

*Summary*

---

**2012**

**STRUCTURAL  
CHANGE  
FOR EQUALITY**

---

*An Integrated Approach  
to Development*

---



UNITED NATIONS

**ECLAC**

*Thirty-fourth  
session  
of ECLAC*

*San Salvador,  
27 - 31 August*

*Summary*

**2012**

**STRUCTURAL  
CHANGE  
FOR EQUALITY**

---

*An Integrated Approach  
to Development*

---



UNITED NATIONS



*Thirty-fourth  
session  
of ECLAC*

*San Salvador,  
27 - 31 August*

The preparation of this document was coordinated by Alicia Bárcena, Executive Secretary of ECLAC, in collaboration with Antonio Prado, Deputy Executive Secretary, Mario Cimoli, Chief of the Division of Production, Productivity and Management, Juan Alberto Fuentes, Chief of the Economic Development Division, Martin Hopenhayn, Chief of the Social Development Division and Daniel Titelman, Chief of the Financing for Development Division.

The drafting committee also comprised Wilson Perés and Gabriel Porcile, in collaboration with Martín Abeles, Verónica Amarante, Filipa Correia, Felipe Jiménez, Sandra Manuelito, Juan Carlos Moreno-Brid, Esteban Pérez-Caldentey and Romain Zivy.

## Contents

<b>I. What ECLAC proposes: Continuity and new directions</b> .....	5
<b>II. Structural change as a key vector of development</b> .....	13
A. Patterns of growth: Productivity, employment and structural change .....	14
B. Technology revolution, structural change and environmental sustainability.....	20
<b>III. Cycle, trend and the relationship between macroeconomic policy and structural change</b> .....	23
A. Relationship between production structure and cycle fluctuations.....	23
B. External shocks, policy responses and business cycle.....	26
C. Cycle patterns and structure .....	27
<b>IV. Business cycle and investment</b> .....	33
A. Cycle specificity in Latin America and the Caribbean.....	33

B. Policy responses, the cycle dynamic and structural change.....	37
C. Macro prices and production specialization.....	42
<b>V. The social dimension in structural change .....</b>	<b>45</b>
<b>VI. Policies for an integrated vision of development.....</b>	<b>51</b>
A. Industrial policy.....	51
B. Macroeconomic policy .....	55
C. Structural change and social and labour policy .....	60
<b>VII. Concluding remarks: Politics and the State in an integrated approach to development .....</b>	<b>65</b>
<b>Bibliography.....</b>	<b>69</b>

## I. WHAT ECLAC PROPOSES: CONTINUITY AND NEW DIRECTIONS

This document builds on and expands the vision set out by ECLAC in *Time for equality: closing gaps, opening trails*. Holding equality as a core value and a guiding principle, as then framed, means spreading capacity-building, technological progress, ample job opportunities and universal access to social benefits and protections throughout the production structure and weaving them into the very fabric of society.

Equality is also a condition for the exercise of the civil, political, economic, social, cultural and environmental rights that full citizenship entails. It requires a deliberative democratic order in which all stakeholders take part and are heard. The State has a central role to play here, in safeguarding those rights through provision of incentives, redistribution, regulation and oversight. Social covenants are essential for progressing towards this goal, conjugating equality in terms of broad-based discussion, redistribution of the benefits of growth and access to the links of social inclusion that ensure full entitlement.

Putting equality front and centre means breaking with the economic paradigm that has prevailed in the region for at least 30 years. This change comes at a good time for many of the countries of Latin America and the Caribbean, with (i) pent-up citizen demands that have redrawn the region's political map over the past 10 years; (ii) States and governments that are more inclined to make social investments and draw on redistributive mechanisms, as seen in the systematic increase in social spending and in countercyclical policies, especially those deployed to cushion the social costs of the 2008 global financial crisis and its aftermath; (iii) the growing

set of rights-based, more universalist policies taking shape in spheres like employment, health, pensions and retirement; and (iv) international summits and a global democratic imaginary with equality of rights at the top of the agenda.

Putting equality on the agenda marks a radical shift: in addition to raising the issue of minimum income thresholds, it means discussing long-neglected matters of social justice. Among them: how assets, benefits and resources are distributed throughout society; what the redistributive role of the State is as the main guarantor and promoter of equality; how productivity gains in the economy are distributed among stakeholders; how to fashion a social-rights oriented regulatory framework requiring fiscal covenants concerning universal benefits; and what spheres of development see a negative or positive impact on equality.

This leads to another idea that also is a move away from dominant paradigms: that social issues depend on variables that are not confined to the social sphere. Indeed, as ECLAC has put forward, equality and inequality in assets and in rights are heavily influenced by the production structure, technological development, divides in the sphere of labour; macroeconomic management of cycles; territorial organization; capacity-building; social protections; and political participation. What is more, social equality is not incompatible with a growth dynamic capable of transforming the production structure. They complement each other. The big challenge lies in finding the synergies between them. So, in an integrated approach to development, equality is forged in a virtuous dynamic of economic growth and steady gains in productivity with social inclusion and environmental sustainability.

*The shift away from old paradigms has taken on new dimensions. What are the pillars for this change, for the new approach to development proposed herein?*

*First, macroeconomic policy and industrial policy cannot continue on separate paths. They should be paired to build synergies between the short term and the long run. On the macroeconomic front, fiscal, monetary and exchange-rate policy should do more than promote nominal stability and smooth the business cycle. They can, at the same time, encourage long-term investment, production structure diversification and, above all, greater productivity convergence throughout the economy. Government investment plays a crucial role in guiding and promoting structural change by spurring*

complementary private investment and identifying sectors and activities that will see the most growth down the line. In turn, increased production diversification with greater incorporation of technological progress, smaller productivity gaps and improved energy and environmental efficiency are crucial for shielding the economy from cycle volatility—especially in the face of external shocks that are magnified by volatility.

So, the potential synergies between macroeconomy and structure, between business cycle and growth trend, and between the short term and the long run pose a challenge: how to best combine macroeconomic policy with industrial and technology policy. Macroeconomics for development cannot decouple cycle and stability (both real and nominal) from structural change or from faster long-term growth. Pairing them calls for an integrated approach that makes structural change an explicit priority and levels up social capacities and opportunities. Macroeconomic policy with a broader set of goals and instruments is thus part of the proposal and part of the change in course.

*Second, industrial policy should play a key role in steering development.* This, too, is a shift. For 20 years, the political agenda treated industrial policy, like equality, as anathema. *But there is increasing recognition that such policies have played a central role in all the countries that have succeeded in narrowing their technology, productivity and competitiveness gaps with economies on the technology frontier.* The lock-in of specialization patterns and technology paths based on static comparative advantages calls for a new set of incentives to redirect investment and transform the production structure by incorporating greater value added, targeting sectors on the basis of productivity leaps that radiate out to society as a whole, promoting sectors, activities and technology paths that are environmentally sustainable and disseminate technological innovation faster and more systemically.

In the approach set out herein, industrial policy points in two complementary directions: boosting the capacities and competitiveness of existing sectors with obvious potential for growth and for incorporating technological progress; and diversifying the production structure by creating new, high-productivity sectors that are more environmentally sustainable and efficient. Added to this is the pressing need to foster greater productivity among microenterprises and small and medium-sized businesses (SMEs), especially in view of their capacity to create jobs and to become hubs for the dissemination of knowledge and the appropriation



of technology. Investment in SMEs, both formal and informal, should no longer represent a marginal share of public investment. Such firms account for more than half of the workforce and tend to have very low levels of productivity. SME policy should be tied in with policy geared towards structural change, clearing the way for smaller enterprises in fast-growing sectors with high potential for increasing productivity.

*Third, this industrial policy is set within an industrial revolution encompassing new information and communication technologies, biotechnology and nanotechnology.* Industrial policy should dovetail with developments on the scientific and industrial frontier, where new knowledge paradigms turn into new production modes at an ever increasing speed. For this same reason there is no avoiding the importance of investing in research and development: the cost of being a bystander to changing patterns of knowledge and production is too high. Because knowledge creation and the translation of knowledge into technology and productivity keep pace with each other, any discussion of structural change must include these new ways of pairing knowledge and production. It also calls for targeted strategies for mastering the new paradigm.

*Fourth, environmental sustainability should not continue to be a second-class issue on the development agenda.* It must be coupled with structural change and a pattern of sector diversification that is in tune with sustainability. Doing so calls for social covenants where the State plays a key role in promoting the environmental dimension as a part of —not a constraint on— industrial policy. Sustainable development needs an industry structure that is quite different from the one currently in place in most countries. Faster growth that does not do irreparable damage to the environment can only be achieved with structural change that redefines sectors and technologies and the production matrix itself and retargets efforts in the spheres of research, development, innovation and learning. During paradigm shifts when patterns are still flexible and alternate paths still open, societies need, more than ever, the political will to steer production and technology on a course that considers future generations and the long term. This opens ample space for legitimacy and international cooperation on proactive industrial policy that promotes structural change with sustainability. Such legitimacy is often denied to other kinds of industrial policy.

*Fifth, on the social front the challenge lies in the State taking on a more robust, firmer role in charting a universalist policy course.* The development of workers'

capacities so as to allow them to enter into new, high-technology and knowledge-intensive production patterns is a right that should be within the reach of all. This calls for a society where capacities for functioning as citizens and in the workplace are quickly and sustainably disseminated and expanded, and informal-sector workers are progressively absorbed into formal employment.

Intrinsic to the equality of rights agenda is a minimum standard of well-being for all citizens that is progressive over time and is in step with the positive impacts of structural change. The State and tax policy should therefore play an increasingly robust role in providing social protection networks that are more inclusive and integrated, especially in a region where most of the countries have much unfinished business in this regard.

But structural change, in prioritizing sectors and activities and in strategically creating new ones, triggers job loss in the short run. New jobs can take a long time to appear or require skills that are still not available in the labour market. To avoid the social costs of this process, the State must therefore step in to ensure an income for those who are, at first, at most risk for job loss because of sector recomposition. Policies should be geared towards actively training workers in the skills needed in new, fast-growing sectors whose footprint in the economy is growing. Income-transfer mechanisms should therefore be coupled with appropriate training aimed at reinserting the economically active population into the new patterns of production. And it is crucial that changes in education keep pace with structural change.

Here, there are two ways to look at social policy. On the one hand, it goes along with and supports the transition to a more dynamic structure. On the other hand, it helps build that structure over time. On the one hand, social policy is a palliative measure that prevents inequalities from increasing during the shift to the new structure. On the other hand, it promotes training and the incorporation of workers into the modern formal labour market and is a necessary investment for structural change.

In a way, this focus on social factors runs counter to another dominant paradigm that embodies, above all, recommendations now issuing from the financial world in the face of the financial crisis sweeping Europe. Criticisms of the welfare State abound. Recommendations mirror those that so harshly hit the societies of Latin America during the debt

crisis and the lost decade of the 1980s: fiscal restraint with an emphasis on slashing social spending and public investment.

In contrast to that paradigm, which swept across Latin America during the debt crisis and is doing so now in Europe, what is put forward herein is the importance of strengthening the social role of the State. Social investment is needed not only to make development more egalitarian but also because such investment is more consistent with a dynamic economy that boosts the average productivity of society through training and education while maintaining domestic demand at levels needed to re-start economic activity.

*In short, this proposal is grounded in structural change as the path, public policy as the instrument and equality as the core value steering the course of change.* When structural change narrows productivity gaps, diversifies the production structure and adds value to productivity, the working world benefits in terms of equality because wage gaps close; contributory social protection coverage expands as more quality jobs are created; steady growth at higher rates improves the fiscal position, in turn enhancing redistributive action by the State; and infrastructure improvements broaden access to services. A more integrated economy grounded in a more diversified and knowledge-intensive production matrix also means a society where it is politically more feasible to reach stakeholder covenants on how to more equally distribute the wealth arising from leaps in productivity. And as jobs are drawn into the formal sector and become more productive it becomes easier to establish dialogue among agents in the working world as the institutional foundation for advancing towards full social rights.

The structural change for equality proposed herein is neither a closed formula nor a one-size-fits-all action list. This document lays out concrete policy proposals for working towards this goal. But, in implementing them, the economic, institutional and political conditions specific to each country must be weighed. There is no single model: the region's heterogeneity requires tailored approaches to devise public policies. Some countries already have a more diversified and integrated production structure. Others have a more consolidated institutional framework with more experience in public policy management. And in others the baseline levels of inequality and informality are less acute. What this means is that the sequence and pace of progress on the policy front, as well as the

policy mix, will depend on the situation in each country. Besides, structural change for equality cannot be undertaken other than in a democratic context, with social covenants that legitimize the coordinating, guiding role of the State. Such covenants have their own dynamic and timing in each country, which should be respected if policies are to be successful and tap fully into the synergies discussed above.

The following chapters look at structural change in all its dimensions and interrelations, spotlighting it as the linchpin of development. Patterns of structural change are identified, where the virtuous pattern that should be the goal combines job growth, an expanding GDP and higher labour productivity. The complementarities between structural change and environmental sustainability should also be tapped, especially by incorporating the technology revolution.

Subsequent sections examine the link between macroeconomic policy and structural change, stressing the relationship between production structure and cyclical fluctuations in different phases of the development process in Latin America and the Caribbean, including import substitution industrialization, the impact of global liquidity cycles (particularly in the 1970s and 1990s) and the recent surge in exports and in the international price of natural resources. Fallout from external shocks, combined with the macroeconomic policy response and weak or non-existent industrial policy, has brought low investment rates that fall short of bridging technology and productivity gaps. Procyclical policies in the past often worsened recessions and exacerbated the underutilization of capital and labour, discouraging investment even further. A trend towards exchange-rate appreciation has emerged in some countries, working against the production of tradable goods (by making them less competitive and raising the pressure to substitute local production with imports) and hinders access to the economies of scale that the global market provides. Cycles and policy responses have thus had lasting impacts on production structure and the accumulation of technological capacities.

Further along, a look at the social dimension of structural change shows how the region is still marked by a pattern with acute productivity gaps. This pattern, in turn, limits the social inclusion capacity of employment and reinforces the poor functional distribution of income (among the factors of production) and the poor distribution of household income.

Last, a set of industrial, macroeconomic, social and labour policies is put forward for advancing towards virtuous structural change that can combine a shift in the production matrix towards sectors that are more productive and environmentally sustainable (incorporating technological progress and narrowing gaps between sectors); proactive macroeconomic policy for managing cycles to encourage productivity and investment (positively pairing cycle and trend for the short term and the long run); and social and labour policies that team structural change with redistributive impacts, improvements in the working world and fairer distribution of productivity gains among the factors of production.

## II. STRUCTURAL CHANGE AS A KEY VECTOR OF DEVELOPMENT

Structural change has always been at the heart of development theory. This vision dates back to, among others, Schumpeter and his idea of development as a process of “creative destruction” giving rise to new sectors while others decline as innovations appear and spread. Later on, the pioneers of development theory studied this process in the context of an international system with marked asymmetries between countries, regions and territories in terms of technological capacities and the participation of knowledge-intensive sectors in the production structure (Prebisch, 1949; Hirschman, 1958). These asymmetries are subject to increasing returns and the cumulative forces that reproduce them and, in some cases, strengthen them over time. For this reason, in the absence of industrial policy, most creative processes are concentrated in the developed economies. Technology and income divides are not self-correcting, as proven in the 1990s during the debate over convergence and divergence between countries on the technology frontier and the laggards.

