and dominate the global financial system. Institutions of this type are highly interconnected, with the result that the financial system has been becoming less dependent on deposits but more dependent on lending between the institutions themselves. One of the most important reflections of this is the increasingly close relationship between the banking system and the capital market. Greater interconnectivity means that an institution's financial stability comes to depend on the stability of other institutions. This being so, the handling of risk as seen from the perspective of an individual financial institution has system-wide consequences, thus representing a risk for the financial system as a whole.

This shift in the financial system has been reinforced by deregulation, which has driven growth in the shadow financial sector at the national and global levels. This includes financial intermediaries operating outside the formal system and conducting credit intermediation operations, such as leveraging and maturity transformation. The global shadow financial sector has grown since the crisis, rising from between US\$ 60 trillion and US\$ 67 trillion or so in 2007 to US\$ 71 trillion in 2012 so that, according to the Financial Stability Board (FSB, 2014), it now accounts for 24.0% and 46.7% of total assets and banking system assets worldwide, respectively.

Financial sector transformations have significant implications for the dynamic of the real economy, as seen in the behaviour of the commodity market in the 2000s. Raw materials can also be regarded as a financial asset, insofar as their prices respond more to changes in expectations of future conditions than to the current state of market supply and demand (i.e. the fundamentals). Some large financial institutions, such as Goldman Sachs, JP Morgan and Morgan Stanley, have been playing an increasing role in these markets.⁵ The growing role of commodities as financial assets can also be seen in the fact that they have been becoming increasingly associated with traditional financial assets such as shares in terms of returns and, above all, volatility. This implies that the behaviour of commodities is becoming increasingly dependent on the factors explaining the behaviour and fluctuations of stock markets.

⁵ The large banks involved in commodity markets are also the ones that have been heavily affected by the global financial crisis. Their leverage has dropped (from 33 to 12 between 2007-2008 and 2012), and they have consequently had to opt for other strategies, such as investment in commodities, to maintain profits. The recent falls in the prices of these have led the institutions concerned to alter their investment portfolios, giving less weight to raw materials.

IV. The region's position in the world economy has been weakening

The Latin American and Caribbean region is confronting the challenges of the 2030 Agenda for Sustainable Development with a lower long-run growth rate than other regions in the developing world and with persistent external vulnerability. Economic growth has slowed in most of the countries since 2010-2011, with some even experiencing contractions. The demand component most affected by the slowdown has been investment, which has negative implications for productivity and competitiveness. At the same time, fiscal space has tightened in almost all the countries. The combination of these factors indicates that the region will have to change its development style under less favourable conditions than in the previous decade, with less room for manoeuvre and a relative loss of technological capabilities.

A. The region has fallen behind

The long-run GDP growth rate of Latin America and the Caribbean over the 1960-2014 period is estimated to have been below that of all other developing regions except Sub-Saharan Africa and developing parts of Europe and Central Asia. In the most recent boom period (2003-2007), regional growth remained well below that of East Asia and the Pacific, developing parts of Europe and Central Asia, and South Asia. Similarly, the period of recovery that followed the crisis was weaker in the region (see table IV.1).

Table IV.1
Average per capita GDP growth by region
or income grouping, 1961-2014
(Percentages)

	1961-1970	1971-1980	1981-1989	1990-2000	2003-2007	2010-2013	2001-2014
Latin America and the Caribbean	3.3	4.4	-0.3	1.3	2.7	2.9	1.8
Brazil	3.3	5.9	-0.3	1.0	2.7	3.0	2.1
Mexico	3.6	3.7	-0.3	1.8	2.0	2.2	0.7
East Asia and the Pacific ^a	2.4	4.6	5.8	7.0	9.2	7.5	7.8
South Asia	2.0	0.7	3.1	3.2	6.5	5.3	5.2
Europe and Central Asia (developing only)	2.3	-0.5	7.0	4.0	3.9
Organization for Economic Cooperation and Development (OECD) (high-income countries)	4.2	2.6	2.6	2.0	2.0	1.2	1.0
Middle East and North Africa	5.0 ^a	3.0	0.1	1.5	3.5	0.2	1.7
Sub-Saharan Africa	2.4	0.9	-1.3	-0.7	3.7	1.7	2.1

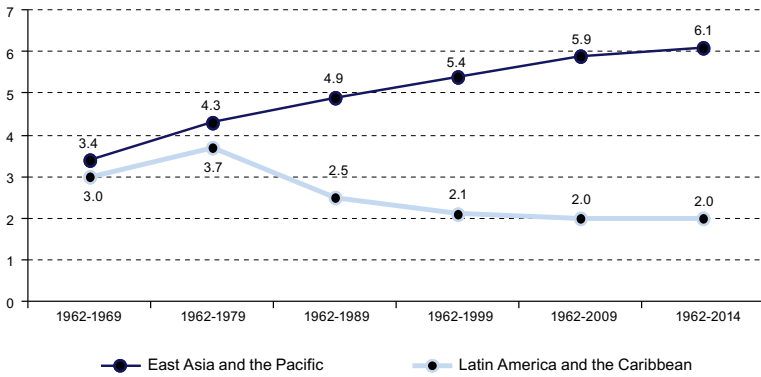
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators, 2015.

^a Data from 1966 onward.

Since the 1980s, the annual per capita GDP growth rate in the region has been just 2%, which means that its path has diverged from that of the more dynamic developing economies of East Asia and the Pacific (see figure IV.1). No differences between the averages are observed in periods of slow growth or in the 1962-2009 period, which includes the 2003-2007 boom.

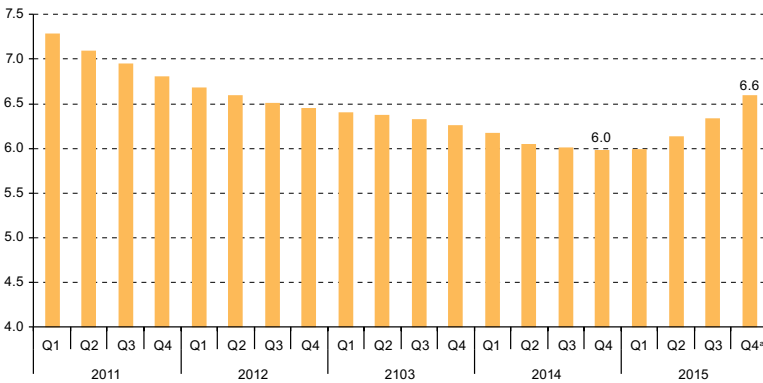
The growth slowdown hurt job creation and employment quality. The urban unemployment rate in the region has been rising since the fourth quarter of 2014 (figure IV.2). The quality of employment has also deteriorated, something that is reflected in the stronger growth of own-account work than of wage employment since 2012. These two factors help explain why the downtrend in inequality has petered out and some social indicators in the region have worsened since 2012.

Figure IV.1
Latin America and the Caribbean and East Asia and the Pacific:
real per capita GDP growth, 1962-2014
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators, 2015.

Figure IV.2
Latin America and the Caribbean: urban unemployment rate,
rolling years, first quarter of 2011 to fourth quarter of 2015^a
(Percentages)



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

^a Preliminary figures.

B. The determinants of the slowdown

Several factors account for the slowdown: weaker external demand, smaller financial inflows, especially of foreign direct investment (FDI), investors' heightened risk perceptions for the region, and a deterioration in the terms of trade.

The slackening of external demand has been reflected in a lower rate of export volume growth both regionally and subregionally (see table IV.2). If the value of goods exports from the region to the world is confirmed to have decreased by 14% in 2015, this will make three consecutive years of ever-greater declines in the value exported, turning 2013-2015 into the worst three-year period for the region's exports since 1931-1933, in the midst of the Great Depression. The 2015 contraction may be attributed to a sharp drop in prices (-15%) not offset by a higher volume of exports (1%) (ECLAC, 2015b, p.42).

Another determinant of the slowdown has been an increased perception of Latin America's riskiness as an investment destination. Current account imbalances and slower growth have increased investors' uncertainty about future performance. The Emerging Markets Bond Index (EMBI) spread (the difference between the interest rates on dollar-denominated bonds issued by emerging countries and United States Treasury Bonds, considered risk-free) has widened since the second half of 2014.

The consequences of the commodity price fall have differed widely from country to country. For net energy importers such as Central America, the Dominican Republic and Haiti, it has improved the terms of trade. In the case of agroindustrial commodity exporters (Argentina, Paraguay and Uruguay), lower energy prices have partly offset the drop in agricultural goods prices and helped to reduce the impact of weaker external demand on the current account. Conversely, the same development has had the opposite effect in countries that export hydrocarbons (the Bolivarian Republic of Venezuela, Colombia, Ecuador and the Plurinational State of Bolivia) and metals (Chile and Peru), as their terms of trade have deteriorated.