The economic literature has made strides in understanding why some economies have achieved technology and productivity convergence with the global leaders while others fall farther behind. There are not many cases of convergence in the store of international experience, but they do provide useful lessons on what made them possible. These lessons are discussed below.

## **A. Patterns of growth: Productivity, employment and structural change**

Structural change that sustains development is change that diversifies the economy and shifts a larger share of the production structure over to sectors that are more knowledge-intensive (Schumpeterian efficiency) or have faster-growing demand (Keynesian or growth efficiency, according to Dosi, Pavitt and Soete, 1990). The combination of both kinds of efficiency in the production structure is called dynamic efficiency because it yields higher rates of growth in productivity, innovation and employment.

Desirable structural change—the kind that strengthens sectors with dynamic efficiency—is defined and evaluated according to its aggregate effects on the economic system. Structural change is not virtuous if it merely creates more high-technology enclaves or if changes only occur in the most efficient parts of the production structure. The dissemination of technology and the expansion of demand should not boost just a handful of companies but rather the economy as a whole by means of forward and backward linkages. The process leads to a more even distribution of medium- and high-productivity activities that make the production matrix denser. As part of this process of structural change, new agents emerge and the workforce increasingly moves away from low-productivity sectors to new sectors that populate the space between pioneering activities and subsistence activities (ECLAC, 2007).

Employment dynamics are, then, a central element in any process of structural change. Developing economies have strong structural heterogeneity, with a significant portion of the workforce engaged in the informal sector or in subsistence activities. This contingent of workers has very low rates of productivity, to the detriment of income distribution and average income in the economy. With virtuous structural change, new sectors and activities are created that absorb the reserve of workers into more productive, better quality and higher

paid jobs. The force that reduces heterogeneity is the diversification associated with structural change.

Knowing whether structural change will foster development requires an examination of how productivity and employment levels change over time. In a process of virtuous growth, productivity and employment expand together (although not necessarily at the same pace), and growth does not generate unsustainable pressure on the external sector. Whereas in the most successful countries outside the region there is continuity in employment and productivity gains over time, in Latin America and the Caribbean periods of job creation (with lagging or declining productivity) alternate with periods of productivity gains with very little in the way of job creation. So, there are growth patterns in the region where no country has managed to pair, over the long run, strong job growth (a prerequisite for reducing the domestic income gap and poverty) with productivity gains (a prerequisite for narrowing the productivity gap in a world in full-fledged technology revolution).

A pattern of growth that creates a “virtuous circle” like the one described in diagram 1 is consistent with the goal of increasing levels of equality. In such a pattern, the structure’s dynamic efficiency allows for fast growth while narrowing the technology gap. The structure is transformed to redefine external insertion and the nature of employment as the number of quality jobs in the economy rises. The opposite takes place in a “vicious circle” pattern where slow GDP growth translates into slow employment growth and flat or declining productivity while waning investment deepens technology and income gaps with the rest of the world. The other patterns involve either “defensive adjustment” (where just a few activities are modernized and compete, while most jobs and most of the economy do not reap the benefits of technology diffusion) or a “job absorption” model, with weak structural change, in which the expansion of low-productivity activities—often involving non-tradable sectors—hinges on booming natural resource exports.



Diagram 1  
DEVELOPMENT PATTERNS

Employment growth		Productivity growth	
		Low	High
<b>Strong</b>	Macroeconomy	<b>Employment absorption</b> Strong aggregate demand growth	<b>Virtuous circle</b> Strong aggregate demand growth
	Technological progress and innovation	Low or no productivity growth	Strong productivity growth
	Type of structural change	Weak structural change	Strong structural change
<b>Weak</b>	Macroeconomy	<b>Vicious circle</b> Weak aggregate demand growth	<b>Defensive adjustment</b> Weak aggregate demand growth
	Technological progress and innovation	Low or no productivity growth	Strong productivity growth
	Type of structural change	No structural change	Structural change limited to enclaves

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of J.A. Ocampo, "The quest for dynamic efficiency: structural dynamics and economic growth in developing countries", *Beyond Reforms, Structural Dynamics and Macroeconomic Vulnerability*, Stanford University Press, and R. Astorga, M. Cimoli and G. Porcile, "Technological upgrading and employment: patterns from developing economies", 2012.

Table 1 shows productivity and employment growth for several of the region's economies (Argentina, Brazil, Chile and Mexico) between 1960 and 2010. These rates are compared with those seen in the Republic of Korea, which is used as a point of reference because it represents one of the most successful cases of technology, production and income catch-up of the post-war era. The countries of Latin America did have some periods of virtuous growth but could not maintain the pattern consistently: productivity stagnated or declined in the 1980s (see figure 1). This decline was accompanied by job losses in higher-productivity sectors and a migration of workers to subsistence activities or underemployment, which tended to bring down the average productivity of the economy. This movement is the flip side of regressive structural change. By contrast, changes in the pattern of specialization in the Republic of Korea ensured the expansion of demand and output, creating jobs in high productivity activities for workers previously engaged in lower productivity activities and improving income distribution (ECLAC, 2007; Cimoli and Rovira, 2008; McMillan and Rodrik, 2011).

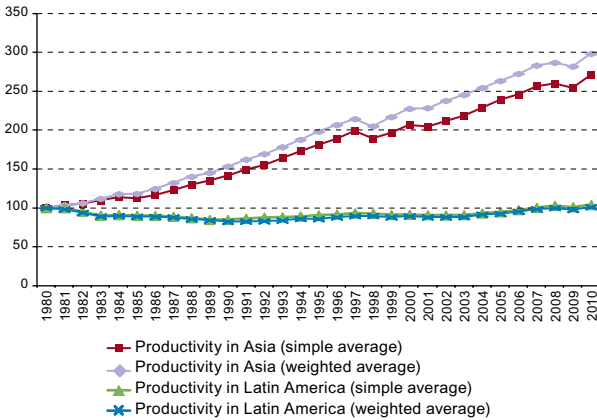
**Table 1**  
**LATIN AMERICA (SELECTED COUNTRIES) AND REPUBLIC OF KOREA:**  
**OUTPUT AND LABOUR PRODUCTIVITY GROWTH, 1965-2010**  
*(Percentages)*

Period	GDP	Employment	Productivity
<b>Argentina</b>			
1965-1975	4.20	1.28	2.65
1976-1981	1.52	1.84	-0.29
1982-1990	-0.90	2.34	-3.19
1991-2001	3.86	1.29	2.53
2002-2010	5.56	3.51	1.92
<b>Brazil</b>			
1965-1981	7.22	3.60	3.77
1982-1992	1.99	3.73	-1.68
1993-1998	3.33	1.71	1.60
1999-2010	3.38	1.93	1.45
<b>Chile</b>			
1965-1973	2.96	1.35	1.91
1974-1981	4.03	0.87	3.24
1982-1985	0.25	2.39	-2.07
1986-1998	7.28	3.29	3.88
1999-2010	3.43	1.08	2.33
<b>Mexico</b>			
1965-1981	6.69	4.69	1.83
1982-1994	1.87	3.46	-1.55
1995-2000	3.51	2.72	0.73
2001-2010	1.81	1.18	0.62
<b>Republic of Korea</b>			
1965-1980	8.20	3.64	4.71
1981-1990	8.74	2.84	5.76
1991-2000	6.19	1.61	4.46
2001-2010	4.16	1.35	2.77

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

**Note:** The periods used are specific to each country and were chosen based on the principal shocks and policy changes in each one.

Figure 1  
**LATIN AMERICA AND ASIA: PRODUCTIVITY GROWTH, 1980-2010**  
*(Index 1980=100)*

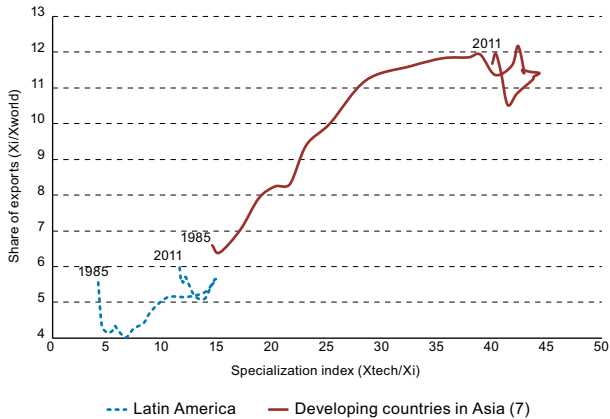


Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Since the 1990s, the Republic of Korea’s growth has been propelled more by productivity than by employment, as is to be expected in an economy that has already absorbed most subsistence jobs, substantially raised real wages and increasingly competes on quality. The same dynamic has not been seen in Latin America, not even during the post-2004 boom.

Figure 2 shows the dissimilar intensity of structural change towards dynamic efficiency in Asia and in Latin America. It compares two groups (one comprising Latin American countries and the other made up of seven very dynamic economies in developing East Asia). The horizontal axis tracks an indicator of structural change towards Schumpeterian efficiency (share of high-tech sectors in total exports). The vertical axis tracks an indicator of Keynesian or growth efficiency (ability to penetrate the fastest-growing markets, represented by the increase the country’s share of global exports). The Asian countries rapidly changed their export profile, moving towards high-tech sectors between 1985 and 2011 while increasing their share of the global market (reflecting their ability to increase their long run rate of growth with external balance). This process was far less intense in the countries of Latin America, which did not approach Asia’s 1985 competitiveness levels until the mid-2000s (Cimoli, Porcile and Rovira, 2010).

**Figure 2**  
**LATIN AMERICA AND DEVELOPING COUNTRIES IN EAST ASIA: PATTERN**  
**OF STRUCTURAL CHANGE AND SHARE OF EXPORTS, 1985-2011**<sup>a</sup>  
*(Percentages)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), based on the United Nations Commodity Trade Statistics Database (COMTRADE) [online database] <http://comtrade.un.org/db/default.aspx>.

<sup>a</sup> Technology exports are defined according to the classification used by Lall (2000). Latin America includes Central America, South America and Mexico. The developing countries of East Asia are Hong Kong Special Administrative Region of China, Indonesia, Malaysia, the Philippines the Republic of Korea, Singapore and Thailand.

Generally speaking, in the Asian economies included in the figure, macroeconomic and industrial policies acted in concert with the objectives of promoting growth and maintaining macroeconomic stability.<sup>1</sup> A comparable level of consistency and coordination is not seen in Latin America, which has been subject to cycles of exchange-rate appreciation, indebtedness, fiscal adjustment and recurring balance-of-payments crises that were influenced by sudden capital flow stops and episodes of financial contagion (ECLAC, 1998 and 2010a; Ffrench-Davis, 2000 and 2006; Frenkel and Rapetti, 2011). The absence or withdrawal of industrial policies during the 1980s and 1990s was particularly damaging in this context of real and nominal instability and, as discussed later, it dampened investment—especially in tradable goods (Cimoli and Katz, 2003; Peres, 2010).

<sup>1</sup> At the same time, the array of macroeconomic policy instruments was significantly more complex than what is generally accepted in economic thinking. Lending guidance policies, income policies and regulating the price of consumer wage goods (to cite a few policy instruments) were an integral part of the macroeconomic policy toolkit. See, among others, Amsden (1989), Wade (1990), Chang (2001) and Gallagher and Porzecanski (2010).

## **B. Technology revolution, structural change and environmental sustainability**

Any discussion of structural change must be inserted in the context of two issues that are increasingly crucial for development. First, the technology revolution associated with new paradigms is transforming not only the economy but also the very dynamics of society and politics. Second, the patterns of production and growth need to be reconfigured to make them environmentally sustainable.

Thinking about structural change must take account of how the *new paradigms* impact technology paths and production sectors and systems. The dominant technology paradigm is undergoing changes of such magnitude that they have been described as a new technology revolution. This is based on the coevolving paths being charted in nanotechnology, biotechnology, new materials and information and communications technologies, backed by new findings in physics and genetics. Each of these fields is advancing rapidly on its own path, but what is most important is that they are tending to combine in processes that feed back into each other. The convergence of these technologies could lead to a new industrial revolution given their potential applications, particularly in terms of the digitalization of production, the generation of new materials, the synthesis of biologically active substances and a lighter environmental burden (van Lieshout and others, 2008).

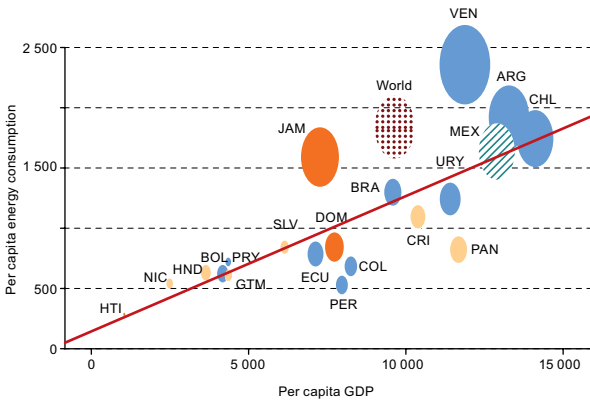
With the emergence and development of new paradigms there is, now more than ever, a need for industrial policy to keep developing countries from lagging farther behind. These paradigms are associated with robust economies of scale and networks that enhance the competitiveness of capital- and technology-rich economies. In other areas, personalized information and communications technology niche markets have the potential for making economies of scale less important. In both cases, the new sectors need technology complementarities and access to advanced infrastructure in order to remain competitive. Building dynamic comparative advantages depends on public investment and on policies that encourage private investment and foster coordination between agents and institutions (including those that operate in the field of science and technology) in order to obtain synergy effects.

Another core dimension of the path to structural change that will be a determining factor in coming years is *environmental sustainability*. Societies are increasingly aware of this issue and are coming to value it more amid mounting evidence of climate change and environmental degradation (with

significant consequences for the quality of life of the poorest segments of society). Deployment of such policies is lagging behind the serious environmental problems they should address, but there is no question that any long-term strategy for structural change should include a transition towards technologies and production systems that are far less polluting than at present. This goes beyond public policy geared towards stimulating target sectors. It means promoting a ground-shift in production and consumer systems and in technology paths themselves. Doing so calls for redefining the very approach to development.

The current development model depends on static comparative advantages consisting of exploiting abundant natural resources. This channels investment, innovation and technological development in that direction and encourages energy intensity (especially the use of fossil fuels). This is why there is such a strong correlation between GDP growth, energy consumption and pollutant emissions (see figure 3). This bias towards the dominant pattern, together with a failure to internalize the costs of deteriorating natural resources and ecosystems, has held back structural change towards more efficient and knowledge-intensive activities with a smaller environmental impact.

**Figure 3**  
**LATIN AMERICA: PER CAPITA GDP AND PER CAPITA ENERGY CONSUMPTION, 2008<sup>a</sup>**  
*(Kilograms of oil equivalent and 2005 purchasing power parity dollars)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators (WDI) [online database] <http://databank.worldbank.org/>.

<sup>a</sup> The size of the circles indicates the level of each country's per capita emissions. The colours correspond to the different subregions: blue: South America; red: Central America; orange: the Caribbean.

The current patterns of production and consumption are unsustainable because in the medium and long term they erode the material foundation on which they are built (Stern, 2007; de Miguel and Sunkel, 2011). From the standpoint of Schumpeterian efficiency, greater opportunities for investing in clean technologies (such as those that are low in carbon emissions) can spur long-term economic development with structural change where countries move from the production of and international trade in traditional, low-productivity goods to other, more modern and dynamic ones with high productivity.

If the region is to benefit from the global transition towards a more environmentally friendly economy it will have to develop its industrial, scientific and technological capacities and encourage investment, thus improving its systemic competitiveness (ECLAC, 2008).<sup>2</sup> A region with remarkable natural resource diversity whose indigenous peoples have such a wealth of knowledge about the use of biodiversity and ecosystems has a competitive advantage that, if valued and safeguarded, would enable it to reduce poverty, protect the environment and create sectors that are at the leading edge internationally.

In sum, the need to transition to a development model whose guiding principle is equality, that progresses simultaneously towards social development, economic growth and environmental sustainability, poses an imperative for change for the region and the world. Forging a paradigm for sustainable development with equality would converge with structural change if there are effective mechanisms for managing the economy that take into account the cost of the environmental degradation, biodiversity loss and large carbon footprints that are putting global climate security at risk.

---

<sup>2</sup> UNCTAD has highlighted the potential of "green growth poles" in promoting energy efficiency, agriculture and renewable energy sources, as well as low-carbon foreign direct investment (UNCTAD 2010).

### **III. CYCLE, TREND AND THE RELATIONSHIP BETWEEN MACROECONOMIC POLICY AND STRUCTURAL CHANGE**

#### **A. Relationship between production structure and cycle fluctuations**

Macroeconomic policy shapes the production structure, and the production structure in turn determines the space available for macroeconomic policy as well as its effects on the economy. From this perspective, it is more accurate to speak of cycle and trend as coevolving rather than as two separate dimensions of economic growth. The coevolution of the production structure and the business cycle is based on transmission mechanisms whereby these variables interact with and condition each other over time. The analysis starts with the idea that the balance of payments plays a central role in the macroeconomic dynamic (Ocampo and others, 2010) and the way in which structural factors of trade and specialization are linked to financial market and terms of trade shocks.

*First, an economy's capacity to respond to external shocks depends on its production structure.* The link between the production structure and cyclical fluctuations can be seen most clearly in economies whose export basket depends on a handful of commodities subject to highly volatile demand and prices determined by the international market. In this case, the cycle of economic activity, and thus employment, is heavily dependent on the ups and downs of just a few markets. This is precisely one of the mechanisms identified in the literature to explain why dependence on natural resources can slow long-term growth: the volatility associated with that dependence is a drag on investment, and by extension, on long-term



growth. At the other extreme are economies where knowledge-intensive goods and services account for a large share of production; in them there is more division of labour and diversification of skills. This diversified base of expertise and skills allows for a faster, more efficient response to a negative shock. Such flexibility comes from knowledge and the ability to adapt to changing conditions. A diversified economy will be in a position to grow in a more sustained manner over time, with fewer fluctuations in output, employment, wages and trade flows.

*Second, structure impacts cycle through the long-term growth rate compatible with external balance.* This growth rate keeps the ratio between current account deficit and GDP at manageable levels where it is not difficult to obtain funding on the international market. It depends on, among other factors, the dynamic efficiency of the production structure and the pattern of specialization.<sup>3</sup> If dynamic efficiency is low and the economy grows at a pace in which the current account deficit as a percentage of GDP is increasing, an adjustment (less absorption) will be needed in the form of a reduction in autonomous public and private spending, in different proportions depending on the initial conditions and policy constraints. In the long run, fiscal policy hinges on the leeway provided by the long-term balanced growth rate. If a structural change raises this rate and all other factors remain constant, it would be possible to increase fiscal spending without putting destabilizing pressure on the current account.

Macroeconomic policy and the business cycle have, in turn, effects on the production structure. *There are four transmission mechanisms between macroeconomic policy and production structure.*<sup>4</sup> They are:

- (i) the effect of policies on the use of installed capacity, which in turn influences investment amounts (accelerator effect);
- (ii) the effect of an increase in aggregate demand on the rate of technical progress (Kaldor-Verdoorn effect, which links rising production to productivity gains);
- (iii) the effects of policies on macro prices, which shape the differences in rates of return across sectors, and thus define where investment will go, following the signals of expected return; and
- (iv) the crowding-in effect of public investment at different phases of the cycle.

---

<sup>3</sup> See Alleyne and Francis (2008); Cimoli (1988 and 1992); Barbosa-Filho (2002); Moreno-Brid (2002); and Thirlwall (1979 and 2011).

<sup>4</sup> The functioning of transmission channels from macroeconomic policy to structure is complex and also includes intermediate effects on income distribution and the demand for consumer goods, which are not examined in this section.

These effects connect macroeconomic policy with the level and composition of investment and, therefore, with structural change. They thereby help define future productivity and employment paths (level, composition and quality) and act as a link between the long run and the short term and between cycle and trend. By influencing investment, macroeconomic policy shapes future growth. The irreversibility of supply and growing returns on technology and on capacity-building paths are contributing factors. These paths should be preserved and encouraged. The recessionary phase of a cycle of economic activity can permanently destroy installed capacity (“a company can be destroyed in a day”), but the corresponding expansionary phase, of the same duration, can be insufficient to replace lost capacity, mainly because of the lead time needed for individual and institutional training (“a company is not built in a day”). The mechanisms of transmission between macroeconomic policy and structural change are discussed below.

*Managing aggregate demand and its effect on the use of production capacity helps determine the level of investment.* Highly restrictive management, which results in long periods of underutilization of installed capacity, blunts the investment stimulus and disincentivizes expansion and modernization of the stock of capital assets. At the same time, the expansion of aggregate demand and output in the short term generates production learning-by-doing that boosts productivity. Productivity tends to rise when production increases, owing to growing returns on economies of scale and the accumulation of experience, which expands the stock of skills. Conversely, when the technology frontier is moving quickly, macroeconomic policy that unnecessarily slows growth will force the economy to face international competition with lagging technological capacities.

*Inasmuch as fiscal, monetary and exchange-rate policies affect macro prices they will impact relative sector profitability.* Differences in returns are a key signal for investment decisions at the microeconomic level. When firms make decisions about which sectors to invest in, they are also making decisions about the future configuration of the production structure. One important macro price is the real exchange rate, whose effects on output composition (particularly the mix of tradable and non-tradable goods and services and of sectors with varying degrees of technology dynamism) have been broadly identified as a key factor linking macroeconomic policy to growth. However, this is not the only possible channel for transmitting macroeconomic policy to the production structure. For example, interest

rate levels, restrictions on access to bank credit for start-ups (especially SMEs) have an adverse effect above all on innovative activities, whose rates of return are more uncertain. Implicitly, this strengthens activities that reproduce the prevailing structure.

Macroeconomic policy interacts with and responds to shocks from the global economy. The following section discusses how this mix of shocks and the policy responses to them have shaped cycle and trend in the region.

## **B. External shocks, policy responses and business cycle**

The external sector —more precisely, the behaviour of the balance of payments— is key to understanding the coevolution of cyclical fluctuations in production activity (business cycles) and the long-term expansion trend or path of the economy. Modern history in Latin America and the Caribbean provides numerous cases that illustrate this relationship. There have been episodes of strong growth driven by abundant foreign currency, the result of substantial improvements in the terms of trade and access to the global financial market (as happened, for example, in the period following 2003, with the exception of the worldwide recession of 2008-2009). There have also been cycles of economic expansion accompanied by persistent current account deterioration and exchange-rate appreciation, which culminated in severe currency crises, capital flight, recession and job loss (as occurred in several economies in the region in the 1990s and in most of them in the 1980s).

The relationship between external shocks and macroeconomic policies has key implications for growth and stability. The central role of the balance of payments is based on the dynamic between four dimensions of the external sector:

- (i) net exports (exports less imports);
- (ii) payments to the factors of production, especially remittances from migrant workers, remittance of earnings on foreign capital, and interest payments;
- (iii) terms of trade effects; and
- (iv) access to external financing and the volatility of short-term capital flows.

Historically, the first three components dominated the dynamic of what was termed the external constraint on growth. Among them, in economies that were less open than now, net exports clearly exerted the most weight as a direct result of the production structure. When financial

globalization began to take root in the 1970s, the fourth component became substantially more important and is a major source of short-term fluctuations in the rate of growth.

External balance of payments shocks associated with the terms of trade and changes in liquidity (points (iii) and (iv) above) are key to the cycle dynamic, along with policy responses. These shocks, in addition to their short-term impacts, affect the long term as well to the extent that they affect macro prices and investment (which is to say that shocks change the structural component that determines long-term growth). Significant and sudden fluctuations in access to capital markets (for example, due to a massive influx of short-term capital that sparks exchange-rate appreciation and creates stock or real estate market bubbles) can have deep and lasting effects on gross fixed capital formation and, by extension, on the production structure and the pace of economic and job growth. These destabilizing effects are more potent in a globalized world, particularly in economies that do not have instruments for regulating or managing international capital flows, as is the case with most of the countries of the region. The cycle and its link to structure are taken up below, looking first at pre-2000s cycles and then at the most recent commodity boom cycle.

### **C. Cycle patterns and structure**

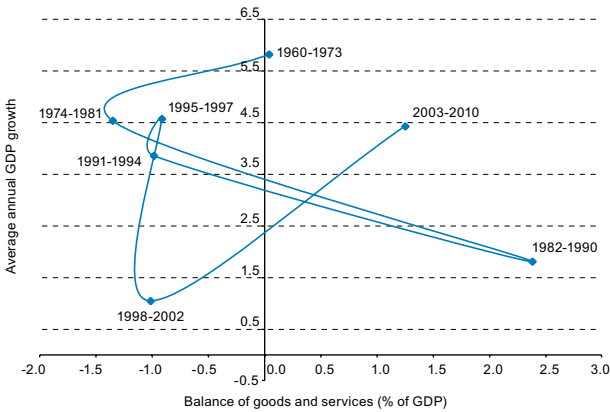
Latin America's production structure has not allowed it to take full advantage of growing demand, whether global or domestic. This has been a long-standing concern at ECLAC. Due to the prevailing pattern of specialization, the income elasticity of exports is very low in comparison with the income elasticity of imports, so when growth accelerates in the region—a sine qua non condition for absorbing underemployment, reducing heterogeneity and promoting equality—imbalances in net exports of goods and services emerge that slow expansion and have often unleashed balance-of-payments crises.

The structuralist approach links long-term growth to the production structure, holding that income elasticities of imports and exports reflect or are determined by the pattern of specialization and the density of the production fabric. These elasticities help determine the long-term equilibrium growth rate and are a composite expression of the degree of linkage between movements in domestic and external demand and the capacity to meet that demand endogenously by expanding production (ECLAC, 2007; Gouvea and Lima, 2010; McCombie and Thirlwall, 1999;

Cimoli and Porcile, 2011). With a dense production structure that is technologically sophisticated and allows for innovation, it is more likely that local production will respond dynamically to expanding domestic and external demand, and intra-industry specialization will be strengthened by a more diversified export base.

The region's greater degree of global financial integration (a process that began in the 1970s and was consolidated in the first half of the 1990s after the international debt crisis brought it to a standstill in the 1980s) led to growing inflows of international capital, both direct and in the form of short-term speculative investment. In the context of financial globalization, trade factors become less important in the short term while the components of the balance of trade financial account come to figure more heavily. In order to illustrate this relationship and place it in its historical context, figure 4 tracks average economic growth rate in the region (vertical axis) against the goods and services balance as a percentage of GDP (horizontal axis) in Latin America between 1960 and 2010. The data in this figure and in table 2 (which shows figures for South America and Central America) identify three patterns in the relationship between these variables.<sup>5</sup>

**Figure 4**  
**LATIN AMERICA: GOODS AND SERVICES TRADE BALANCE DEFICIT AS A PERCENTAGE OF GDP AND GROWTH RATES, 1960-2010**  
*(Percentages)*



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

<sup>5</sup> The variable presented in figure 4, which is a country-weighted average, basically reflects what happened with the larger economies, particularly Argentina, Brazil and Mexico, which account for nearly two thirds of the GDP of Latin America. The story that emerges from the aggregate values does not apply to all countries in the region.

**Table 2**  
**SOUTH AMERICA, CENTRAL AMERICA AND MEXICO: GOODS AND SERVICES BALANCE AND GDP GROWTH, 1960-2011**  
*(Percentages, averages of each period)*

	1960- 1969	1970- 1979	1980- 1989	1990- 1999	2000- 2005	2006- 2011
<b>Trade balance (percentages of GDP)</b>						
South America	1.0	-0.5	1.8	-0.6	3.4	1.8
Argentina	0.2	0.8	2.4	-0.7	8.2	4.2
Brazil	-0.1	-1.9	2.0	-0.2	2.1	0.3
Central America	-2.6	-3.5	-3.8	-6.1	-8.7	-10.6
Mexico	-1.5	-1.9	2.5	-1.5	-1.7	-1.6
<b>Average annual GDP growth (percentages)</b>						
South America	5.5	5.8	2.0	2.7	3.0	4.5
Argentina	4.7	3.0	-0.7	4.1	1.8	7.0
Brazil	6.3	8.0	3.1	1.7	3.0	4.1
Central America	5.7	5.7	1.8	4.7	3.6	4.7
Mexico	7.2	6.5	2.2	3.4	2.7	2.0

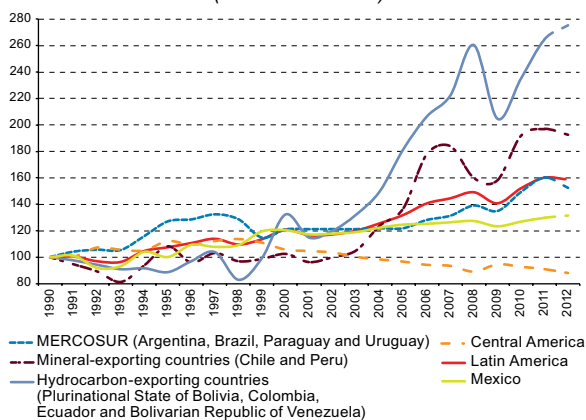
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC).

The first pattern corresponds to the import substitution period, characterized by stop-and-go growth cycles, which ran through the mid-1970s. The pace of growth was high, and the goods and services balance was in equilibrium. The second pattern is one of growth that is unsustainable because of greater external vulnerability (persistent goods and services balance deficit). It is seen at two points in time: the second half of the 1970s and in the 1990s. Each period ended in crisis and a recession: the lost decade of the 1980s in the first case and the lost half decade (1998-2002) in the second. The third pattern is the one seen today in the largest net exporters of natural resources, especially in South America and in Caribbean countries like Belize, Guyana, Suriname and Trinidad and Tobago. In the South American countries that export minerals, hydrocarbons and natural resource-intensive goods, the balance of goods and services in 2006-2011 moved from deficit to surplus alongside fast economic expansion. Unlike in the 1980s and early 2000s, the shift towards trade surpluses reflected an easing of the balance of payments, not an effort to service the debt. This made faster growth possible, but the pace was still slower than in the 1960s when the goods and services balance as a percentage of GDP was the same.