Table IV.2
Latin America and the Caribbean: growth in export volumes
and the terms of trade, 2006-2014
(Percentages)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Export growth								
Latin America	5.4	3.4	0.0	-6.3	8.6	4.3	3.8	2.3	0.3
South America	2.5	3.9	-0.5	-5.6	4.8	5.2	0.9	2.1	-3.0
Hydrocarbon exporters (Bolivarian Republic of Venezuela, Colombia, Ecuador and Plurinational State of Bolivia)	-0.7	-1.9	2.6	-3.8	-4.4	10.0	5.4	-0.9	-5.0
Central America, Dominican Republic and Haiti	7.1	8.1	3.6	-4.7	9.6	9.0	8.4	1.3	1.0
Agricultural commodity exporters (Argentina, Paraguay and Uruguay)	7.8	8.3	1.6	-3.8	17.1	4.5	-5.6	5.8	-7.9
The Caribbean	10.3	-5.4	2.6	-26.4	6.3	-0.3	-7.1	-3.1	-12.1
The Caribbean (except Trinidad and Tobago)	5.3	6.2	2.5	-18.9	0.1	4.2	10.7	-7.3	-24.4
Service exporters (the Caribbean except Guyana, Suriname and Trinidad and Tobago)	6.5	3.1	1.9	-24.2	-8.7	7.4	7.8	-16.0	-7.4
Metal exporters (Chile and Peru)	1.8	5.7	-2.0	0.7	-0.2	4.7	2.4	0.8	0.9
Brazil	3.5	5.5	-2.5	-10.7	9.5	3.1	-0.3	3.4	-2.0
Mexico	11.1	1.7	0.4	-7.8	15.8	1.8	8.3	2.8	9.4

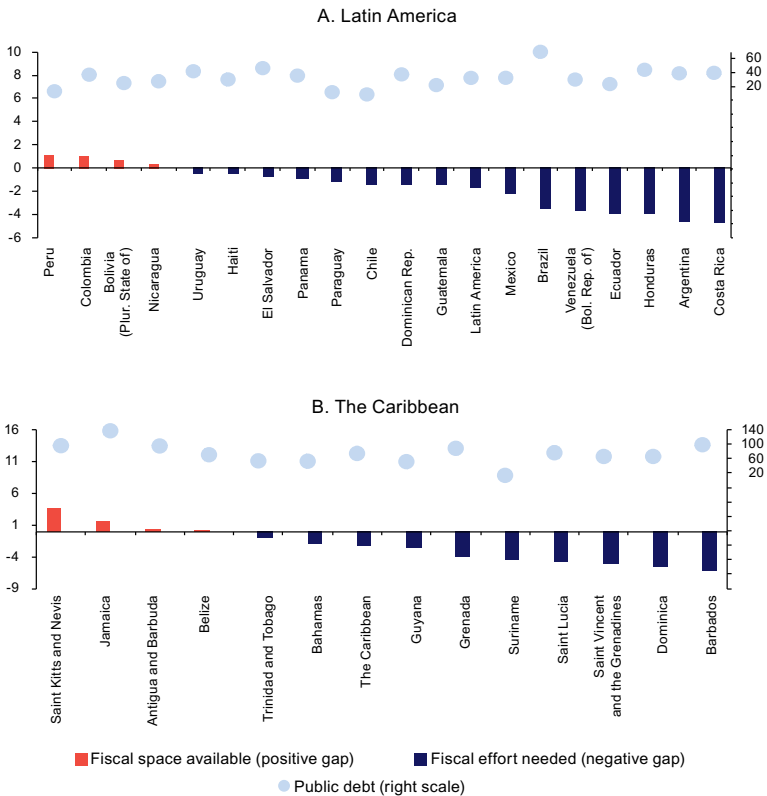
Table IV.2 (concluded)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Terms of trade growth								
Latin America	7.2	3.0	3.3	-7.0	10.7	7.7	-2.4	-2.2	-3.7
South America	5.7	3.2	1.9	-11.2	5.0	5.8	2.4	-2.5	-3.1
Hydrocarbon exporters (Bolivian Republic of Venezuela, Colombia, Ecuador and Plurinational State of Bolivia)	14.2	4.7	10.1	-11.9	14.5	14.0	0.1	-2.3	-4.3
Central America, Dominican Republic and Haiti	-2.2	-0.7	-6.2	7.0	-0.6	-1.5	-2.3	-2.8	1.5
Agricultural commodity exporters (Argentina, Paraguay and Uruguay)	4.5	5.5	11.0	1.4	1.9	9.2	3.4	-5.7	-1.2
The Caribbean	13.0	-4.1	8.9	-13.3	0.9	8.6	2.1	-2.3	-0.1
The Caribbean (except Trinidad and Tobago)	11.4	-4.2	-3.8	-0.2	5.4	-0.5	-1.4	-6.8	-0.1
Service exporters (the Caribbean except Guyana, Suriname and Trinidad and Tobago)	0.8	3.7	9.1	1.8	0.6	5.5	2.9	-3.7	0.7
Metal exporters (Chile and Peru)	30.6	3.9	-12.0	0.0	21.8	3.0	4.3	-4.2	-2.9
Brazil	6.4	3.5	5.3	-2.7	15.3	8.7	-5.1	-2.3	-3.3
Mexico	0.6	1.0	0.7	-10.7	7.3	7.0	-2.0	-0.2	-4.9

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

The drop in commodity prices has also affected the tax take in producing countries, particularly hydrocarbon and metal exporters or producers whose fiscal revenues depend heavily on these prices. The Bolivarian Republic of Venezuela, Ecuador and Trinidad and Tobago stand out, with fiscal revenues from the hydrocarbon sector representing more than 40% of the total take in 2010-2013 (see figure IV.3 A y IV.3 B). Of the mineral-exporting countries, it is in Chile that this sector accounts for the largest share of fiscal revenues (15.3%), followed by Peru (7.4%).

Figure IV.3
Latin America and the Caribbean: fiscal gap between the actual primary balance in 2014 and the primary balance required in 2015 to stabilize the public debt
(Percentages of GDP)



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

Falling exports, smaller financial flows and, above all, declining commodity prices have reduced the region's fiscal space, measured as the gap between the actual primary balance and the primary surplus required to stabilize debt as a proportion of GDP (ECLAC, 2014b).

The Caribbean has less fiscal space than the rest of the region because average debt levels there are high, at about 80% of GDP. The average fiscal effort required in 2015 to make the current level of debt sustainable is 1.3% of GDP (see figure IV.3B). Most of the countries in the subregion have a negative gap between the actual and required primary balance, with Saint Lucia, Grenada and Dominica needing to make an exceptional fiscal effort (some 6% of GDP or more). At the other extreme, Antigua and Barbuda, Jamaica and Saint Kitts and Nevis have a positive gap, which that means they can continue with fiscal consolidation.

C. External vulnerability remains, along with low investment

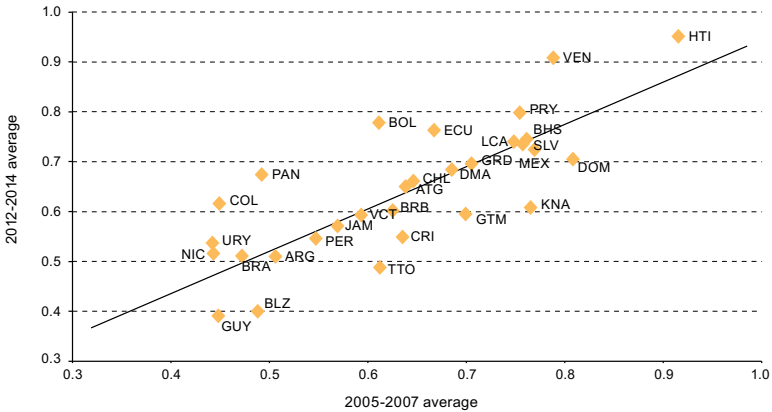
The economies of Latin America and the Caribbean are essentially exposed to two kinds of external shocks: real shocks, determined by movements in the terms of trade or changes in the growth rates of a country's main trading partners, and financial shocks, associated with fluctuations in short- and long-term external investment flows.

Real external vulnerability depends on each country's trade specialization. A lesser degree of production diversification or a higher degree of export concentration among just a few trading partners leaves an economy excessively exposed. The heavy dependence of a number of Central American and Caribbean countries on remittances from abroad or inbound tourism is a vulnerability of the same type. External financial vulnerability, meanwhile, depends on each economy's degree of leverage, including the greater or lesser degree of FDI penetration, which in turn depends on the degree of financial openness and the regulatory framework for foreign capital investment. This type of vulnerability is manifested in an unfavourable asset position, with high debt ratios. The greater the external leverage, the greater the exposure to sudden stops in the international financial cycle or changes in the monetary policy of the central countries.

Figures IV.4 and IV.5 show the evolution of real and financial vulnerability indicators in 2005-2007 (when there was a cyclical upturn prior to the global financial crisis) and 2012-2014 (after the crisis): real vulnerability increased in 17 of the 32 countries, while financial vulnerability increased in 29. The lowest degrees of vulnerability occur in most of the South American countries and the greatest, in the Caribbean. Mexico and Central America occupy intermediate positions in this regard.

South America and Central America have experienced significant declines in investment growth rates since 2013 (see figure IV.6). In Brazil and Mexico, the rate has been virtually nil. This investment pattern implies that the region is not building the capacities, infrastructure and innovation underpinnings required for a growth cycle like that needed to support the effort to achieve the Sustainable Development Goals.

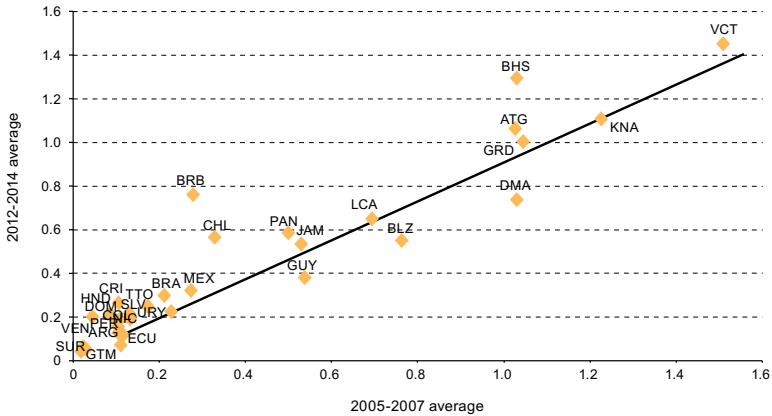
Figure IV.4
Latin America and the Caribbean: real vulnerability,
2005-2007 and 2012-2014



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

Note: Real vulnerability is defined using the highest of two alternative indicators: either primary goods exports as a percentage of total foreign-exchange inflows, or the sum of remittance receipts and exports of manufactures and tourist services as a percentage of total foreign-exchange inflows.