The global economy has seen significant change since 2004. Not only is there fluid access to capital markets, but the terms of trade have shifted in favour of countries that export natural resources, particularly minerals

and hydrocarbons. Although international liquidity levels remain high, the principal shock generated by the cycle of the 2000s was the expansion of global trade in commodities and an improvement in international prices (see figure 5). This had significant consequences for the region's external position, which as a whole moved to a goods and services balance surplus with faster growth. This new landscape, which is emerging as the Asian countries (especially China) come to account for a greater share of global demand, has very different effects across the region. It benefits most of the South American countries, a few of Caribbean countries and, to a lesser extent, Mexico, all of which are net exporters of natural resources. But it has a negative effect on Central America and part of the Caribbean (especially the service-based economies), which are in the opposite situation in this regard.<sup>6</sup>

**Figure 5**  
**LATIN AMERICA AND THE CARIBBEAN: TERMS OF TRADE, 1990-2011**  
(Index: 1990=100)



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

The problems and opportunities sparked by this new era of global trade are, accordingly, different in each case. In South America, a path to faster economic growth is opening that, nonetheless, holds long-term risks due to its effects on the production structure and slackening investment

<sup>6</sup> For an analysis of the impact of the commodities boom in the Caribbean economies and the varying effects based on the degree of insertion of each in global trade (service-based and goods-based), see ECLAC (2002, chapter 11), and ECLAC (2003).

in tradable sectors not tied to natural resources. In Central America and some economies in the Caribbean, new pressures are being generated on the external sector because most of these economies are net importers of energy and food. Furthermore, rising global agricultural prices introduce an imported inflation component that, by impacting food prices, has adverse distribution effects. The situation also has negative fiscal impacts, since government budgets are under pressure to cover a larger oil bill and grant subsidies to offset the impact on basic food basket prices.

Those countries that are net exporters of natural resources share some trends. The first is the decline in external debt service payments as a percentage of export earnings.<sup>7</sup> Between 2000 and 2008, every country in South America substantially reduced its foreign debt-to-GDP ratio and changed its debt stock profile, holding less short-term debt as a percentage of total debt and borrowing at lower rates. A second aspect has been the increase in foreign currency reserves, which, combined with an improved fiscal position and lower inflation, has facilitated access to international credit at lower interest rates. This is one of the factors underlying the region's unprecedented resilience in coping with the latest global crisis, of 2008 and 2009.

Much of the favourable external impact is more of a price effect than a volume effect, and there is acute vulnerability to a global economic slowdown, especially in the Chinese economy. In South America, expansion does not reflect endogenous capacity-building despite improvements on several fronts during the 2000s. It is the outcome of new patterns of global demand that have galvanized the markets for South America's traditional export goods. In other words, the improved external performance of South America is, to a large extent, a result of endogenous capacity-building and convergence in the Asian economies—not Latin America's—which have (at least for the time being) redrawn the global trade map in a way that has benefitted exporters of natural resources. South America has yet to take up the challenge of converting the exogenous momentum of Asian demand into an endogenous transformation of its own production structure that internalizes the forces of development and makes them permanent.

The situation in other subregions is more heterogeneous. Whereas some economies in the Caribbean have high external debt levels (above

---

<sup>7</sup> For example, in Colombia and Peru, interest payments on debt as a percentage of total return to foreign capital fell from as high as 82.8% and 93.7% in 1999 to 26.3% and 9.3% in 2010, respectively.



60% of GDP in Belize, Granada and Jamaica, and above 40% of GDP in Dominica, Guyana and Saint Vincent and the Grenadines) in others, including the Bahamas, Suriname and Trinidad and Tobago, the levels are below 10% (Alleyne, Hendrickson and Amonde, 2011). Patterns in Central America also vary. Whereas external debt climbed between 2002 and 2010 in Costa Rica, El Salvador, Guatemala and Panama, it fell sharply in countries benefitting from the Heavily Indebted Poor Countries initiative: Honduras and Nicaragua (ECLAC, 2011). In Central America and some Caribbean countries, two other variables are helping ease external vulnerability. These are export diversification based on assembly-for-export operations and foreign currency remittances from emigrants (an increasingly important component in the balance of payments).

These trends on the external front in Latin America and the Caribbean have been accompanied by changes in macroeconomic strategy that to some extent reflect lessons learned from negative experiences with fixed exchange rates in the 1990s. During that decade, some countries had stabilization programmes that used the exchange rate as a nominal anchor<sup>8</sup> for inflation expectations. This kind of strategy tended to change in the 2000s. Aside from the countries that have adopted the dollar as their currency (Ecuador, El Salvador and Panama) and some of the smaller and more open economies in the region that have maintained their fixed exchange-rate parity regimes (for example, Barbados, Belize and the member countries of the Eastern Caribbean Currency Union), other economies have moved towards more flexible exchange rates. Examples of this include inflation-targeting regimes instituted in Brazil, Chile, Colombia, Mexico and Peru between the late 1990s and early 2000s.<sup>9</sup> This strategy keeps the idea of a nominal price anchor (determined by the target towards which inflation expectations are meant to converge) but allows the exchange rate to be adjusted to help reduce external imbalances. Under this monetary regime, the main instrument for stabilization is the short-term interest rate, seeking to influence the portfolio decisions of economic agents and the various components of aggregate demand. During the recent boom, this strategy was associated with exchange-rate appreciation that aroused, in some countries, substantial and heightened concerns as to the direction that structural change was heading.

---

<sup>8</sup> A nominal anchor is a nominal variable that the government seeks to control in order to contain inflation expectations.

<sup>9</sup> Unlike the Caribbean countries mentioned, some of the larger economies of this subregion (Trinidad and Tobago, Jamaica and Guyana) have a flexible rate of exchange (see Alleyne, Hendrickson and Amonde (2011), table 2).

## IV. BUSINESS CYCLE AND INVESTMENT

### A. Cycle specificity in Latin America and the Caribbean

Latin America and the Caribbean is not the only region where external shocks and policy responses combine to shape cycle dynamics. But the cycle in the region does have some particular traits,<sup>10</sup> as shown in the quantitative analysis set out below, focusing on 1990-2010.

Table 3 shows that the average duration of *recession phases* of the cycle in Latin America and the Caribbean (both region-wide and subregionally) is similar to other countries in the sample (roughly four quarters).<sup>11</sup> In South America, recessions lasted an average of 5.6 quarters; in Central America and the Dominican Republic, recessions were shorter (3.0 quarters). Nor does recession amplitude in Latin America and the Caribbean vary significantly with the rest of the world. The average fall in the recession phase of the cycle in South America and Mexico was 8.0 %, whereas in Central America and the Dominican Republic the drop was much less pronounced. This difference is explained by the fact that the most intense crises in the period under study —the Mexican crisis (1994-1995), the Asian crisis (1997-1998), the Russian crisis (1998) and the Argentine crisis

---

<sup>10</sup> Pérez Caldentey and Pineda (2010); Titelman, Pineda and Pérez Caldentey (2008). See also Male (2011) and Harding and Pagan (2005).

<sup>11</sup> A standard method described in the literature on business cycles was used to identify turning points (maxima and minima) in real GDP series, using quarterly data from a sample of 59 countries for 1990-2010. The turning points made it possible to identify GDP expansion and contraction phases. An expansion is a period of positive GDP growth; a contraction is a period of negative GDP growth. Subsequently, the duration and amplitude of economic activity expansions and contractions were estimated for countries, regions and subregions. Duration refers to the length of an expansion or a contraction between turning points. Amplitude refers to the change in economic activity between turning points.

(2001-2002)— had their epicentre in Mexico or South America. The countries of East Asia and the Pacific underwent contractions that were similar in amplitude to those of South American countries.

**Table 3**  
**DURATION AND AMPLITUDE OF REAL GDP EXPANSIONS AND**  
**CONTRACTIONS, BY LEVELS, SELECTED REGIONS**  
**AND COUNTRIES, 1990-2010**

	Expansion		Contraction	
	Duration (quarters)	Amplitude of the upswing (percentages of GDP)	Duration (quarters)	Amplitude of the downswing (percentages of GDP)
South America	19.9	27.5	5.6	-8.0
Central America and Dominican Republic	20.5	26.3	3.0	-3.3
Mexico	23.0	25.6	4.3	-8.0
Brazil	14.3	15.6	2.8	-3.0
Latin America and the Caribbean	19.7	25.3	3.8	-6.2
East Asia and the Pacific	31.5	42.4	3.6	-9.4
Eastern Europe and Central Asia	29.1	52.3	4.0	-12.2
OECD member countries	34.0	29.8	4.3	-5.1

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

By contrast, *expansions* in Latin America and the Caribbean are shorter than in other regions in the sample. The difference is especially marked (12 or more quarters) compared with the countries of East Asia and the Pacific and the developed (OECD) countries. The amplitude of expansions varies significantly among regions. In East Asia and the Pacific, GDP grew an average 42.4% during expansions, which lasted nearly 32 quarters (eight years). During expansions in Latin America and the Caribbean, which lasted less than 20 quarters, GDP grew by just 25.3%.

The difficulty faced by the region's economies in sustaining expansions has impaired their ability to reverse the effects of recessions on the production structure, which helps explain the low average growth rate over the past 20 years. This difficulty stems from a less diversified and integrated production structure that keeps the region from reaping to the fullest the growth stimulation benefits of rising external and domestic demand and from seizing the opportunities for trade specialization

associated with intra-industry trade. Short expansions are the other face of low dynamic efficiency in the production structure.

An analysis of fluctuations in the demand components of GDP shows that investment retreats far more sharply than other components on the downswing. Its behaviour is also clearly asymmetric, with changes during cycle downswings being much sharper than during upswings. This dynamic is particularly marked in the case of public investment in infrastructure, which contracts 12 times faster than GDP overall.

This dynamic depends on how governments respond to crises—especially their decisions on public investment—and on slackening private investment. In the case of public investment, both regionally and as a percentage of GDP, the highest level was recorded in 1980-1981 (6.7%), after which the percentages declined gradually until 1999-2003 (3.9%). In 2004-2010, there was a widespread recovery (4.8%) although the intensity varied across countries. In this period, the regional average rose to its highest level since 1990. Nonetheless, in some countries (the Dominican Republic, El Salvador and Guatemala), the level of public investment remained persistently low throughout 1980-2010. The recent improvement notwithstanding, the historically procyclical behaviour of public investment and its long-term downtrend are worrying because of their negative impact on growth.

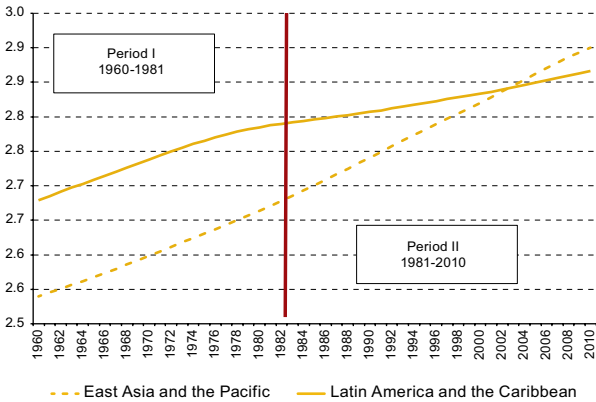
The pattern of private investment has been different. Expressed as a region-wide average percentage of GDP, it fell from 14.3% in 1980-1981 to 11.1% in 1982-1990 (the debt crisis years) and then rose in 1991-1994 (to 14.1% of GDP) and 1995-1998 (15.6% of GDP). Between 1999 and 2003, private investment dropped to 14.7% of GDP; this variation has to do with external fluctuations that impacted growth expectations. Some examples are the dot-com crisis in the United States and domestic crises such as the one that hit Argentina in 2000. During 2004-2010, when the region's export commodity prices soared and growth prospects improved, the pace of private investment picked up substantially and brought the regional average up to 15.9% of GDP.

Foreign direct investment is figuring increasingly heavily, especially in the most dynamic and technology-intensive areas of the service sectors (telecommunications and banking); manufacturing (automobile, chemical and metalworking industries) and natural resources (mining). Transnational companies, including those that were born in the region (the

trans-Latins) base these investment decisions on three kinds of strategy: tapping domestic markets, seeking natural resources and developing export platforms (often from free zones). What is missing in the region is strategies seeking advanced assets (technology and skilled human resources). This reflects the weaknesses in the growth pattern and in policies for bringing about virtuous changes in that pattern.

Both investment and the production structure have been hit hard by the crises; this has undermined the capacity for growth, especially in the wake of the debt crisis of the 1980s. Figure 6 compares long-term trend GDP for Latin America and the Caribbean and for East Asia and the Pacific during 1960-2010. Whereas East Asia and the Pacific sustained high GDP growth throughout the period, there was a structural break in Latin America and the Caribbean in the 1980s. The GDP growth trend between 1960 and the early 1980s (Period I) is similar to that in East Asia and the Pacific although the latter region started with lower GDP levels. After the lost decade, the GDP growth trend in Latin America and the Caribbean slackened and has still not recovered (Period II) despite faster growth in 2003-2008.

**Figure 6**  
**TREND GDP FOR LATIN AMERICA AND THE CARIBBEAN AND EAST ASIA AND THE PACIFIC, 1960-2010<sup>a</sup>**  
*(Annual logarithmic data)<sup>b</sup>*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, "World Development Indicators" and "Global Finance" [online] <http://www.gfmag.com/>.

<sup>a</sup> The East Asia and Pacific region consists of 22 nations, including China, Japan, the Republic of Korea and Singapore.

<sup>b</sup> Hodrick-Prescott method.

The basic difference between the two paths is between a virtuous model (such as in East Asia, where there was positive structural change) and the Latin American and Caribbean model with its pattern still defined by its static comparative advantages. Apart from the duration of cycle phases, what is important is what is done during these phases to improve the pattern of specialization and the production structure. The region's cyclical behaviour and its impact on the growth path pose policy design challenges that will be discussed later.

To summarize, the region's cycle dynamic has specific traits. Expansions cannot be sustained, translating into shorter periods of economic growth. Investment rates drop sharply in recessions but do not respond as strongly to expansions. As a result, the region's production structure has been unable to move towards dynamic sectors that would make it more competitive in a fast-changing world. This affects long-term growth rates. The trend break in the 1980s illustrates this dynamic: what began as a cycle fluctuation turned into a structural lag.

## **B. Policy responses, the cycle dynamic and structural change**

The lack of an integrated production matrix deflects the dynamism of demand growth towards imports, blunting its multiplier and growth accelerator effects and thus its impact on learning. Policy responses can either heighten or lessen these consequences (ECLAC, 2007 and 2010a).