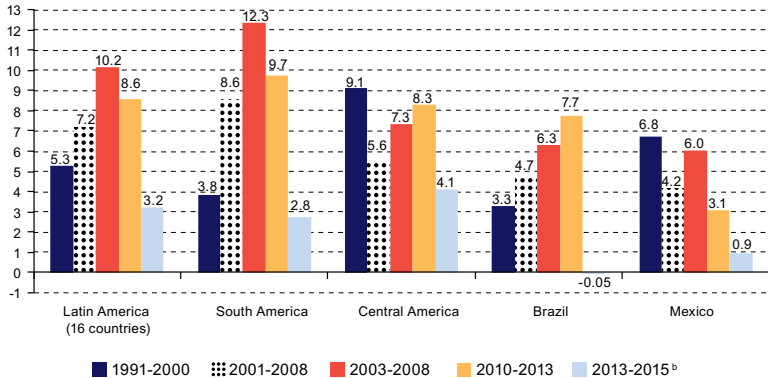
Figure IV.5
Latin America and the Caribbean: financial vulnerability, 2005-2007 and 2012-2014



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

Note: Financial vulnerability is defined as the ratio between the sum of portfolio investment liabilities and foreign direct investment net of international reserves, and GDP measured in dollars at purchasing power parity.

Figure IV.6
Latin America: rates of change in real-term gross fixed capital formation, 1991-2000, 2001-2008, 2003-2008, 2010-2013 and 2013-2015^a



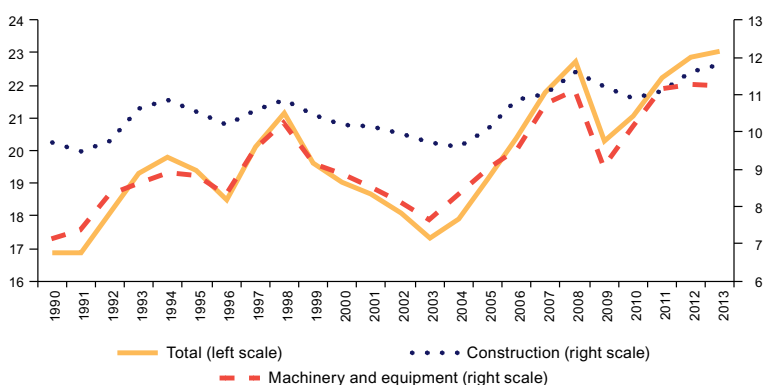
Source: Economic Commission for Latin America and the Caribbean (ECLAC), CEPALSTAT database, 2015.

^a The data are the averages for each subperiod and, in the case of the subregions, the average for the countries.

^b Data refer to the first quarter.

Comparing the region with others, especially East Asia and the Pacific, shows that the downturn of its cycle is steeper and deeper than the upturn, which has major consequences for long-term investment behaviour. In 1990-2013, and especially between 2003 and 2008, the evolution of investment was led by its most dynamic and highest-tech component —machinery and equipment (see figure IV.7). Investment in construction also increased, but much more slowly, from 9.6% of GDP in 1990 to 11.0% in 2010. During what was the region's strongest growth period in three decades, investment did not behave in a different or particularly dynamic way relative to other periods.

Figure IV.7
Latin America and the Caribbean: total gross fixed capital formation in construction and in machinery and equipment, 1990-2013
(Percentages of GDP)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), CEPALSTAT database, 2015.

The close link between the evolution of total gross fixed capital formation and the machinery component, which embeds the latest innovations and technological advances, is a key channel through which capital accumulation affects productivity. Eroded productivity can then widen the productivity gap between Latin America and the Caribbean and other regions, which has consequences in various spheres, especially international competitiveness.

V. Structural gaps have not narrowed

The external context is not the only factor shaping responses to the challenges of the 2030 Agenda for Sustainable Development: development possibilities are also constrained by the region's internal structures. Despite recent achievements in some areas, the structural gaps analysed by ECLAC in the publications making up its equality trilogy continue to obstruct progressive structural change.

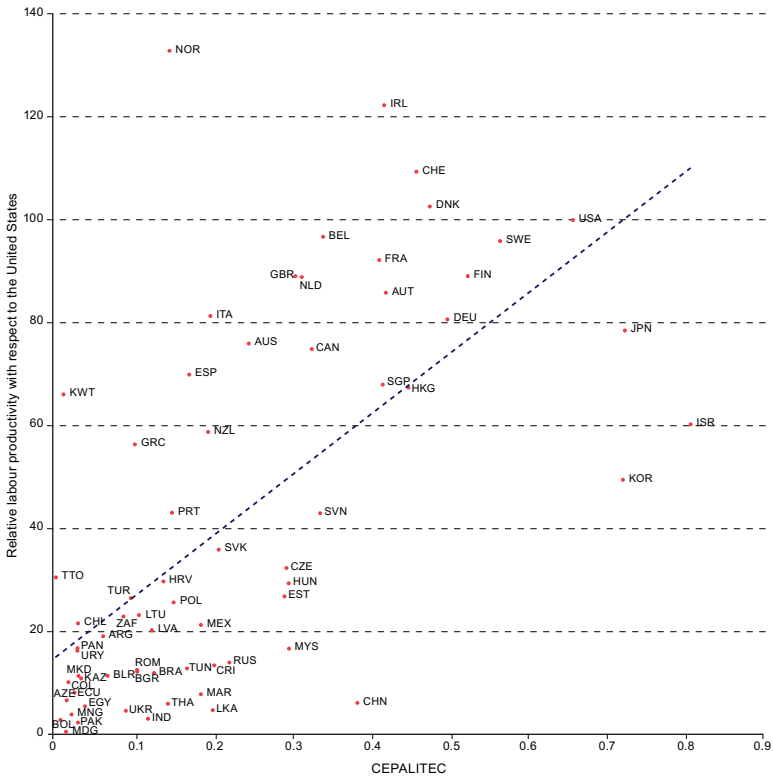
A. Low productivity and poor infrastructure

The 2030 Agenda for Sustainable Development calls for full productive employment, inclusive and sustainable industrialization, and innovation. Closing the productivity gap between the countries of the region and the developed world requires bringing more technology-intensive activities and sectors into the production structure of the countries that are furthest behind.

Figure V.1 shows the relative productivity of different countries compared to the United States, plotted against an indicator of technology intensity (CEPALITEC), which combines information on high-tech exports, patents, R&D spending and the weight of engineering in the manufacturing value added.

Most Latin American countries are in the bottom left-hand corner of figure V.1, with low technology intensity and low relative productivity. In general, their relative productivity is higher than would be expected from their technology intensity, reflecting the greater weight of natural resources than human capital in sustaining labour productivity.

Figure V.1
Selected economies: relative labour productivity
compared to the United States
and technology intensity index



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE), United States Patent and Trademark Office (USPTO), United Nations Educational, Scientific and Cultural Organization (UNESCO), Organization for Economic Cooperation and Development (OECD), Ibero-American Network of Science and Technology Indicators (RICYT) and ECLAC.

Note: CEPALITEC is an unweighted average of three indicators with values standardized between zero and one: medium- and high-tech exports as a percentage of total exports (high-tech exports according to the Lall classification); the number of patents per million inhabitants; and spending on R&D as a percentage of GDP

Investment in infrastructure is another key vector for productivity convergence with the international frontier, and indeed the 2030 Agenda includes building resilient infrastructure among its objectives. There is a significant gap between the region's investment needs and the amounts actually raised (Perotti and Sánchez, 2011), which adds to existing historical gaps (Perotti and Sánchez, 2011).

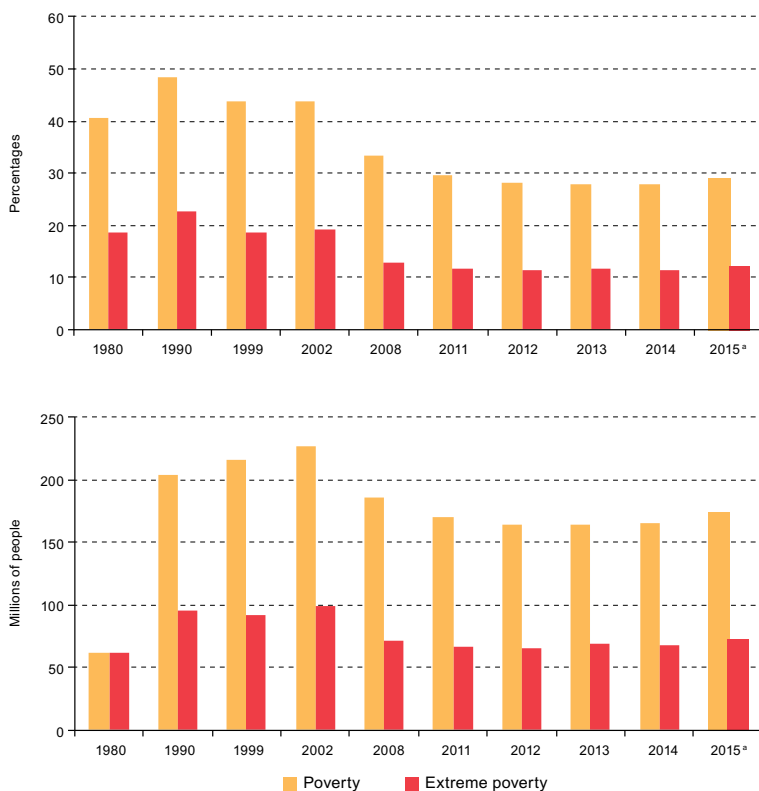
B. Poverty and income concentration increase vulnerability

Sustainable Development Goal 1 calls for ending poverty in all its forms everywhere, and it is complemented by Goal 10, to reduce inequality within and among countries. The Goals seek equality not only of opportunities, but of outcomes too.

Twenty-eight per cent of the Latin American population—168 million people— lives in poverty (see figure V.2). At the start of the 1990s, this figure was 48%, and in 2002 it had fallen just a little to 44%. Most of the decrease in fact occurred between 2002 and 2009. In the past few years, the downward trend has slowed and estimates for 2015 indicate an increase of nearly one percentage point. The extreme poverty rate follows a similar trend: after dropping from 19.2% to 11.8% between 2002 and 2014, it is expected to rise in 2015. The setback in poverty reduction is due to the slowdown in growth (with its impact on employment creation and decent work) and mounting inflationary pressures (Medina and Galván, 2014).

The improvement in material living conditions in Latin America between 2002 and 2014 resulted in the percentage living in or vulnerable to extreme poverty dropping from 22.2% to 10.9% in that period. The number living in or vulnerable to poverty also decreased, albeit to a lesser extent (nearly 6 percentage points), and the percentage of the population not at risk increased. The fact that a significant percentage of the population is close to the poverty line and highly vulnerable to returning to poverty in the event of a slight fall in their income should raise alarm bells at a time when economic conditions in the region are less auspicious.

Figure V.2
Latin America (19 countries): poverty and extreme poverty rates, 1980-2015^a
(Percentages and millions of people)

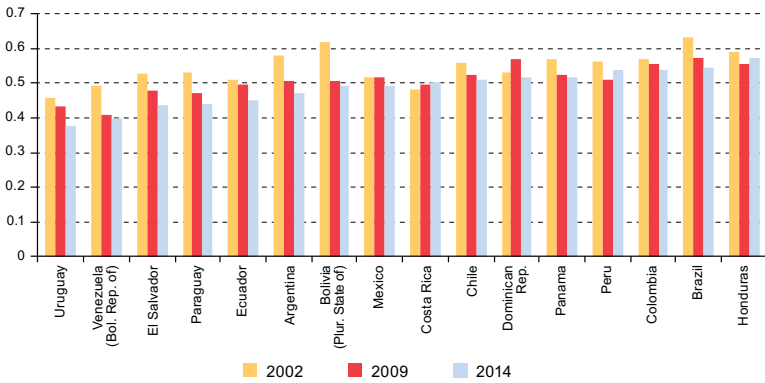


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys.

^a Projection.

Income inequality, as measured by the Gini coefficient, has eased in most of the region's countries, with the greatest achievements between 2002 and 2014 occurring in Argentina, the Bolivarian Republic of Venezuela, El Salvador, Paraguay and the Plurinational State of Bolivia, where poverty rates declined by more than 4% a year (see figure V.3).

Figure V.3
Latin America (16 countries): Gini coefficient,
2002, 2009 and 2014

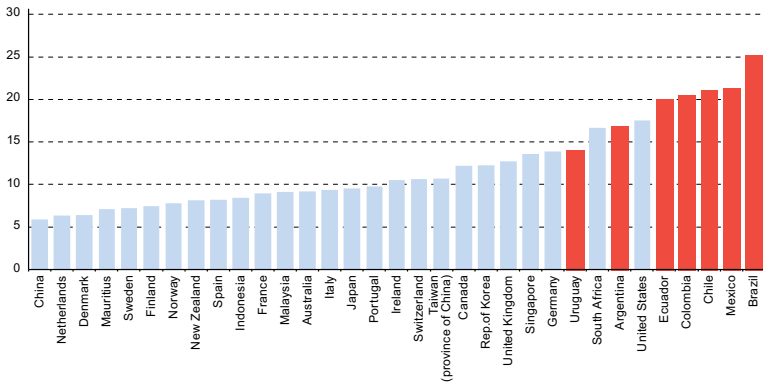


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys.

However, the figures from the last few years show that that inequality reduction has slowed. The percentage of income captured by the richest confirms the high levels of inequality prevailing in region (see figure V.4). In Brazil, Chile, Colombia, Ecuador and Mexico, more than 20% of total income went to the richest 1%, while in most developed countries (except the United States) this figure was not more than 15%.

Lastly, as well as looking at inequality in terms of income, progress is needed on the collection of data on wealth in the region. This effort should be part of the policy agenda, as it would contribute to discussions on the feasibility of more progressive tax policies and margins for implementing them, including, possibly, taxing capital and inheritance.

Figure V.4
Selected countries: share in total income
of the richest 1%, around 2010
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Paris School of Economics, The World Top Incomes Database [online] <http://www.wid.world/>; for Chile: T. Fairfield and M. Jorrot De Luis, “Top income shares, business profits, and effective tax rates in contemporary Chile,” ICTD Working Paper, No. 175, 2015; for Ecuador: L. Cano, “Income mobility in Ecuador: new evidence from personal income tax returns,” UNU-WIDER Working Paper series World Institute for Development Economics Research (WIDER), 2014; for Mexico: R. Campos, E. Chávez and G. Esquivel, “Los ingresos altos, la tributación óptima y la recaudación posible,” Premio Nacional de Finanzas Públicas 2014, Mexico City, Centro de Estudios de las Finanzas Públicas, 2014; and for Brazil: PH.G.F. Souza, M. Medeiros and F. 35, No. 2, 2015.

Note: The red bars correspond to countries in Latin America.

C. Shedding light on the gender gap

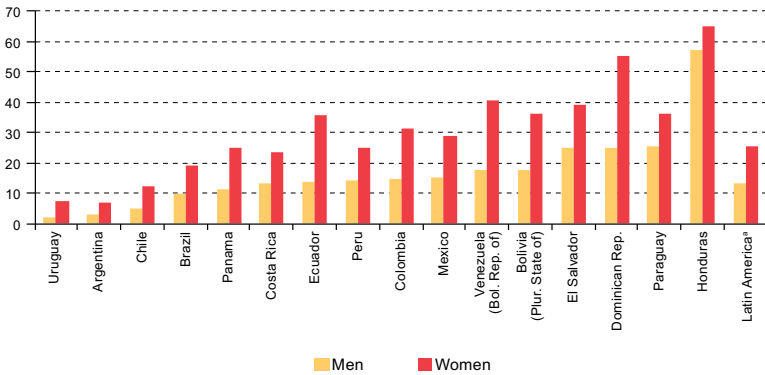
Sustainable Development Goal 5 calls for achieving gender equality and empowering all women and girls, emphasizing the effort to eradicate all forms of discrimination and to recognize and afford value to unpaid care work, which would help to empower women in the public and private spheres.

One way of bringing gender into the analysis of poverty is to analyse female-headed households compared to those headed by men. Considering households with only one adult⁶ shows up sharper gender differences (see figure V.5). In all the countries, poverty is higher among

⁶ This figure includes households which have only one adult between the ages of 20 and 59. This group represents 21% of households in Latin America (16 countries), ranging between 17% in Peru and 29% in the Dominican Republic.

women than among men for sole adults in the household. This is due to two factors: the lower income received by women and the composition of those households. Households with only one adult male are usually working-age, one-person households, while those with one working-age adult female are divided among single-parent, one-person or extended households. The average income that these types of household receive differs, and in the case of single-parent and extended households, depends on the number of people to be supported (children and older persons).

Figure V.5
Latin America (countries): persons aged between 20 and 59 living in poverty, by sex, in households where they are the only adult of that age, around 2013
(Percentages)



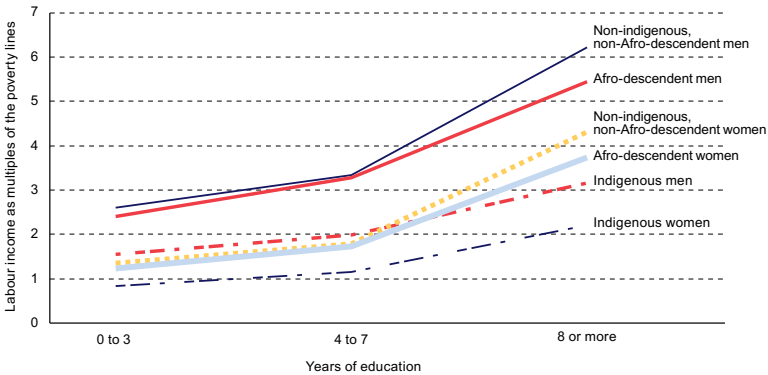
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys.

^a Weighted average.

The percentage of women without their own income is triple that of men in all the countries, which is attributable to differences in labour participation. Gender gaps in earnings—which are significant in most of the countries of the region—also contribute to this large difference (ECLAC, 2014c). These gaps intersect with and heighten ethnic and racial inequalities, leaving Afro-descendent and indigenous women are a particular disadvantage when compared with non-indigenous, non-Afro-descendent men (see figure V.6). In addition, women’s total work burden is larger than men’s. Although women’s financial contribution is negatively correlated with their hours of unpaid work, they always do

a larger share of the unpaid work. Regardless of the percentage of their household's income women contribute, they undertake at least 60% of the couple's total unpaid workload.

Figure V.6
Latin America (8 countries): average monthly labour income of indigenous, Afro-descendent and non-indigenous, non-Afro-descendent population, by years of education and sex, around 2011
(Multiples of the poverty line in each country)



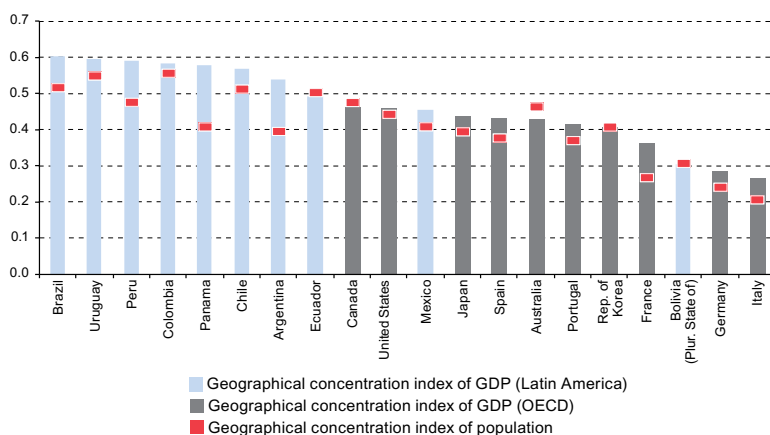
Source: Economic Commission for Latin America and the Caribbean (ECLAC), *Inclusive social development: The next generation of policies for overcoming poverty and reducing inequality in Latin America and the Caribbean* (LC.L/4056(CDS.1/3)), Santiago, 2015.