After the economic reforms that began in the mid-1980s in most of the region and broadened in the 1990s, the prevailing trend was to abandon industrial policies and dismantle the institutions charged with carrying them out. The very idea of targeted policies was rejected. With very few exceptions (particularly Brazil), there was a move towards horizontal policies that, supposedly, were sector-neutral. Because these policies were not implemented or were very limited in scope, tradable sectors and activities had to face rapid trade liberalization and exchange-rate appreciation without the new institutional context helping them respond or make the necessary adjustments.

Macroeconomic policies made great strides on several fronts, such as fiscal balance and inflation control (which are prerequisites

for development policy). But they did not make enough progress on other fronts, with major issues related to equality and structural change going unaddressed.

Fiscal policy should encompass important objectives related to equality, smoothing the economic cycle and promoting structural change. ECLAC has been a pioneer in calling for a new social covenant to strengthen the State on the basis of a higher, more progressive tax burden as each country's degree of development permits.<sup>12</sup>

As for fiscal policy and equality, most of the region has made significant progress in tax revenue over the past few decades. But serious problems remain, including a low tax burden in many countries and the regressive distributive impact of the tax structure. The region's countries have less difficulty collecting indirect taxes than (potentially progressive) direct taxes such as personal income and property taxes. Increasing the tax burden and improving the distributive impact of the tax collection structure are important issues for the development agenda of Latin America and the Caribbean. But it should be borne in mind that public spending is the main redistributive instrument of fiscal policy. International comparisons show that most of the redistributive effort in developed countries is based more on public social spending, and the system of transfers in particular, than on the tax system.<sup>13</sup>

The low direct tax burden reflects not only high levels of non-compliance, evasion and avoidance, which work against the principle of horizontal equity, but also the relative narrowness of the tax base. All of this renders virtually ineffective the redistributive impact of income tax. The (vertical) inequity resulting from the proliferation of income tax exemptions is compounded in turn by the degree of evasion, which tends to be much higher for income tax than for value added tax (VAT). (Jiménez, Gómez Sabaini and Podestá, 2010). Not only has tax policy increased the general taxation of consumption by strengthening VAT, but the income tax focus has, essentially, been on the income of juridical persons and only to a much lesser extent on

---

<sup>12</sup> The main contribution in this regard can be found in ECLAC (1998) and is expanded and developed in ECLAC (2000, 2004 and 2010a) and elsewhere.

<sup>13</sup> See Goñi, López and Servén (2008). Analysing fiscal policy in Central America, the Dominican Republic and Panama, Barreix, Bes and Roca (2009) find the distributive impact of public-sector social spending 4.4 times greater than that of tax policy in those countries.

income of individuals, reducing its redistributive effect.<sup>14</sup> The burden on social security income is also very low, which is symptomatic of both the high level of informal employment and the wide variety of public- and private-sector social security arrangements in the region.<sup>15</sup>

From a macroeconomic viewpoint and as an integral part of development policies, fiscal policy has a role to play in stabilizing economic activity and reducing external imbalances. The historical experience of Latin America and the Caribbean, and more recently the response to the 2008-2009 crisis in the region and the wider world, have made plain the key role of fiscal policy instruments in dealing with fluctuations in economic activity, especially those caused by external trade or financial shocks (see ECLAC, 2010b).

One of the main lines of action for strengthening the capacity for countercyclical measures is the consolidation of fiscal space or leeway. Fiscal solvency is a precondition for taking countercyclical measures, although conditions in the external sector are equally important in determining the public sector's room for manoeuvre (Martner and Tromben, 2004).

Macroeconomic policy management has improved in most of the region's countries in recent years, enabling them to reduce their external vulnerability while at the same time giving them greater fiscal space to deal with exogenous shocks. For the first time in decades, a number of governments in the region have not found fiscal constraints or the external sector to be an insurmountable obstacle to, for example, extending the coverage of their social protection systems.

Fiscal policy performance has shown positive signs in the past decade. In the past, the fiscal policy of the region's countries was often procyclical in that it accentuated economic fluctuations instead of attenuating them. This tendency changed in the 2000s, with many countries adopting a countercyclical stance, or at least a less procyclical one, as can be seen from the effectiveness of the governments' response to the international recession of 2008 and 2009 (ECLAC, 2010b).

<sup>14</sup> This becomes clear, for example, in a comparison with the countries of the European Union, where direct and indirect taxes represent 16.1% and 11.7% of GDP, respectively, whereas in Latin America they represent 5.4% and 9.6% of GDP. The average personal income tax take in the region is less than 1% of GDP (in 2000-2008 the figure was in fact 0.46% of GDP), whereas in the OECD countries it accounts for 9.1% of GDP. The difference is also substantial, though considerably smaller, in the case of corporate income tax, with receipts in 2000-2008 averaging 1.6% of GDP in the region's countries and 3.3% of GDP in the OECD countries. See also Rossignolo and Gómez Sabaini (2011).

<sup>15</sup> The tax burden is larger in the countries of the Caribbean than in those of Latin America, but the split between direct and indirect taxes is similar.



Everything indicates that the region is now better prepared to design and apply countercyclical fiscal policies. Implementing such policies poses two major challenges. The first is to have enough fiscal space to undertake the extra spending necessary to boost aggregate demand and economic growth during downturns. This extra fiscal space can be generated by increasing public savings during the boom phase so that the impact of adverse shocks can be managed without jeopardizing the financial sustainability of the State.

The second challenge is that greater fiscal space should be complemented by an improvement in the economy's external position, so that internally generated resources can be supplemented by others from abroad. In other words, countercyclical fiscal policy should be based on a monetary and exchange-rate policy aimed at accumulating international reserves in order to avoid external strangulation and at real exchange-rate levels that prevent the emergence of an unsustainable external deficit. One of the main reasons that the region's countries were able to react in 2008-2009 was the external leeway available in much of the region in the run-up to the crisis, either for exogenous reasons (improved terms of trade, favourable international financial conditions) or for endogenous ones (alertness to the negative effects of excessive external borrowing at times of high international liquidity, and policies for external deleveraging and building up international reserves). Structural change is thus crucial for increasing the long-run growth rate compatible with external equilibrium and creating space for fiscal policy to work without creating current account vulnerabilities.

Last, as discussed when examining the relationship between cycle and investment, the use of fiscal space to promote structural change via public investment has been weak in the region, and it is declining. Public investment has mostly been used as an adjustment variable during crises. Its historically procyclical pattern and tendency to decline over the long run are a drag on growth. The lack of industrial policy providing an investment horizon and a productivity expansion path heightens the negative impacts of the long-term decline in public investment, especially when infrastructure investment is cut back.

For many of the region's countries, the most pressing monetary policy challenge of the 1990s was to reduce the high inflation levels inherited from the lost decade of the 1980s. After experiencing high inflation during

the 1970s, 1980s and early 1990s, including several bouts of hyperinflation, the countries of Latin America and the Caribbean did in fact succeed in slowing the price spiral during the second half of the 1990s. In the late 1990s, inflation rates tended to converge to the single digits virtually everywhere in the region, with just a few exceptions.

In many cases, price stabilization was achieved by implementing monetary programmes that used the exchange rate as a nominal anchor, not only in the smaller economies of Central America and the Caribbean (where this type of monetary regime is still fairly predominant), but also in some of the larger economies of South America.<sup>16</sup> These programmes were usually implemented along with policies to open up trade and finance and deregulate domestic markets, including the financial and labour markets.

In small, open economies with low levels of financial intermediation—like most of the countries of Latin America and the Caribbean—the exchange-rate channel, as opposed to the credit channel, tends to be the main mechanism transmitting monetary signals to prices.<sup>17</sup> In regimes with a flexible exchange rate and unrestricted financial account openness, any rise (fall) in the domestic interest rate will attract (drive) capital into (out of) the country, and the local currency will tend to appreciate (depreciate). This will directly affect domestic prices for tradable goods, and thence inflation. Less immediately, it will affect the evolution of credit, which may actually expand faster if a “wealth effect” arises on the demand of credit as a corollary of currency appreciation (Stiglitz and others, 2006; Ocampo, 2011). Thus, in countries with little financial deepening, a contractionary monetary policy will tend to reduce the inflation rate primarily through the exchange-rate channel, and only to a lesser degree through the credit channel.<sup>18</sup> This is what is known as the trilemma in international economics: the impossibility of having an open financial account while at the same time exercising an active monetary policy and meeting exchange-rate targets.

---

<sup>16</sup> Fixed parity regimes used “hard” pegs (currency boards, dollarization and fixed exchange rates) and “soft” pegs (crawling pegs and crawling bands).

<sup>17</sup> See Barbosa-Filho (2008), Frenkel (2008), Galindo and Ros (2008), Bresser-Pereira (2010) and Ros (2012). The discussion about the relationship between exchange rates and inflation targets is also quite relevant in some developed and transition countries. See, in this regard, Bernanke and Woodford (2004).

<sup>18</sup> This does not mean that the credit channel is not operative in the region’s countries, but that it is less important than in advanced economies where the financial system is far more developed. This lesser importance is due not only to the smaller degree of development and depth that usually characterizes the region’s financial systems, but also to the contradictory effects of monetary policy decisions.

Precisely because the exchange-rate channel is more effective, the authorities usually react quickly to the smallest possibility of an increase (devaluation) in the nominal exchange rate by increasing the policy interest rate, intervening directly in the currency market, or some combination of the two in order to prevent this passing through to prices. But they do not react this way to a decrease (exchange-rate appreciation). In practice, this leads to asymmetry in exchange-rate management by central banks in developing countries or those with little financial deepening. This asymmetry is built into the system of incentives underlying inflation targeting regimes. This bias is problematic, as it is detrimental to the production of tradables and can work against production diversification (Abeles and Borzel, 2010).

The central role of the exchange rate has profound implications for the production structure. If macroeconomic policy strongly affects macro prices, it will have an impact on relative sector profitability (and hence on the direction of investment) that will be hard to reverse by means of industrial policy—even more so when industrial policy is weak or non-existent, as is the case in most Latin America and Caribbean countries. Moreover, the external imbalances associated with appreciation usually culminate in crisis and devaluation, exacerbating the real and nominal instability of the economy as well as exchange-rate volatility.

### **C. Macro prices and production specialization**

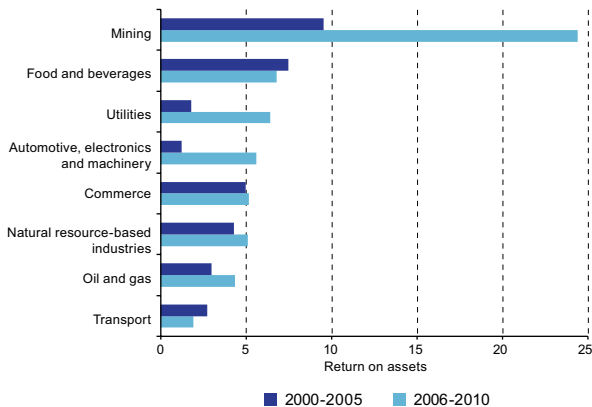
The production specialization dynamic depends on economic incentives and the behaviour of the agents of production. Differences in sector returns determine where investments will go. If higher returns are associated with less knowledge-intensive sectors, the production structure will remain locked in a technologically less dynamic path. And if due account is not taken of negative environmental externalities, cost and return signals skew the growth model in an unsustainable direction. This blocks the development of new technologies that would, for example, open up less carbon-intensive energy alternatives for transport, urban development and production.

Technology asymmetries between Latin America and the Caribbean, on the one hand, and developed countries on the other are

more marked in knowledge-intensive sectors. These differences open a productivity gap, undermine competitiveness and make returns in these sectors lower than in sectors specializing in natural-resource-based export products. In the absence of active policies to change relative rates of return, the negative relationship between technology intensity and profitability will persist and help reproduce the existing pattern of specialization.

International price shocks have reinforced the relative profitability structure and preserved production structure inertia. Against a backdrop of burgeoning commodity demand, the openness model consolidated a vector of incentives that caused the self-reinforcement of the region's specialization in products that already provided its competitive base (see figure 7). Investment decisions guided by relative returns are reinforcing the current path. In this scenario, macro prices are not encouraging investments that could diversify the production structure and strengthen forward and backward linkages.

**Figure 7**  
**LATIN AMERICA: RETURN ON ASSETS BY SECTOR, WEIGHTED**  
**AVERAGE, 2000-2005 AND 2006-2010 <sup>a</sup>**  
*(Percentages)*



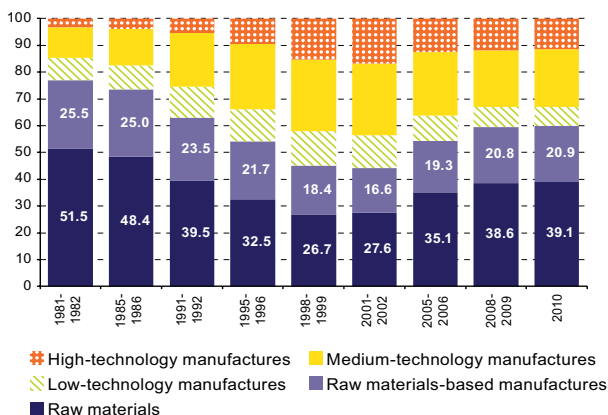
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information provided by the Special Studies and Projects Department of *América economía* magazine.

<sup>a</sup> Weighting based on each company's share of sector sales. Natural resource-based industries include cement and aluminium, iron and steel, chemicals, petrochemicals, paper and pulp, and agribusiness.

Overcoming this problem calls for redefining the sector-based structure of investment incentives. This is a challenge that public policy cannot afford to ignore in the next few years if the aim is to bring about structural change that also creates quality jobs.

Against this background, the region's exports to its three largest extraregional markets (Asia and the Pacific, the United States and the European Union) were concentrated in raw materials and natural resource-based manufactures. This reflects a trend towards reprimarization, driven by the high natural resource prices prevailing throughout most of the period (see figure 8).

**Figure 8**  
**LATIN AMERICA AND THE CARIBBEAN: EXPORT STRUCTURE BY TECHNOLOGY INTENSITY, 1981-2010**<sup>a</sup>  
*(Percentages of the total)*



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

<sup>a</sup> Cuba and Haiti not included. Data for Antigua and Barbuda refer only to 2007, and data for the Bolivarian Republic of Venezuela only to 2008; data for Honduras do not include 2008; data for Belize, Dominican Republic, Saint Kitts and Nevis, Saint Lucia, Suriname and Grenada (exports only) do not include 2009.

There is no virtuous structural change without a shift in investment direction towards sectors with dynamic efficiency. In Latin America and the Caribbean, the trend towards currency appreciation, terms of trade shocks and an industrial policy vacuum have all reinforced the pattern of specialization in sectors with static comparative advantages. The outcome has been production structure lock-in and a technology lag.

## V. THE SOCIAL DIMENSION IN STRUCTURAL CHANGE

Two distinctive characteristics of the region's economic and social structure are a sharply heterogeneous production structure and high levels of inequality in different areas, which are usually captured in its high income inequality indexes. Structural heterogeneity refers to the coexistence in a single economy of highly productive sectors together with a heavy preponderance of low-productivity segments. The countries in the region tend to have a poorly diversified, commodity-based export structure; this influences the production structure. Difficulties in propagating technical progress tend to perpetuate productivity gaps both within countries and in relation to economies which are quicker to incorporate such progress.