D. Territorial inequalities restrict personal development

Territorial inequalities come in two forms. The first is that the population and economic activity is heavily concentrated in a small number of geographical locations within each country, usually the major metropolitan areas. Comparison with a selection of OECD countries shows that geographical concentration is, in general, very high in Latin America and the Caribbean (see figure V.7).⁷

⁷ The geographical concentration of GDP index is the sum of the differences between the share of land area and the share of GDP of the leading subnational unit over the total for the country, in absolute values divided by two. The index is zero when the share of national GDP and the share of total land area are identical for all subnational units and moves closer to one as the differences between the GDP and land area shares of each subnational unit become larger.

Figure V.7
Latin America and OECD (selected countries):
geographical concentration index
of GDP and population, 2012

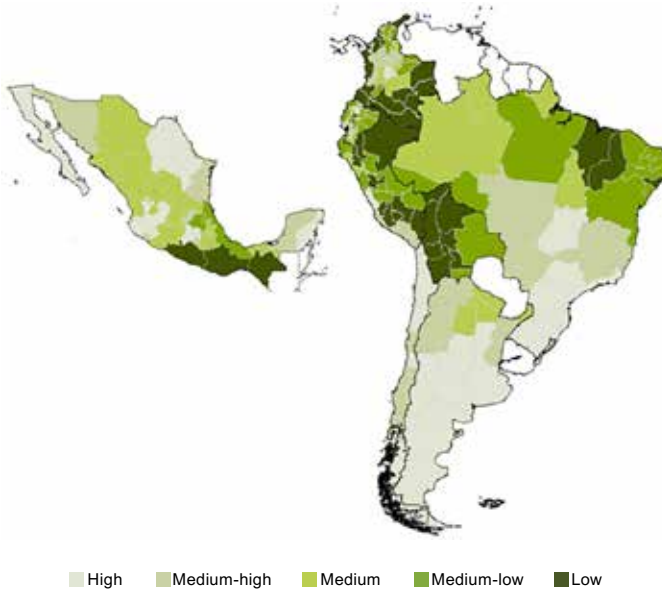


Source: Economic Commission for Latin America and the Caribbean (ECLAC), *Panorama del Desarrollo Territorial en América Latina y el Caribe, 2015* (LC/W.671), Santiago, 2015.

A second form of territorial inequality in the region is the wide gaps in the general living conditions of the populations of different areas. One indicator of territorial development, calculated for 8 countries and 182 territorial entities in 2010, classified the territorial entities into five groups, or quintiles, from least to most developed (see map V.1). Some examples of disparities within countries occur in North-East Brazil, south-eastern Mexico, the Andean areas of Peru and the Plurinational State of Bolivia, Greater Northern Argentina and southern Chile.

On average, for the least developed quintile, life expectancy is six years less, the infant mortality rate is three times higher and the illiteracy rate is five times higher than for the most developed quintile. The percentage of households with access to a computer in the highest quintile is three times that of the lowest, while the rural population accounts for 10% of the highest quintile and for 45% of the lowest. Given the importance place of birth has in a person's development prospects, territorial considerations should be included in national agendas and strategies in the region.

Map V.1
Latin America (8 countries and 182 territorial entities):
regional development indicator, 2010



Source: Economic Commission for Latin America and the Caribbean (ECLAC), *Panorama del Desarrollo Territorial en América Latina y el Caribe, 2015* (LC/W.671), Santiago, 2015.

Note: The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations.

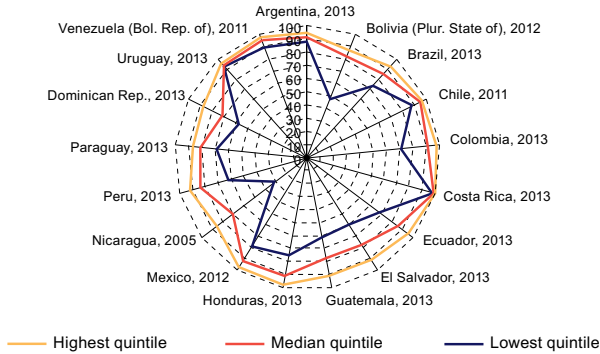
E. Environmental degradation also increases inequality

The combination of poverty and inequality makes the poor more vulnerable than the non-poor to the effects of environmental damage owing to their greater exposure to these problems, limited access to resources and lesser capacity to use political mechanisms effectively (Downey, 2005; Martuzzi, Mitis and Forastiere, 2010; Schoolman and Ma, 2012). Although the provision of basic services has improved in the region over the past 25 years, difficulties remain in extending them to the poorest groups.

Failings in provision of clean water and sanitation cause gastrointestinal infections that remain a major cause of death and healthy life years lost. They affect school attendance and educational performance, and mean

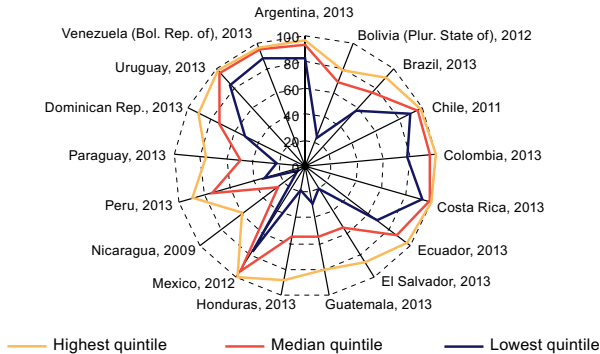
lost workdays. Households without drinking water face additional costs—getting water from tankers, negative health effects and opportunity costs (such as the time spent fetching water, which affects women in particular). There are significant differences by income quintile in access to piped water (see figure V.8) and to sanitation (see figure V.9).

Figure V.8
Latin America: dwellings with access to piped water,
by income quintile, around 2012



Source: Inter-American Development Bank (IDB), Sociómetro-BID database, on the basis of household surveys conducted in the respective countries.

Figure V.9
Latin America: dwellings with access to improved sanitation
facilities, by income quintile, around 2012



Source: Inter-American Development Bank (IDB), Sociómetro-BID database, on the basis of household surveys conducted in the respective countries [online] <http://www.iadb.org/en/research-and-data/tables,6882.html?indicator=3> [date of reference: 17 August 2015].

Lack of access to modern energy sources means that many households, urban and rural, continue to use solid fuels, which produce high levels of indoor air pollution, causing respiratory problems that can lead to illness and death. Collecting fuel, such as wood, has a high opportunity cost, particularly for women and children, and prevents or hinders them from participating in the labour market or going to school (Kozulj, 2009).

Deficient public transport produces inefficient urban systems where the richest groups use private vehicles (ECLAC, 2014d) and thus generate air pollution and congestion. Moreover, these groups benefit the most from fossil fuel subsidies and investments in infrastructure for private mobility (ECLAC, 2014d).

By sector, mining, quarrying, transporting and processing hydrocarbons, large-scale agricultural activities and mass tourism, have a significant impact on ecosystems. This particularly affects indigenous peoples and communities that rely on traditional ways of life, which are most vulnerable to water pollution caused by mining activities, the use of pesticides and other sources of contamination. These groups are also the ones most directly affected by phenomena such as deforestation and have limited access to political and institutional resources (information, participation and access to justice) to defend their interests.

The effects of climate change will be felt more directly and strongly by the poorest, who lack access to basic services and health care, are more dependent on natural resources for their livelihoods, and have limited access to technology and the financial resources needed to adapt. The households most affected are also those that have the most difficulty recovering from losses, meaning that these disasters have long-term effects on health, education, nutrition and productivity, and help to engrain poverty and inequality.

F. Structural gaps in Caribbean economies

As in other countries in the region, structural gaps hamper the development of small island developing States in the Caribbean —their production and export bases lack diversification, have weak linkages and are not particularly innovative (spending on R&D amounts to only 0.13% of GDP). These constraints are compounded by social problems, such as high maternal mortality rates, the spread of HIV (with the highest infection rate after Africa), high levels of unemployment and female unemployment rates that are double those of Latin America, as well as large pockets of poverty and vulnerability. The specificities of the Caribbean small island developing States increase the burden of financial, environmental, transport and connectivity (maritime and telecommunications) gaps, and heighten their vulnerability to natural disasters. Table V.1 shows that the Caribbean subregion presents especially adverse social and economic indicators.

The geographical situation of many of the Caribbean small island developing States makes them particularly vulnerable to the effects of climate change. This region is one of the most exposed to natural disasters: between 1990 and 2014 there were 328 disasters. These events caused extensive damage to production sectors and set back growth, and hurt the well-being of affected populations, as the most vulnerable sectors (agriculture and tourism) account for 76% of the subregion's GDP and many of its jobs. In light of the foregoing, it behooves Latin America to show solidarity with the Caribbean.

Table V.1
The Caribbean: selected indicators
(Percentages)

Country	Population living in informal settlements (2006)	Population living at an elevation of less than five metres (2012)	Population living under the national poverty line	Unemployment rate	Liner Shipping Connectivity Index* (2014)	GDP per capita (2013) (current dollars)
Antigua and Barbuda	47.9	15.5	18.3	10.2	4.1	13 342
Bahamas	...	23.55	12.5	14.0	26.7	22 312
Barbados	...	0.92	19.3	10.8	4.7	14 917
Belize	47.3	17.36	41.3	23.2	7.8	4 894
Dominica	...	3.05	28.8	14.0	1.6	7 175
Grenada	59.0	1.92	37.7	24.9	4.5	7 890
Guyana	33.7	11.81	36.1	10.7	4.1	3 739
Jamaica	60.15	3.08	17.6	13.0	24.5	5 290
Saint Kitts and Nevis	...	9.46	21.8	6.5	2.3	14 133
Saint Lucia	11.9	0.84	28.8	21.2	4.6	7 328
Saint Vincent and the Grenadines	0	0	37.5	18.8	3.9	6 486
Suriname	38.9	62.0	10.1	10.3	5.0	9 826
Trinidad and Tobago	17.0	5.9	17.3	18 373

Source: Economic Commission for Latin America and the Caribbean (ECLAC), "The Caribbean and the post-2015 sustainable development agenda", paper presented at the Symposium on sustainable development goals for the Caribbean within the post-2015 development agenda, Port of Spain, June 2015, unpublished.

* The Liner Shipping Connectivity Index (LSCI), computed by UNCTAD, captures how well countries are connected to global shipping networks. It is based on the number of ships, their container carrying capacity, vessel size, the number of services offered and the number of companies that deploy container ships in a country's ports. The maximum score is 100.

VI. An environmental big push for equality and sustainability in development

Achieving the objectives of an equality-centred agenda to the year 2030 will require a change in the style of development along with economic, industrial, social and environmental policies that are aligned with progressive structural change. Public institutions and policies must revolve around environmental big push geared towards transforming the production structure and strengthening the absorption of technical progress with sustainability and equality.

Putting the 2030 Agenda for Sustainable Development into effect will require action on three fronts (see table VI.1): international governance for the production of global public goods; regional cooperation and input to the global discussions; and national policies, in particular macroeconomic, social, industrial and environmental policies.

Table VI.1
Policy proposals for implementing the 2030 Agenda
for Sustainable Development

Sphere	Policies
Creating global public goods	<ul style="list-style-type: none"> (i) Achieve greater correlation between the weight of developing countries in the world economy and their representation and decision-making power in international financial institutions. (ii) Coordinate fiscal policies focused on environmental investments to give an expansionist thrust to the global economy and sustain employment. (iii) Coordinate foreign-exchange and financial policies to reduce trade imbalances and volatility through redesign of the financial architecture. (iv) Strengthen international coordination to reduce tax evasion and avoidance. (v) Create funds to finance the adaptation and transfer of environmental technologies. (vi) Disseminate environmental standards and eco-labelling to promote trade in goods of lower carbon intensity. (vii) Adjust global trade and investment rules to make them more compatible with the Sustainable Development Goals. (viii) Participate proactively in the discussion on Internet and information governance.
Strengthening the regional contribution	<ul style="list-style-type: none"> (i) Create or expand financial safety nets (Latin American Reserve Fund (FLAR), regional development banking, payments clearing system). (ii) Apply common fiscal, social and environmental standards to avoid predatory competition in international trade and foreign investment. (iii) Create a digital common market. (iv) Develop regional value chains in environmental goods and services. (v) Establish a regional fund for the purchase and licensing of patents. (vi) Create a debt relief and resilience fund for countries in the Caribbean.
National strategies and policies	<ul style="list-style-type: none"> (i) Fiscal space and multi-year planning to protect and promote public investment. (ii) Afford equal priority to nominal and financial stability in monetary policy. (iii) Implement suitable macroprudential policy in the external sphere, especially at times of abundant liquidity. (iv) Smart cities: expand the public transport and social integration system. (v) Increase the share of clean energies in the energy mix. (vi) Develop clean technology capacities. (vii) Create science centres to evaluate, implement and monitor intended nationally determined contributions (INDC). (viii) Gradually withdraw fossil fuel subsidies. (ix) Tax carbon-intensive sectors and activities. (x) Include environmental costs in the cost of bank loans. (xi) Achieve universal social protection. (xii) Achieve universal health and education coverage.

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

A. Governance for creating global public goods

1. Changing the international financial system

The discussion on governance must give greater recognition to the role that developing countries and their institutions can play in reforming the international financial architecture. The emerging countries need greater representation and effective participation in this discussion and in the

resulting governing bodies. The international financial architecture is governed by a small group of developed countries (G7 or G8) or by an “elite multilateralism” —countries that enjoy greater influence because of their quota shares, voting rights, and decision-making power in international organizations. Developing countries and their regional agencies play a minor role.

Mobilizing resources for development is also hampered by the magnitude of illicit capital outflows from developing countries and the great volumes of liquidity that are held in tax havens (OECD, 2013; Global Financial Integrity, 2015). Combating illicit flows and regulating tax havens could open up important sources of funding. Efforts in this direction are being supplemented by initiatives such as the Action Plan on Base Erosion and Profit Shifting (BEPS), which is intended to regulate the tax practices of multinational enterprises and to prevent tax evasion through the manipulation of transfer prices and tax arbitrage.

2. Climate security and implementation of the Paris Agreement of 2015

The Paris Agreement, adopted at the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) in 2015, marks a positive step in the construction of a new environmental governance. Given that 185 countries have made commitments to intended nationally determined contributions (INDC) under the Agreement, it covers virtually all global emissions of greenhouse gases.⁸ Recognition of the severity of the problem is reflected in the objective of limiting the global temperature rise to less than 2°C, or even to 1.5°C, over the pre-industrial level. The Agreement also establishes the aspiration to neutralize emissions through absorption, i.e. achieving carbon neutrality, by 2050.

⁸ There are two processes under way. The first began in 2010, on the basis of decisions taken at COP16 and its successors, at which certain developing countries (Brazil, Chile, Costa Rica and Mexico within the region) assumed mitigation commitments that expire in 2020. As well, as part of the Paris Agreement, nearly all countries (except Nicaragua and Panama within the region, according to information as of January 2016) have assumed commitments that will come into effect as of 2020 and that will be reviewed periodically to make them progressively stricter. The first review of intended nationally determined contributions, prior to their entry into force, will come in 2018.

This universal agreement, which involves commitments by both developed and developing countries while recognizing their differing capacities, represents a move away from the markedly differentiated regime of the Kyoto Protocol towards a regime in which all countries must make reductions according to the degree of development. As well, financial assistance to developing countries for mitigation and adaptation has been expanded, emphasizing the need to transfer and build technological and institutional capacities.

Yet there some aspects of the Agreement that need to be reformed. In the first place, the intended nationally determined contributions are to be established by means of domestic legislation, without international commitments that would lead to sanctions if not met. Second, the sum of these targets is insufficient to avoid a global temperature rise of 2°C above pre-industrial levels. Third, although mention is made of the importance of adaptation and the losses and damages occasioned by global warming, no compensation mechanisms or adaptation commitments have been established. Fourth, climate funds are earmarked resources and are not additional to official development assistance. And, finally, important steps in the area of environmental governance are still pending, such as carbon taxes and the labelling of less-polluting goods as guidance to the consumer.

3. Improving trade and intellectual property rules

The discussion of environmental governance needs to be cast within the broader framework of governance for development. Developing country governments will find it difficult to change production patterns if this undermines their capacities to promote growth and job creation. Greater consistency is called for among the various international regimes (labour, environmental public health, trade and so on) and between these and the measures being taken by governments to implement the 2030 Agenda for Sustainable Development and the Paris Agreement. Rather than creating limitations, trade agreements should build national capacities to internalize technologies and activities for the environmental big push

To create capacities, new policies are needed to help local firms, particularly the smaller ones, to access technology. One such policy would be to establish a fund to purchase and release patents that are

important from the sustainability viewpoint. Reducing the costs of acquiring technology by this means could have an even greater impact if it is done within an integrated regional market. This is an initiative that should be taken up by regional institutions, and operational input could be provided from the experience of public or private funds that purchase patents and license them to their members, thereby reducing transaction costs and risks of litigation.

4. Participation in the data revolution and in Internet governance

Citizens, businesses and governments of the region are now immersed in experimenting with and adapting to a new online ecosystem with more complete and up-to-date data that can be used to improve decisions and to make their impacts more transparent.

In November 2014, the Independent Expert Advisory Group on the Data Revolution for Sustainable Development (IEAG), appointed by the United Nations Secretary-General, proposed the development of global principles and standards, for which it is necessary to bring together and aggregate data from the public, private and civil society spheres. As a way to improve monitoring and evaluation of the Sustainable Development Goals, the United Nations is working to encourage stakeholders to create a global partnership on sustainable development data and is promoting mechanisms to ensure that the countries furthest behind have access to big data, thereby avoiding the emergence of a new digital divide. This is particularly important considering the scant weight of developing regions in the total stored data: in 2012 the United States and Western Europe accounted for 51% of all data stored, a figure that rises to 64% if China is included (ECLAC, 2015a).

To take full advantage of the data revolution and the possibilities opened up by the Internet of Things will require effective governance of the Internet, taking into account the ways information and knowledge are created, accessed, used and shared. Despite the widespread belief that the Internet is unregulated and the persistent difficulty in applying standards, the Web is subject to policies, self-regulation mechanisms and agreements between the industry and government that enable it to function. Benkler (2000) proposes a three-layered system for identifying the questions surrounding Internet governance.

The first layer refers to physical infrastructure and management of the IP networks (land-based and submarine cables, satellites, wireless communication systems and Internet exchange points (IXPs)). The second or logical layer corresponds to the administration of Internet protocols and unique identifiers, including routing servers, domain names and IP addresses. The third layer refers to the contents transmitted and the activities performed via the Internet, such as trade, communication, education, health management and entertainment which, in turn, have powerful economic, social and cultural effects.

Decisions on Internet governance, including its physical and logical layers, must take into account the speed and convergence of technological change, the elimination of physical and geographical barriers, and the decentralization of information and data (Masters, 2014). Although some countries in the region, such as Brazil, have been leaders in fostering discussion and promoting more balanced models, most are only just beginning to be involved in this area. The region has a platform for discussing and agreeing positions in this area: the Digital Agenda for Latin America and the Caribbean (eLAC2018), adopted by 18 countries of the region in 2015. The eLAC multi-stakeholder working-group on Internet governance has been one of the most active in this decade-long agenda. From a strategic viewpoint, the region's governments must enhance their understanding of what is at stake, define positions and coordinate them in order to make up for their scant weight in the current governance model.