Structural heterogeneity and income inequality are linked through the labour market, in particular through workers' wages. Inequality in wage income stems from productivity differences, but not only between branches of activity or segments of production. Worker productivity varies sharply within segments<sup>19</sup> and sectors, too, and the differences are associated largely with asymmetries that include dissimilar education levels. Labour market institutions, such as wage negotiations and the minimum wage, also come into play in this first link between productivity and

---

<sup>19</sup> Segments are defined by firm size and the occupational category of workers. The high-productivity segment comprises employers and workers in firms with 200 or more employees, while the low-productivity one includes employers and workers in enterprises with up to 5 employees, as well as unskilled self-employed workers, unpaid family members and domestic workers. The medium-productivity segment is made up of employers and workers in small and medium-sized enterprises (6 to 199 workers). See Infante (2011).

wages. These factors affect workers' capacity to benefit from the fruits of the production process and the way in which the returns on capital and labour are distributed to pay for their contribution.

The manner in which these individual income gaps (together with the differences in returns on labour and capital) pass through to household income inequality is affected by public policies, access to non-productive assets and demographic factors. With regard to public policies, contributory transfers (pensions) and non-contributory transfers are important sources of total family income, and whether they contribute to greater equality depends on how progressive they are. Similarly, direct taxation can also contribute to greater equality of disposable household income if it is progressive. Lastly, the level of income inequality in a society will also depend on two other crucial factors: access to non-productive assets and demographic factors.

The labour market and its institutions, which are a nexus between production structure heterogeneity and sharp household income inequality, have behaved differently in the various stages of the business cycle in the region's economies. The countries of the region have seen that rising unemployment and stagnating employment do not occur solely during periods of economic standstill or recession. Economic growth in 1990-1997 did not produce an improvement in labour market indicators. Several factors hurt employment in this period; while largely associated with the economic reforms implemented in the region they also had to do with the region's limited absorption of the technical and production transformations occurring in the global economy. Thus, in an institutional context characterized by weak employment policies, increasing trade openness (in many cases heightened by exchange-rate appreciation) and labour-saving technical and production transformations on a global scale, the growth of the 1990s did not create enough jobs nor did it avoid a sharp rise in unemployment. Consequently, the severe distributive problems that had intensified in the previous decade remained uncorrected.

In 1998-2002 (a period of slack economic growth in the region) the unemployment rate continued to trend up while employment virtually flatlined. The fresh upswing in 2003-2010 brought major changes: this time, growth was accompanied by a falling unemployment rate and an increase in the numbers of workers joining the labour market. It was

the first reversal of rising unemployment in two decades. In this period measures were rolled out to stimulate growth, with a positive effect on job creation (ECLAC/ILO, 2011). Redistributive policies had a direct effect on the demand for consumer wage goods and the increase in production of these goods for the domestic market, thereby contributing to Keynesian efficiency. This trend, together with a favourable international context of economic growth both at the global level and, in particular, among the emerging economies, underpinned an improvement in labour market indicators in the region. Real wages rose in both growth phases, but only in the more recent period were better employment rates combined with steady and significant gains in labour income. The rise in real income in the more recent period is not explained by the economic upswing alone; labour policies, especially as regards the minimum wage, also played an important role.

Over these business cycles, the region's labour market saw substantial qualitative transformations (see table 4). First, in the past two decades the services sector, which accounts for the largest number of jobs in the region, has increased its share to the detriment of agriculture. Second, in the recent growth period (2003-2010) wage employees increased as a proportion of total employed. The percentage had been relatively stable in the first economic growth period (1990-1997) and in what is referred to as the lost half decade (1998-2002).

**Table 4**  
**LATIN AMERICA AND THE CARIBBEAN: CHANGES IN GDP AND  
LABOUR MARKET INDICATORS, 1991-2010**  
(Percentages)

	1991-1997	1998-2002	2003-2010	1991-2010
<b>Cumulative rates</b>				
Change in GDP	26.2	8.9	35.6	86.5
Change in unemployment rate	17.7	20.4	-34.8	-7.6
Change in gross participation rate		1.6	1.2	5.8
Change in gross employment rate		-0.6	5.7	6.5
<b>Average annual rates</b>				
Change in GDP		1.7	3.9	3.2
Change in unemployment rate		3.8	-5.2	-0.4
Change in gross participation rate		0.3	0.2	0.3
Change in gross employment rate	0.2	-0.1	0.7	0.3

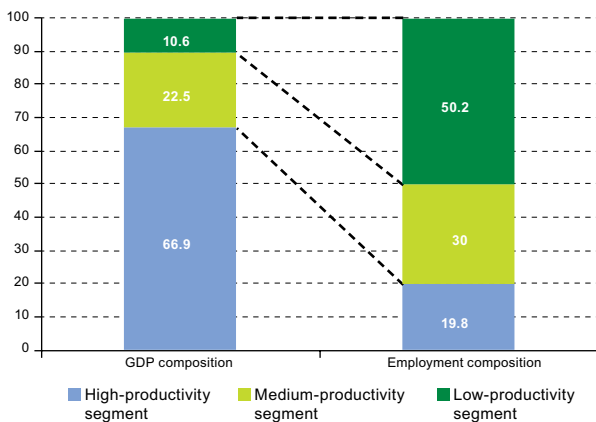
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from CEPALSTAT.



The recent uptick is still incipient, but it is a good sign in that it indicates that the growth of employment is being driven by the creation of better quality (wage) jobs. While own-account work continues to serve as backup option in the region and is still concentrated in low-productivity areas, it is trending down for the first time in two decades.

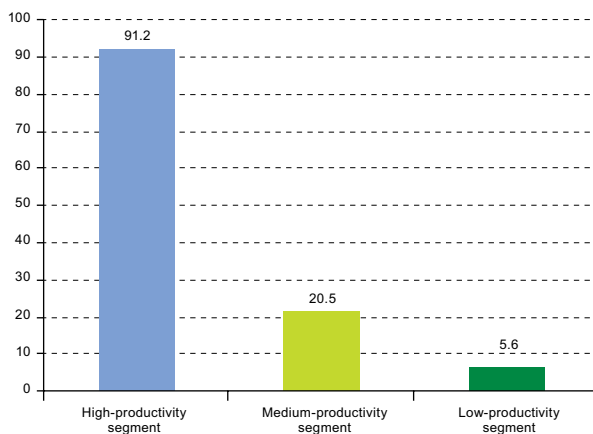
Notwithstanding these changes, the structural traits of the region's labour markets, linked as they are to structural heterogeneity, persist. As shown in figure 9, in Latin America two thirds of GDP (66.9%) is generated by the high-productivity segment, 22.5% by the medium-productivity segment and just 10.6% by the low-productivity segment. But this distribution pattern is reversed for job creation: the high segment accounts for just 19.8% of new jobs, the medium segment 30% and the low segment 50.2% (Infante, 2011). In addition, as shown in figure 10, there are large gaps between the high-, medium- and low-productivity segments in terms of GDP per employed person. This sharp disparity between the different segments' contribution to GDP and employment translates into a very unequal distribution of the returns on productivity gains among workers. Heterogeneity in the region's production structures is, then, reflected in huge productivity gaps, a distribution of employment that is inversely proportional to productivity in each segment, and sharp wage income inequality.

**Figure 9**  
**LATIN AMERICA (18 COUNTRIES): STRUCTURAL HETEROGENEITY**  
**INDICATORS, AROUND 2009**  
*(Percentages)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of R. Infante, "América Latina en el 'umbral del desarrollo'. Un ejercicio de convergencia productiva", *Working Paper*, No. 14, Santiago, Chile, June 2011, unpublished.

**Figure 10**  
**LATIN AMERICA (18 COUNTRIES): GDP PER WORKER, PPP AROUND 2009**  
*(Thousands of dollars)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of R. Infante, "América Latina en el 'umbral del desarrollo'. Un ejercicio de convergencia productiva", *Working Paper*, No. 14, Santiago, Chile, June 2011, unpublished.

In all the countries of the region, aside from their greater or lesser production structure heterogeneity, women's labour market participation and youth unemployment are highly stratified. The stratification of female labour-force participation is associated with lower education levels among poorer women and fewer available jobs in these sectors because labour markets have been raising education requirements. However, stratification also largely reflects very limited capacities and alternatives for women to reconcile paid and unpaid work. When resources are scarce, households larger and social and cultural connections weaker, women's options shrink and the possibility of entering the labour market diminishes. In the case of youth unemployment, socioeconomic stratification is compounded by a slower response to economic growth; this has widened age disparities.

Rising real income for workers has not, in most countries, led to improvements in the functional distribution of income. In general, the wage share of national income in the countries of Latin America and the Caribbean has shown the same downward trend seen at the international level, even during economic upswings (see table 5). The evidence appears to show that wage earners have captured only a limited share of productivity gains in many of the region's countries.

Table 5  
**WAGE SHARE OF INCOME, AT FACTOR COST, 1990-2009**

	1990	1997	2002	2009	Change			
					1991-1997	1998-2002	2003-2009	1991-2009
Bolivia (Plurinational State of) <sup>a</sup>	39.0	39.7	37.8	31.1	1.9	-4.9	-17.7	-20.3
Brazil <sup>a</sup>	53.5	47.1	46.8	48.3	-11.9	-0.7	3.2	-9.7
Chile	38.7	44.1	46.7	44.5	13.9	5.8	-4.6	15.0
Colombia	41.6	40.7	37.2	36.1	-2.2	-8.6	-3.0	-13.3
Honduras	54.1	50.1	50.8	47.5	-7.3	1.3	-6.4	-12.1
Mexico	32.2	32.7	35.6	31.4	1.6	8.6	-11.8	-2.6
Panama	58.6	39.3	38.6	35.2	-32.9	-2.0	-8.7	-39.9
Paraguay <sup>a</sup>	43.4	57.1	49.2	47.2	31.6	-13.9	-4.0	8.8
Peru	24.9	27.3	27.5	23.3	9.8	0.5	-15.2	-6.4
Venezuela (Bolivarian Republic of)	31.1	37.0	36.1	33.5	18.8	-2.4	-7.3	7.6

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

<sup>a</sup> For Brazil, Paraguay and the Plurinational State of Bolivia, the most recent available data are for 2006.

The outlook is better with regard to the personal distribution of income in the region. Whereas in the 1990s and through the early 2000s, inequality trended up in most of the countries, in the past few years it has turned downward in a large set of countries, and this does not appear to have been changed by the recent economic crisis. It is not easy to weight the causes behind this trend. Explanations run from citizens' demands for greater equality to economic factors such as transfers and the dynamics of the labour market. Consensus does exist that what happens in the labour market is the most important factor in the reduction of household income inequality and that non-contributory transfers have had a deconcentrating effect. It is not yet clear whether the fall in labour income inequality is due fundamentally to the increase in the relative supply of skilled workers or the increase in the relative demand for unskilled workers associated with expanding production of non-tradable goods.

A pro-equality dynamic linked to structural change calls for a labour market in which the growing supply of skilled workers is matched by equally dynamic demand. Enhanced bargaining power would allow workers to capture a larger share of productivity gains (in the form of higher real wages). This process will not unfold spontaneously, but rather will require simultaneous actions on three fronts: industrial policies that promote structural change, macroeconomic policies for growth and employment, and rights-based social protection systems.

## VI. POLICIES FOR AN INTEGRATED VISION OF DEVELOPMENT

### A. Industrial policy

The pattern of production specialization in Latin America and the Caribbean has locked the production structure into activities that are environmentally inefficient and not very knowledge-intensive. The activities benefitting from the ongoing technological revolution account for a small share of this structure, thus worsening the productivity gap. To overcome this inertia, the structure of relative returns needs to be re-gearred in favour of knowledge-intensive sectors; this can only be achieved by means of industrial policies aimed at creating new manufacturing, primary or service sectors. Such policies are critical to development that incorporates and goes beyond competitiveness policies designed to improve the efficiency of *existing sectors*.

Creating new sectors was among the region's prime industrial policy objectives until 1980, but it lost legitimacy during the ensuing decade as the new economic model ushered in by reforms took root. Much of what the region has done since then falls under the umbrella of "competitiveness policies".<sup>20</sup>

After an initial period extending through the mid-1990s, when the wave of reforms all but wiped industrial policies off the public agenda, there was a resurgence of interest in competitiveness. Competitiveness

---

<sup>20</sup> It is useful to maintain the distinction between industrial policy and competitiveness policy, in order to highlight the need for policies geared towards creating new sectors in the strict sense. Competitiveness policies are not enough to change the production structure because not all sectors have the same potential for reaping the same benefit from efficiency gains. Of course, creating sectors entails developing pertinent economic agents and institutions.

policies (even those that were fundamentally sectoral) were far more concerned with making existing sectors more efficient than with creating new ones, something that was consistent with seeking a greater share of international markets —particularly on the basis of static comparative advantages (IDB, 2001; Melo, 2001; Peres, 1997).

Competitiveness policies in the region can be grouped as follows, in accordance with the degree of acceptance they have attained (which is no reflection on their effectiveness): policies with strong legitimacy, policies with weak legitimacy and emerging policies. Policies with strong legitimacy include those that are most highly regarded by governments. In addition to policies for promoting exports and attracting foreign direct investment, this group includes policies to foster development and innovation in science and technology; human resources development, including business training; support for micro and small and medium-sized enterprises and production development at the local level. These policies are accepted because they are perceived as sector-neutral since they operate on markets for production factors (technology and training) or contribute to job creation.<sup>21</sup>

Policies with weak legitimacy are those that are more clearly in contradiction with the current development model. They include direct fiscal subsidies, non-targeted tax exemptions, directed credit and subsidized borrowing rates, foreign trade tariffs and the use of the State's purchasing power.

Emerging policies (in particular pro-competition measures, regulation of infrastructure sectors, and environmental policies) are acquiring growing legitimacy but are still maturing and are at very different stages of development in the countries of the region.

Policy documents in the region have seen considerable content convergence over the past decade, except as regards acceptance of sectoral policies. This convergence is evident in six policy components: (i) an emphasis on raising competitiveness in the global market; (ii) the legitimacy of horizontal or neutral instruments (which are actually far from it, as seen *ex post*; (iii) support for micro and small enterprises,

---

<sup>21</sup> These competitiveness policies do not encompass the entire universe of government action affecting the competitiveness of an economy. Other measures include macroeconomic policy and infrastructure development policy.

because of their capacity to create jobs; (iv) the growth of programmes to support production clusters; (v) the strengthening of science, technology and innovation policies and, more recently, policies for widespread availability of broadband Internet; and (vi) the targeting of subnational or local economic areas.

The fact that these elements have remained a fairly constant feature of competitiveness policies would suggest that a stock of skills and experience has been accumulated that could serve as a basis for designing and implementing updated industrial policies.