B. Consolidating the regional contribution

Regional coordination and cooperation in Latin America and the Caribbean has a long track record. By tapping these accumulated capacities, the region could enhance its efforts to implement and indeed improve on the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.

1. Reinforcing the financial safety net

Regional financial cooperation and integration can play a valuable role in completing the global financial architecture. Expanding the Latin American Reserve Fund (FLAR) would be one possible route, which would require moving forward with a coordination agenda. A regional reserve

fund with a larger membership and more capital would contribute much to regional financial stability. This proposal is feasible and is supported by the fact that balance-of-payments problems and crises do not necessarily affect all countries of the region simultaneously.

Other areas involving cooperation among countries of the region include encouraging the conduct of bilateral trade in the currencies of the countries involved (as occurs between Argentina and Brazil); expanding the regional development banking system through the creation of new entities, such as the Bank of the South, and strengthening existing ones (e.g. the Development Bank of Latin America-CAF); and engaging in currency swaps with main trading partners, and issuing foreign-exchange insurance in contexts where speculation is liable to drive up demand for foreign currencies.

Improving domestic resource mobilization for development also requires progress towards better fiscal cooperation in the region in order to control tax evasion and avoidance and illicit capital flows. When it comes to attracting foreign direct investment, countries must avoid a race to the bottom. Competition of this kind, as well as in environmental matters and labour standards, will undermine countries' negotiating positions and produce a negative-sum game

2. Moving forward with regional integration

The regional space is crucial for diversifying production and exports. Trade within the region accounts for the largest share of exports of manufactures, absorbs the largest number of export products and is supplied by the greatest number of exporting firms. As well, it is the natural setting for the creation of production linkages, owing to geographical proximity and complementarity among national economies (ECLAC 2014e, 2014f and 2014g).

In the complex outlook now facing the region, it is even more urgent to take up the economic integration agenda once again. The renewed interest expressed by members of the Southern Common Market (MERCOSUR) in exploring options for working together with the Pacific Alliance could be an important catalyst in this process.

Common rules are needed for trade and investment. The greater the regulatory fragmentation, the higher the transaction costs for businesses,

especially SMEs. Gradual harmonization or mutual recognition of technical, sanitary and environmental standards —not only within the various integration arrangements but also between them— would do much to foster trade and economic integration within the region.

The same logic applies when it comes to trade facilitation. According to information for 2015 on 19 countries of the region, all have achieved significant progress in this field (ECLAC, 2015b). These advances would have a greater impact if they were coordinated at the regional or at least the subregional level. For example, in order to streamline regional value chains, the countries involved should agree on the criteria that a firm must satisfy in order to be an authorized operator, or on the required content of advance rulings. As well, regional or subregional coordination is essential in designing procedures to guarantee full interoperability of countries' single windows for foreign trade.

Allowing cumulation of origin among several countries would promote shared production and therefore production integration. All the subregional integration accords contain mechanisms of this kind, but they do not always apply between members of different schemes. Moving forward in this area would help to scale up production integration from the subregional to the regional level.

Industrial policy in the region has been traditionally devised with a view to favouring national objectives; it is time to move towards formulating national industrial policies with plurinational components. The coordination of national industrial policies admittedly poses political, technical and even budgetary challenges. Consequently, such initiatives must be approached gradually and in stages. Efforts could be focused initially in two areas: supporting the internationalization of SMEs and developing infrastructure for transport, logistics, energy and telecommunications (including broadband). Major plurinational initiatives are being pursued in all these spheres, such as the Initiative for the Integration of Regional Infrastructure in South America (IIRSA)—a technical forum of the South American Infrastructure and Planning Council (COSIPLAN) of the Union of South American Nations (UNASUR)—, the Mesoamerica Project and the Andean Electrical Power Interconnection System. However, the implementation of projects defined as priorities needs to be expedited.

3. Creating a single digital market

From the regional standpoint, one urgent strategic objective is to create a digital common market. Lowering cross-border barriers will facilitate the accessibility and distribution of digital goods and services, boosting the quality of supply and reducing the costs of access by taking advantage of economies of scale and of networking. Building a single digital market will require incentives to expand telecommunications infrastructure, to reduce legal and regulatory complexity, to harmonize rules relating to security, privacy, standards, data traffic and tax burdens, and to diminish transaction costs for the intraregional goods trade.

This medium-term effort will be greatly facilitated if results can be achieved quickly on issues now under consideration in the region, such as building a continental fibre optic ring and laying submarine cables to other regions, eliminating roaming charges for data transfer, and harmonizing policies for allocation of the radiofrequency spectrum. The creation of the digital common market can be based on national and regional institutional advances that are rarely present in other areas: examples are the Digital Agenda for Latin America and the Caribbean (eLAC2018) and the Mexico City Declaration, adopted in August 2015 at the fifth Ministerial Conference on the Information Society in Latin America and the Caribbean, which recognized the need to move toward this objective.

C. National policies for progressive structural change

1. Redefining macroeconomic policy

In the macroeconomic thinking put forward by ECLAC, articulating the short and long terms requires policies aimed at managing not only the level of aggregate demand but also its composition, as well as consideration of the effects of financialization on macroeconomic management (ECLAC, 2010a and 2012).

Fiscal policy is the countercyclical instrument par excellence, and it must not be confined to the quantitative control of the public accounts. Expanding fiscal space during an upswing for use during adverse times not only stabilizes GDP but also produces a greater average growth rate,

since the expansionary effect of using fiscal space (expenditure) exceeds the decline in growth generated at the time it is created (the effect of the savings on GDP during the upswing is in fact close to zero). Conversely, not pursuing countercyclical policy and making procyclical adjustments during the downswing leads to “the worst of all worlds”, for it is at this time that adjustment has the largest negative impact. The fiscal space created should then be used to protect public investment and crowd in private investment to achieve development objectives.

The redistributive dimension of fiscal policy needs to be strengthened. Unemployment subsidies and automatic inflation adjustments to social benefits and pensions for the most vulnerable sectors help to sustain consumption levels during the downswing and reduce inequality. The most effective countercyclical tax is income tax, although this heading also includes taxes on revenues from the exploitation of natural resources (ECLAC, 2012). A key step is the creation of intergenerational savings and investment funds and stabilization funds, such as those introduced in the Bolivarian Republic of Venezuela, Brazil, Chile, Mexico, Peru, and Trinidad and Tobago. So, too, is updating taxation systems to introduce progressiveness into the State’s share in windfall profits resulting from price booms (Altomonte and Sánchez, 2015).

Fiscal policy must be articulated with industrial, technology and environmental policy in order to shift profitability among sectors, internalize negative externalities, and protect non-renewable resources. A difficult but necessary step in this direction is gradually to reduce subsidies for fossil fuel consumption and to introduce environmental taxes. Soft financing (i.e. subsidized from government funds) for the development of energy from renewable sources is another instrument to be considered. This is what ECLAC has in mind when it calls for an environmental Keynesianism, i.e. the establishment of fiscal incentives that will sustain activity and promote the low-carbon development.

The challenge for central bankers is to coordinate monetary and exchange-rate policies so that the quest for nominal stability does not push up exchange rates excessively and the quest for currency competitiveness does not overheat inflation or compromise income distribution. The actual capacity to use exchange-rate policy to cushion the effects of international financial cycles is a function of the stock of international reserves. If a

countercyclical exchange-rate policy designed to promote a degree of exchange-rate stability is not to be hostage to large movements in interest rates or in the central bank's stock of reserves, new instruments must be developed to administer the exchange rate.

The goal of macroprudential policy is to regulate and maintain stability of the financial system at the aggregate level, by minimizing the systemic risk. This means reducing the accumulation of fragile financial structures, watching for excessive shrinkage in the balance sheet of financial institutions, and preventing external flows from becoming a source of instability. In a setting dominated by concerns over the balance of payments and financial openness, the regulation of cross-border capital movements needs to be given due priority in macroeconomic policy. Regulations can be applied to capital inflows and outflows, and they include measures to regulate prices (for example, taxes on portfolio investments by non-residents or taxes on the purchase of external assets by residents) and to regulate quantities (restrictions or limitations on capital inflows and outflows, minimum deposit requirements, special licences for the entry of foreign direct investment and other financial transactions). Just as important as the effectiveness of these regulations is the way the composition of the flows is managed, and its impact on sector balance sheets.

2. Broadening social protection for equality

The new development agenda presents an opportunity to undertake more solid commitments to eradicate poverty, reduce inequality and build universal social protection systems.

There is a broad spectrum of policies available for strengthening labour markets to promote greater equality. They include: increasing labour market formalization; raising the minimum wage; consolidating unemployment insurance programmes and reinforcing forums for collective bargaining and social dialogue to reduce wage dispersion and shorten the working day; promoting union membership and freedom of association; eliminating all forms of discrimination and eradicating child labour and forced labour; creating national public employment systems; promoting the economic empowerment of women through active policies to help them find jobs and to provide

training for upgrading their skills, rules and programmes that promote equal opportunities and treatment and eliminate wage discrimination; consolidating national care systems or networks; and articulating training systems with education systems.

Attention must be given to safeguarding the civil, political, economic, social and cultural rights of indigenous peoples and Afro-descendent populations. Countries must demonstrate their commitment to the first group by budgeting the funds needed to implement the United Nations Declaration on the Rights of Indigenous Peoples and to give full effect to Convention No. 169 of the International Labour Organization (ILO) of 1989 on Indigenous and Tribal Peoples in the 15 countries of the region that have ratified it. They must also support fulfilment of the commitments acquired at the World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance (Antón and others, 2009; Hopenhayn, Bello and Miranda, 2006).

A social protection policy that is sustainable over the long term must be closely associated with skills development and workforce participation with rights. The idea that “social issues are not played out in the social sphere alone” is more valid than ever in a globalized international economy where supporting employment requires workers who can switch quickly into the new activities and tasks imposed by accelerating technical progress. Making benefits universal, thereby providing a social safety net for workers, and providing them with training and education are essential components of a new economy that is more exposed to market fluctuations and technology shocks. This will require new institutions as well as long term worker-business compacts.

3. Implementing environmentally-focused industrial policies

Progressive structural change implies that the economy will move forward on a low-carbon growth path, in which production and emissions will be gradually decoupled. This will demand the development of technological capacities and innovations focused on sustainability. The environmental big push, then, is a concentrated investment effort to redefine patterns of production and consumption, based on learning and innovation. Environmental innovations, although sometimes hard for firms (especially smaller ones) to implement, can become competitive

assets, insofar as the regulations in this area ultimately make them more competitive. ECLAC thus believes that the environmental issue offers a great opportunity for a technological and production transformation that will lay the basis for creating high-quality employment. Creating national centres to analyse, monitor and evaluate the implementation of intended nationally determined commitments will make it easier to achieve these goals.

The energy sector will play a key role in redefining the style of development. The region has advantages in the generation of renewable energies, in particular hydroelectric, solar and land-based wind energy. While the prices of some of these energies are already lower than those of conventional sources, there is still the challenge of reducing their intermittency so as to make them reliable as base energy supplies. More decisive support for the incorporation of renewable energies, by cutting fossil fuel subsidies, taxing carbon emissions and adjusting regulations for purchase, generation and transmission, would facilitate a faster switch-over to cleaner energy sources. Renewable energies also have the potential to generate backward linkages, as has happened with solar and geothermal energy.

New opportunities for production diversification are emerging from the application of information technologies to production and the increased density of the industrial fabric, as current technologies and the energy mix are redefined. Examples include the management of smart cities, the expansion of mass transit, the processing of biodiversity, the development of biomaterials and the bioeconomy, eco-labelling, and renewable energy sources, as well as the production of renewable energies, with consequent development of their value chains.

Capitalizing on the potential of the bioeconomy will require: (i) developing regulatory frameworks in such areas as biosafety and biorisks, protection of biodiversity, and access to genetic resources; (ii) articulating policies for research, development and innovation in the areas of clean non-fossil energy, the use of biotechnology in agriculture and in human and animal health, the development of low-carbon agriculture, and payments for environmental services; and (iii) promoting bioeconomy-based SMEs by creating capacities and reducing access barriers to concentrated markets and to financing.

Stimulus for environmental stewardship must encompass the financial sector, increasing the use of instruments such as assessment of environmental risk in investment portfolios (for example, carbon risk indices and stranded assets), risk capital funds (such as the international climate funds), guarantees (such as those used by some bilateral cooperation agencies for financing climate investments) and insurance (such as those operating in the Caribbean). It must also redirect investment toward sectors of longer maturity, such as infrastructure.

The coordination efforts implicit in the environmental big push demand new policies and a new institutional system. First, countries must design policies that can be implemented with the institutional capacities at hand or those that can be developed in the short run. Second, policies must be viewed from an operational perspective, taking a production linkaging approach to facilitate interaction with the business sector, incorporation of the territorial dimension, and articulation among distinct sectors. Third, business dynamics require a combination of competition policy and institutions aimed at fostering good practices in corporate governance, to protect the interests of domestic and foreign investors and lessen corruption.

The region's experience points to five principles that must permeate industrial policies: tailoring to institutional capabilities, continuity, flexibility, involvement of stakeholders, and assumption of the costs incurred by change.

D. Conclusion: towards the environmental big push

The next few years will be a difficult time for the world economy and this will have to be taken on board by policy makers. Although the challenge is enormous, the effects of synergy would be such that progress in one direction will reinforce positive trends in others. Policies will be subject to two particularly serious threats: external vulnerability, and tensions on the social front.

The environmental big push will be both investment- and technology-intensive, resulting in high import levels that could hold back growth and compromise employment. For this reason, countries must internalize part of the production processes and the skills and capacities they require, and new markets must be opened for the region's exports, in order to avoid

current account pressure. Sound management of the real exchange rate can help achieve this balance, but is no substitute for industrial policy. A more proactive stance by countries in achieving regional trade and settlements accord could also help reduce external vulnerability.

Equality is another objective that could face tensions as social spending comes under pressure; accordingly policies will be needed to consolidate social progress. Universal social protection could set a floor for aggregate demand, which would also act as a countercyclical mechanism; universal access to education and health would also have a positive impact on productivity. Without social protection it would be difficult for people to sustain or improve their position in a labour market subject to constant technology shocks. Social protection is not an obstacle to development. To treat it as such is to forget the observation of Schumpeter (1942) that “motorcars are travelling faster than they otherwise would because they are provided with brakes”.

Epilogue

Partnerships and compacts for a new development pattern

Policies to implement the 2030 Agenda for Sustainable Development will hinge on a new development pattern: a progressive structural change centred on equality and environmental sustainability and based on social coalitions and compacts for governance at the global, regional and national levels. This shift requires a long-term vision and a new correlation of social and political forces. At the global level, it will need global public goods such as stable growth for full employment and environmental stewardship, tapping the opportunities opened up by the fourth industrial and technology revolution. To move towards this new development pattern, four governance mechanisms will need to be put into operation and supported by political coalitions:

- (i) The international coordination of economies in favour of sustained investment growth, based on fiscal policies that prioritize low-carbon, more energy-efficient projects (global environmental Keynesianism).
- (ii) A new international financial architecture that reduces both real-economy and price volatility, and makes progress towards the reform of the international monetary system.
- (iii) Multilateral trade and technology governance that facilitates and extends access to technology and financing so as to decouple growth from environmental impacts, helping reduce asymmetries between countries and regions.
- (iv) Shared governance of the key components of the digital economy at the global and regional levels.

There is considerable convergence between global environmental Keynesianism and economic development. The new governance of international trade and intellectual property rights should be based on increasing uptake of low-carbon technologies and production processes by developing economies. The adaptation to and mitigation of environmental change impacts should be linked to the building of countries' endogenous (human and technological) capacities to overcome their development constraints while preserving the external balance.

At the domestic level, countries must universalize social protection and the provision of education and health services to generate proactive—rather than merely defensive—responses to the uncertainty caused by globalization and the technology revolution. Public and private stakeholders have a better understanding today of the importance of ensuring a decent minimum income to provide social stability during the inevitable transition to robotics, which will hit employment hard. The universalization of rights is a powerful incentive to expand the partnership for a new development pattern, but would be an empty promise without sustained increases in productivity and competitiveness.

The firms that emerge under the new development pattern will be moulded by the shift of economic incentives towards low-carbon activities and mitigation efforts, insofar as they will have to shift their investments accordingly. In this context, Schumpeterian growth is possible on the fronts of accumulation opened up by technology dynamics and environmental protection: the environmental big push.

The expectations, plans and declarations of the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21), at which governments voiced their concerns, and the meeting of the World Economic Forum held in Davos, Switzerland, in early 2016, which analysed the impacts of the business-driven fourth industrial revolution, reflect the potential for convergence between growth, productivity, employment and development, with a focus on protecting the environment and shared resources. But there are barriers standing in the way of progress towards the necessary partnerships.

First, the implementation of the Paris Agreement may clash with the constraints imposed by bilateral and regional trade and investment

agreements, and even with some of the rules of the World Trade Organization (WTO). Second, States need to claim back the room for manoeuvre that has been lost to capital account deregulation, which is threatening growth and exchange-rate stability. Third, the difficulties in establishing domestic partnerships are no less acute than those that hamper the construction of global public goods. Most obvious is the contrast between the need for long-term policies and the short-term horizon that predominates among many major stakeholders. The environmental big push requires agreement between political actors, business, trade unions and social stakeholders to maintain and develop activities, institutions and policies that extend beyond electoral cycles.

Despite the difficulties and the distance that separate us from the proposed objective, the region is not starting from scratch. Awareness of the constraints of the status quo, the resurgence of planning, the implementation of progressive social policies with a universalist approach, the demand for honest and transparent government, and the promotion of regional integration initiatives all form part of the response to the prevailing development pattern and the quest for new horizons. Latin American and Caribbean societies are no longer willing to tolerate inequality as a given.

Lastly, and importantly, the region must embark on this production shift amid adverse conditions on the international, regional and national levels. Slower global growth and the threat of a new international financial crisis may hit the region hard at a time when regional integration is weak, the fiscal space to respond through countercyclical policies has narrowed or is non-existent, and political and governmental institutions have lost prestige in many countries.

Progressive structural change will depend on each society's choice between two paths: either a return to the old, unsustainable path, associated with an increasingly fierce conflict over distribution and social, institutional and political fragmentation; or a transition to a new development pattern, in which collective action and long-term compacts in democratic societies promote equality, transparency and participation, with a focus on productivity, good-quality employment and environmental stewardship based on the dissemination of new technologies and an environmental big push.

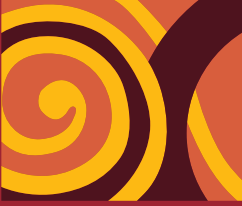
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The world is living a change of era. The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals represent the international community's response to the economic, distributive and environmental imbalances built up under the prevailing development pattern.

This document, presented by the Economic Commission for Latin America and the Caribbean (ECLAC) to its member States at its thirty-sixth session, provides an analytical complement to the 2030 Agenda from a structuralist perspective and from the point of view of the Latin American and Caribbean countries.

The proposals made here stem from the need to achieve progressive structural change in order to incorporate more knowledge into production, ensure social inclusion and combat the negative impacts of climate change. The reflections and proposals for advancing towards a new development pattern are geared to achieving equality and environmental sustainability.

In these proposals, the creation of global and regional public goods and the corresponding domestic policies form the core for expanding the structuralist tradition towards a global Keynesianism and a development strategy centred around an environmental big push.