In the early 2010s (and unlike what has been happening in other development policy areas) there is still no *sectoral policy* convergence among the countries of Latin American and the Caribbean. While in a decreasing number of countries the official stance is strongly against these policies (although sectoral support is provided on an ad hoc basis), in others they are recognized as a valid way of raising the competitiveness of activities that have the potential to penetrate external markets or that face stiff competition from imports.<sup>22</sup>

The slow comeback of sectoral policies is out of step with the pressing need to move forward on structural change. The idea of reinstating the use of industrial policies to create new sectors rather than just boosting competitiveness should be given greater legitimacy and placed at the centre of the policy agenda. These policies are crucial in enabling the region to participate fully in the unfolding technology revolution, promoting environmentally sustainable paths in nanotechnology, biotechnology, new materials and information and communications technologies.

With some exceptions, the degree of policy implementation in Latin America and the Caribbean has been low. The causes behind policy implementation failures and the resulting divide between what is decided and what is actually done are varied and include (i) non-operational or unattainable objectives; (ii) shortage of human or financial resources; (iii) insufficient institutional capabilities; (iv) weak public-private agreements; and (v) weak economic signals.

---

<sup>22</sup> Brazil is the best example of this gradual return to sectoral policies since 2003. Noteworthy in Brazil's experience are continuity of priorities (in particular, innovation and competitiveness); flexibility to deal with unforeseen problems; a growing concern with setting explicit goals, mobilizing instruments and interacting effectively with the private sector; and integration with other development policies, such as education and science and technology (Ferraz, 2012).

What can be done to close the gap between what is decided and announced, and what is actually done and evaluated? First, policymaking should include identification of the implementing agencies. Given the shortage of qualified human resources in those areas of the State that are involved in policy implementation, a second line of action is to transfer to these areas highly qualified staff with an executive profile who are currently engaged in policymaking. A third line of action is to develop and strengthen policy operators, that is, institutions and individuals who will ensure policy implementation through a combination of policymaking, action and funding capabilities.

In weighing industrial policy strategies, the countries of the region should consider the criteria for deciding which sectors to promote, the policy instruments that are available, and the political will to take such action.<sup>23</sup>

The *criteria for targeting sectors* are based on differing views of the role of the market and the importance of efficiency based on comparative advantages for allocating production resources. Views that rely on market constraints for efficient allocation of production resources hold that capacity-building occurs on paths far removed from static advantages (Cimoli, Dosi and Stiglitz, 2009) that tend to be concentrated in the manufacturing sector because of increasing returns, technology spillovers and innovation (Greenwald and Stiglitz, 2006). By contrast, other views favour market efficiency more and, while recognizing the need to diversify the economy, stress that the economy should move close to comparative advantages (Lin, 2011).

The *available instruments* for implementing such policies consist mainly of combining competitiveness policy instruments with direct public-sector financing instruments (particularly national development banks), fiscal stimulus measures and public investment, as well as managing the purchasing power of the State and State-owned enterprises. Such policies are designed to provide temporary conditions that contribute to the profitability of new activities and technology paths, such as widespread availability of broadband Internet access to make way for cloud computing. Another powerful sectoral policy instrument is direct State investment, which can be through the State-owned enterprises

---

<sup>23</sup> Other key variables to be borne in mind are constraints stemming from the size of domestic markets and the stock of skills in each country in the region, as well as the space for action under multilateral and bilateral trade agreements.

that figure heavily in key sectors in a number of countries in the region. Even though there is a great deal of room for manoeuvre in this area, it is little used in the region.

As for the *political will* to implement sectoral initiatives, conditions in the region are ambiguous. Even in countries that do not regard sectoral policies as legitimate, they are practiced in an ad hoc way, and crisis-hit sectors often receive targeted support. The question is, then, what has to be done to increase their legitimacy.

Two lines of action are paramount. First, there is a need to improve implementation capacity, narrowing the gap between policymaking and the policy implementation ability of institutions. The persistence of this gap damages the credibility of policymakers and hence of the policies themselves. Second, there needs to be a move away from implementation-based policy impact evaluation towards objectives-based evaluation.

Despite significant progress since the days when the belief was that “the best industrial policy is none at all”, a crucial question remains open. Beyond improving the implementation and evaluation of policies geared towards diversifying the production structure, it is necessary to bolster social agents interested in seeing these policies applied on a wide scale in the countries of the region, that is to say, agents that would pledge their economic and political resources to initiatives of this type. Industrial policies have made a slow comeback in Latin America. For these policies to have more than a marginal impact, social actors (including the State) should commit to them and back them up with their authority and resources, linking them with macroeconomic, social and environmental policies to drive an integrated vision of development.

## **B. Macroeconomic policy**

The macroeconomic policy recommendations put forward herein follow two lines drawn from the analytical framework of this report. The first line involves increasing the number of instruments, which is the requisite counterpart to increasing the number of policy objectives because, in addition to real and nominal stabilization, macroeconomic policy should send signals that are conducive to sustainable structural change and the progressive redistribution of income for equality. The second line entails coordinating this broader universe of instruments. The



goal is to avoid the problems that arise from adding objectives without instruments or from amassing instruments whose effects contradict each other. This calls for developing and harnessing complementarities and synergies between macroeconomic policy objectives and instruments for development.

The role of fiscal policy is defined based on its effects in three areas: fiscal policy for equality; business cycle smoothing; and the promotion of structural change. In Latin America and the Caribbean, both tax collection and public spending have much room for improvement in advancing towards fiscal policy for equality. In most of the countries the tax burden is lower than it should be (given the degree of development in each case), and it is concentrated in taxes that are generally regressive (indirect taxes). As a result, income redistribution does not substantially improve after taxes and public spending (compared with before), unlike what happens in the developed countries. There is, then, space for making the tax system more progressive. This should be done by means of improved design and collection of income and property taxes, coupled with targeted spending. This is not an easy course to take because there are marked structural constraints, such as the size of the informal sector, low average income levels and the administrative weaknesses of the tax system, not to mention the resistance that direct taxes usually spark. Despite these difficulties, it is essential to strengthen the tax system and make it more progressive, not only for promoting equality but for building the fiscal space that the State needs to act on the cycle and foster structural change.

As for countercyclical policies, it is necessary to build on the progress made over the past decade, buttressing the automatic stabilizers that make it possible to combine countercyclical objectives with the goals of equality. If they are designed and implemented correctly, these stabilizers generate significant transfers to the sectors with the greatest vulnerabilities and to the unemployed during crises. In Latin America and the Caribbean, the impact of automatic stabilizers is small and insufficient and is often limited by high degrees of informality and weak institutions.

Stabilizers can be combined with fiscal rules that help build fiscal space during boom times.<sup>24</sup> And discretionary fiscal spending should

---

<sup>24</sup> Designing a fiscal rule based on structural balance poses substantial methodological challenges, above all in estimating sustainable GDP growth. This calls for paying special attention to the short- and long-term effects of the rule on the growth path.

be kept as a useful instrument because it provides the flexibility needed to respond to frequent, unexpected shocks from a highly volatile globalized economy.

The fiscal dimensions should mesh with the objectives of sustainable structural change. Automatic stabilizers help sustain demand; they therefore work to boost investment rates. Fiscal rules and discretionary spending can incorporate and express the structural change objectives set by industrial policy. Well-crafted public investment programmes (whose implementation provides a stable horizon as to the amount and direction of investment and a stable reference point for private investment) make it possible to successfully pair countercyclical objectives and the goals of structural change. As the expectations of private agents converge towards sustainable structural change, the impact of public investment is multiplied by attracting private investment. The legitimacy and international support aroused by investments in sustainable technologies would be a draw for external funding for countercyclical policies, enhancing the contribution already being made by multilateral financial institutions.

Along these same lines, fiscal revenue stabilization funds act not only to stabilize government revenue and spending but also to curb excessive currency appreciation during booms (along with their impact on macro prices). Natural-resource price booms provide the region with opportunities for creating new financial instruments or improving existing ones. Good governance of natural resources refers to the policy framework regarding the ownership of those resources and the appropriation and distribution of rents therefrom to maximize their development impact. Good resource governance requires (i) progressively increasing the capture of rents from extractive sectors during price booms; (ii) channelling this funding towards long-term investments in capacities, technology innovation and development, and infrastructure, among others; (iii) investing rents from non-renewable resources according to the basic rule of long-term sustainability known as Hartwick's Rule;<sup>25</sup> and (iv) institutionalizing proper macroeconomic management of rents, preventing them from having a negative impact on the exchange rate and the production system.

---

<sup>25</sup> Hartwick's rule defines the amount of investment in capital stock (buildings, roads and knowledge stocks, for example) that is needed to offset declining stocks of natural resources and maintain the standard of living of a society into the indefinite future (Hartwick, 1977).

It is important to recover monetary policy autonomy in the face of the substantial constraints that the *trilemma* poses for many countries. Monetary policy where the credit channel starts to prevail over the exchange-rate channel leaves more room for controlling inflation without opening flanks on the external front. Recovering that autonomy requires regulating the financial account so as to mitigate the destabilizing effects of external short-term capital flows (through credit bubbles and asset overvaluation, especially in non-tradable sectors) during booms or times of high international financial market liquidity. With financial account regulation, opting for a managed float regime boosts the likelihood of pursuing an independent monetary policy. Without that regulation in place, the exchange-rate regime cannot stand up to speculative attacks or massive movements of capital.

An international reserve management policy is an essential tool for a managed floating exchange-rate system. The costs and benefits of accumulating reserves should be considered when implementing such a policy. Benefits include disincentivizing speculative short-term capital movements and providing greater protection against sudden capital outflows. A comfortable stock of international reserves would make it possible to avoid sudden balance of payments adjustments, especially during downturns when there is more danger of sudden or sharp devaluation. On the other hand, the costs include a lower return on short-term investment of international reserves than on alternate uses for them. Where foreign-exchange-market interventions carried out to build reserves are not sterilized, there is an additional cost associated with inflationary pressures. By contrast, sterilization measures have a quasi-fiscal cost.

Action on the financial account front should be coupled with macroprudential policies geared towards regulating the domestic financial market to make it sounder and ward off systemic risk from bubbles, manias and panics and their high costs for the economy and society. In a number of countries, limits on loan-to-collateral, debt-service-to-income, and borrowing and growth ratios, as well as minimum reserve requirements and dynamic provisioning, have proven to have effective countercyclical effects regardless of the level of development or the exchange-rate regime in place in the country in question.

Effective implementation of policies restricting external and domestic sources of instability before their impacts become irreversible is a pressing issue that the governments of the region should address.

The benefits springing from macroprudential policies are many. First comes their countercyclical role in precluding situations of financial fragility and the inevitable corrections that ensue. On the external front, by moderating the exchange-rate appreciation and avoiding severe, unsustainable macro price distortions they lessen the aggregate demand stimulus, the accumulation of current account imbalances and the mounting uncertainty as to the future rate of exchange, among other impacts. These factors lengthen the investment horizon, prevent discrimination against tradable sectors and provide a stable framework for expanding output. Progress is thus made towards real stability and external equilibrium and efficacy is restored to monetary policy instruments such as interest rates and control of monetary aggregates. Above all, monetary policy recovers its role in managing aggregate demand through the credit channel, and the economy becomes less dependent on fiscal policy for controlling inflation. This task can be facilitated by income policies based on price and wage hike coordination between labour unions and businesses, by means of agreements to avoid recessionary measures.

Notable among the benefits of macroprudential policies are their complementarity with industrial policy. For one, they free fiscal policy from some of its aggregate demand management responsibilities and thus allow it to be used to encourage investment in technology and production paths with greater dynamic efficiency and sustainability. For another, they prevent or reduce macro price distortions that work against industrial policy in favour of tradable goods and the economies of scale that only the global market can provide.

It is highly unlikely that industrial policy will yield productivity gains that could offset sharp currency appreciation. The macroeconomy can completely undermine industrial policy for structural change. What is more, excessive appreciation often elicits defensive trade policy measures that draw industrial policy away from its long-term objectives. Macroeconomic policy should therefore be seen as an integral part of a policy for structural change, and it should create competitiveness conditions conducive to that change. Over the long run, the effects of growing returns and technology convergence should prevail, making the output of tradables less dependent on the exchange rate and more closely linked to technology learning and knowledge.

### **C. Structural change and social and labour policy**

The structural change proposed herein, which entails stimulating high-productivity activities, is distributive policy par excellence. In the long run, the set of economic development policies that would spur virtuous structural change are distributive initiatives in the broad sense in that they would change how the production process generates income. This structural change would create job opportunities in the highest-productivity sectors and increase employment overall. Income for the population would rise; the end result would be more egalitarian distribution.

In the short and medium terms, though, higher demand for skilled workers in expanding high-productivity sectors could fuel an increase in labour inequality and hence in total inequality. During the transition towards more homogenous economies with greater productivity, the large share of the informal sector in the region's labour markets will continue to be the main challenge for social protection. This is an area where the region still has profound deficits to address. There could also be significant friction in the labour market, which should have mechanisms for protecting the workers with the greatest vulnerabilities to such contingencies. The positive impacts of structural change should be channeled through labour institutions like the minimum wage and collective bargaining in order to help fulfil the specific rights of quality jobs and contribute to a more egalitarian distribution of the fruits of progress and of productivity gains.

Unemployment insurance programmes, in addition to their countercyclical potential, play a key role as compensatory mechanisms during structural change that would rearrange the sector mix of the demand for skilled workers. Such programmes should mesh with labour intermediation services and training and job creation policies (direct job programmes and labour demand subsidies). Depending on the situation it will be necessary to create or enhance public employment systems that integrate job search support with training and unemployment benefits. Information and communication technologies are a key tool for more efficiently matching workers and businesses. Stepping up the public investment in infrastructure that structural change requires will boost job creation. Public job programmes designed to make up for the

recomposition of labour demand during structural change constitute another instrument; such programmes should be coupled with training and job search support.

There are institutional features in the labour relations that are crucial for translating productivity gains into distributive improvements and better job quality. Employee profit-sharing should be considered an integral part of collective bargaining, based on the premise that the active involvement of workers is crucial for optimizing gains (Durán, 2011). Legal regulations should ensure another right that is essential for overcoming exclusion from quality employment and guaranteeing that productivity gains are transferred to workers: unionization and collective bargaining. Following a marked decline in unionization in the region, the past decade has seen trade union organization rise in a number of countries. In some cases, legal changes facilitated collective bargaining (for example, for outsourced workers and female domestic workers). This raises a need to move towards the formalization of social dialogue by embedding it in government agencies, in the form of social dialogue councils that are already operating in some countries in the region.

While ECLAC has argued that employment is the main route to social inclusion, it also recognizes that, in the short and medium terms, the very segmentation of access to quality jobs will prevent the region from achieving the levels of welfare to which it aspires. The classical contributory equation between employment and social protection does not balance because the large proportion of informal employment limits the possibilities for increasing productivity and contributory social protection for much of the working population. It also determines the type of employment open to those who are outside the labour market or unemployed. As a result, the non-contributory pillar of social protection, which in developed countries was intended to cover a residual sector of the population, has come to occupy a central role. It is imperative that redistributive instruments providing specific protection guarantees be created or enhanced.

In terms of both coverage and spending, the non-contributory pillar is still a long way from reaching all of the population experiencing the most acute vulnerabilities. The expansion and consolidation of this pillar remains a priority objective and calls for enhanced institutional and financial stability.

Structural change should provide another pro-equality mechanism that goes beyond reducing wage gaps and ensuring a fairer distribution of productivity gains among the factors of production. It involves the State appropriating some of those gains, through taxation, to boost funding for social policies targeted at sectors of the population that are experiencing the greatest difficulties or need more time to secure better-paid, quality jobs. Capitalizing on leaps in productivity to build more robust and inclusive social protection systems is part of the agenda combining structural change with equality.

The redistributive capacity of national tax systems in the region is, at best, poor or non-existent. This means that there is room for making the tax system more progressive, which should be done by improving the design and collection of taxes on income and wealth. This is no easy road, as there are strong structural constraints, including a large informal sector, low average income levels and weak tax agencies, as well as the resistance that direct taxation often triggers.

Last, in this context of structural change action is needed to match the labour supply to the requirements of the new demand, especially in training and capacity building. Promoting virtuous structural change (and creating jobs in higher-productivity sectors) must be paired with a push for equal opportunities in building capacities, both in the formal education system and in training systems. Education and job training systems, and systems for disseminating the use of information and communications technologies, need to be rethought and retooled in keeping with national projects for transitioning towards knowledge-intensive societies and economies.

Most countries in the region have tested a wide range of education system reforms and have injected an increasing share of their total social expenditure into the sector. While it is true that upcoming generations will have more years of formal education than their predecessors, neither the increased resources nor the direction of reforms have succeeded in narrowing educational attainment gaps between social groups, nor have they led to clear improvements in the quality of education, measured as relevant learning throughout the formal education cycle.

A number of challenges may be identified in relation to vocational education and training. First, it is necessary to ensure that a growing proportion of young people without a university degree enter the

workforce with qualifications as non-university technicians or skilled workers, steadily expanding the proportion of workers with intermediate-level training. Non-university technical training is still weak in many countries of the region. Second, the technological and organizational changes so typical of today's labour market require workers to constantly acquire new knowledge and skills as part of a lifelong learning process.

Adopting social and labour policies with a clear redistributive impact, such as those proposed herein, means recognizing that the State has a key role to play in harmonizing structural change with equality. On the one hand, the State must ensure that labour market institutions promote a fairer distribution of productivity gains between the various actors in the production structure. On the other hand, it must promote an integrated social protection system based on progressive social spending and progressive taxes that addresses the risks and vulnerabilities that occur in the workplace and in workers' families as a result of the transformation dynamics inherent in structural change. Finally, given the lags and gaps in human capacities and the mismatch between the requirements of labour demand and the characteristics of labour supply, the State must take on all the challenges posed by the knowledge society in this area: a more educated society where the development of relevant skills for the new world of production and communication is a universal right, coupled with an integrated job training system that includes technical education and vocational training components and provides employment opportunities commensurate with the structural change proposed.





## VII. CONCLUDING REMARKS: POLITICS AND THE STATE IN AN INTEGRATED APPROACH TO DEVELOPMENT

The integrated approach emerging from these proposals calls for coordinated action by involved, committed stakeholders. It also needs robust, efficient institutions that can regulate, guide, target and even fund many of the actions needed to turn these proposals into reality over time.

Politics and the State are, therefore, pivotal. Politics, because of the need to bring stakeholders together in forging social covenants to ensure support for this approach and for its continuity over time. The relationship between structural change with equality and political legitimacy is a two-way street. Political will and good policy are, therefore, conditions—or, rather, achievements—that should be the building blocks of a profound change that requires agreements and a shared ethic for reaching compromises among the actors involved in structural change.

*But this also requires a different kind of State.* It is not enough for a State to exhibit administrative probity and efficient use of resources (although these are essential if society is to trust its government). The State must be able to substantively mobilize and communicate its citizens' aspirations for well-being and progress by means of messages that link the present and the future.

What is also needed is a State with a clear ability to rally stakeholders around far-reaching projects. In Latin America and the Caribbean there is no other actor that could shoulder this role of coordinator in the face of the complex industrial, macroeconomic, labour and social policy scenario that is the setting for the integrated approach proposed in these pages.

In this second decade of the twenty-first century, there is evidence at the national, regional and global levels that coordination and regulation are essential in a wide range of spheres (finance, trade, production, environment and migration, among others). It is the State that can regulate, oversee, target and coordinate at the national level, both inwards and outwards, from a vantage point that encompasses all facets of development.

There is also a need for a State with clear goals for driving many of the processes proposed under the aegis of structural change with equality and environmental sustainability. This calls for appropriate incentives and robust investments that, at the same time, target knowledge-intensive sectors, activities that absorb quality jobs and are competitive internationally, and a technology paradigm that ensures lower carbon intensity and high energy and environmental efficiency. It is equally essential to invest in human capacities for structural change and greater equality in the generational changeover. Policies must be devised and funded to provide a shield against the risks of income loss and to guarantee minimum levels of well-being during the transition towards a new production and information paradigm. All of this also requires new fiscal covenants and arrangements that enable the State to capture more resources for promoting economic growth while translating that growth into a more broad-based and progressive tax strategy.

The role of the State is even more important when an integrated vision of development like the one proposed herein is involved. The complementarities and synergies between the macroeconomy and the production structure and between the business cycle and short- and long-term growth trends thus challenge the State to determine how to achieve the most virtuous possible combination of macroeconomic policy and industrial policies based on a new technology paradigm that is more knowledge-intensive and environmentally efficient and, at the same time, more conducive to social inclusion and equality.

Macroeconomics for development cannot dissociate cycle management and (real and nominal) stability from structural change and a higher rate of long-term growth. This pairing must be part of an integrated approach by the State where production change and a levelling up of capacities and social opportunities are explicit priorities. This process should be accompanied by social policy (especially during temporary stages of structural change when production is still not the

universal prime route to inclusion with well-being). Achieving equality does not necessarily run counter to investing in and protecting the environment (the material substrata for development). To the contrary: the idea is to achieve virtuous linkages between economic, social and environmental factors by means of reindustrialization.

With this long-range, forward-looking vision, the structural change with equality and sustainability proposed herein has on its horizon the leading role to be played by coming generations in achieving fulfilment of their rights and their potential. It will fall to these new generations to fully develop the capacities required by a groundswell of changes in productivity, knowledge and technological progress, citizen involvement, deliberative culture and environmental stewardship. These are the generations who will have to promote new ways of producing, organizing and communicating. They are also the ones who will be tasked with preserving and promoting the well-being of all in societies under increasing pressure from population ageing, growing urbanization and scarcer global public resources. And these generations are the ones who will have to live with the effects of several centuries of predatory natural resource use and the diminished capacity of those resources to sustain high rates of growth.

That is exactly why there is no time to lose. The time has come to push for change for the sake of greater productivity and greater equality. In some spheres, the pace is being set by the speed of the technology revolution, production paradigm shifts, the demographic transition, the financial crisis and environmental disasters. Experience has already shown what works and what does not. Looming threats to political stability and citizen safety need to be addressed by bringing the future closer to the present and stepping up government and political action for development and social inclusion. There is room for this in the political imaginary, which is no longer haunted by the spectre of single models and has more scope for mapping out the future.



## Bibliography

- Abeles, Martín and Mariano Borzel (2010), “El régimen bajo presión: Los esquemas de metas de inflación en Brasil, Chile, Colombia y Perú durante el boom en los precios internacionales de materias primas”, *Working document*, No. 31, Buenos Aires, Centro de Economía y Finanzas para el Desarrollo.
- Alleyne, Dillon and Alfred Francis (2008), “Balance of payments constrained growth in developing countries: A theoretical perspective”, *Metroeconomica*, vol. 59, No. 2.
- Alleyne, Dillon, M. Hendrickson and Tom Amonde (2011), *Macroeconomics for Development: The Caribbean Experience*, Economic Commission for Latin America and the Caribbean (ECLAC).
- Amsden, A. (1989), *Asia's Next Giant: South Korea and Late Industrialization*, New York, Oxford University Press.
- Barbosa-Filho, N.H. (2008), “Inflation targeting in Brazil: 1999-2006”, *Beyond Inflation Targeting: Central Bank Policy for Employment Creation, Poverty Reduction and Sustainable Growth*, G. Epstein and E. Yeldan (eds.), Edward Elgar.
- (2002), “The balance-of-payments constraint: from balance trade to sustainable debt”, *CEPA Working Paper*, No. 2001.06, New School University.
- Barreix, Alberto, Martin Bes and Jerónimo Roca (2009), “Equidad fiscal en Centroamérica, Panamá y República Dominicana”, Washington, D.C., Inter-American Development Bank (IDB).

- Bernanke, Ben and Michael Woodford (2004), “The inflation-targeting debate”, *NBER Books*, National Bureau of Economic Research, May.
- Bresser-Pereira, L.C. (2010), *Globalização e competição: por que alguns países emergentes têm sucesso e outros não*, Rio de Janeiro, Elsevier-Campus.
- Chang, H.J. (2001), “Infant industry promotion in historical perspective. A rope to hang oneself or a ladder to climb with?”, paper presented at the conference Development Theory at the Threshold of the Twenty-first Century, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), August.
- Cimoli, Mario (1992), “Exchange rate and productive structure in a technological gap model”, *Economic Notes*, vol. 21, Monte dei Paschi di Siena.
- (1988), “Technological gaps and institutional asymmetries in a North-South model with a continuum of goods”, *Metroeconomica*, vol. 39, No. 3.
- Cimoli, M., G. Dosi and J. Stiglitz (eds.) (2009), *Industrial Policy and Development: The Political Economy of Capabilities Accumulation*, Oxford, Oxford University Press.
- Cimoli, M. and J. Katz (2003), “Structural reforms, technological gaps and economic development: a Latin American perspective”, *Industrial and Corporate Change*, Oxford University Press, vol. 12, No. 2, April.
- Cimoli, M. and G. Porcile (2011), “Learning, technological capabilities and structural dynamics”, *The Oxford Handbook of Latin American Economics*, J.A. Ocampo and J. Ros, Oxford University Press.
- Cimoli, M., G. Porcile and S. Rovira (2010), “Structural convergence and the balance-of-payments constraint: why did Latin America fail to converge”, *Cambridge Journal of Economics*, vol. 34, No. 2, March.
- Cimoli, M. and S. Rovira (2008), “Elites and structural inertia in Latin America: an introductory note on the political economy of development”, *Journal of Economic Issues*, vol. 42, No. 2, June.
- De Miguel, Carlos and Osvaldo Sunkel (2011), “Environmental sustainability”, *The Oxford Handbook of Latin American Economics*, José Antonio Ocampo and Jaime Ros (eds.), Oxford University Press.
- Dosi, G., K. Pavitt and L. Soete (1990), *The Economics of Technical Change and International Trade*, London, Harvester Wheatsheaf Press.

- Durán, G. (2011), “Institucionalidad laboral para un desarrollo inclusivo”, *El desarrollo inclusivo en América Latina y el Caribe. Ensayos sobre políticas de convergencia productiva para la igualdad*, R. Infante (coord.), Libros de la CEPAL, No. 112 (LC/G.2500-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC). United Nations publication, Sales No. S.11.II.G.56.
- ECLAC (2011), *Economic Survey of Latin America and the Caribbean, 2010-2011* (LC/G.2506-P), Santiago, Chile. United Nations publication, Sales No. E.11.II.G.3.
- \_\_\_\_\_(2010a), *Time for equality: closing gaps, opening trails* (LC/G.2432(SES.33/3)), Santiago, Chile.
- \_\_\_\_\_(2010b), *The reactions of the Governments of the Americas to the international crisis: an overview of policy measures up to 31 December 2009* (LC/L.3025/Rev.6), Santiago, Chile, 31 January.
- \_\_\_\_\_(2008), *Structural Change and Productivity Growth - 20 Years Later. Old problems, new opportunities* (LC/G.2367(SES.32/3)), Santiago, Chile.
- \_\_\_\_\_(2007), “Progreso técnico y cambio estructural en América Latina”, *Project documents*, No. 136 (LC/W. 136), Santiago, Chile, October.
- \_\_\_\_\_(2003), *Economic Survey of Latin America and the Caribbean, 2002-2003* (LC/G.2208-P), Santiago, Chile. United Nations publication, Sales No. E.03.II.G.2.
- \_\_\_\_\_(2002), *Globalization and development* (LC/G.2157(SES.29/3)), Santiago, Chile.
- \_\_\_\_\_(1998), “The fiscal covenant: strengths, weaknesses, challenges” (LC/G.2024/I), Santiago, Chile.
- \_\_\_\_\_(2000), *Equity, development and citizenship* (LC/G.2071(SES.28/3)), Santiago, Chile.
- ECLAC/ILO (Economic Commission for Latin America and the Caribbean/International Labour Organization) (2011), *The employment situation in Latin America and the Caribbean*, ECLAC/ILO Bulletin, No. 5, Santiago, Chile.
- Ferraz, J.C. (2012), “Política industrial para a transformação económica”, *O Estado de Sao Paulo*, 1 May [online] <http://www.brasilmaior.mdic.gov.br/artigos/1765>.
- Ffrench-Davis, R. (2006), *Reforming Latin America's Economies: After Market Fundamentalism*, Palgrave Macmillan, April.



- (2000), *Reforming the Reforms in Latin America: Macroeconomics, Trade, Finance*, Macmillan.
- Frenkel, Roberto (2008), “Tipo de cambio competitivo, inflación y política monetaria”, *Revista de economía política de Buenos Aires*, year 2, vols. 3 and 4.
- Frenkel, R. and M. Rapetti (2011), “A concise history of exchange rate regimes in Latin America”, *The Oxford Handbook of Latin American Economics*, J.A. Ocampo and J. Ros, Oxford University Press.
- Galindo, L.M. and J. Ros (2008), “Alternatives to inflation targeting in Mexico”, *Beyond Inflation Targeting: Central Bank Policy For Employment Creation, Poverty Reduction and Sustainable Growth*, G. Epstein and E. Yeldan (comps.), Edward Elgar.
- Gallagher, K. and R. Porzecanski (2010), *The Dragon in the Room: China and the Future of Latin America Industrialization*, Stanford University Press.
- Goñi, Edwin, Humberto López and Luis Servén (2008), “Fiscal redistribution and income inequality in Latin America”, *World Bank Policy Research Working Paper*, No. 4487, Washington, D.C., World Bank.
- Gouvea, R.R. and G.T. Lima (2010), “Structural change, balance of payments constraint and economic growth: evidence from the multi-sectoral Thirlwall’s law”, *Journal of Post Keynesian Economics*, vol. 33, N° 1, octubre.
- Greenwald, Bruce and Joseph E. Stiglitz (2006), “Helping infant economies grow: foundations of trade developing countries”, *American Economic Review*, vol. 96, No. 2, May.
- Harding, Don and Adrian Pagan (2005), “A suggested framework for classifying the modes of cycle research”, *Journal of Applied Econometrics*, vol. 20, No. 2.
- Hartwick, John M. (1977), “Intergenerational equity and the investing of rents from exhaustive resources”, *American Economic Review*, No. 67, December.
- Hirschman, A.O. (1958), *The Strategy of Economic Development*, Yale University Press.
- IDB (Inter-American Development Bank) (2001), *Competitiveness: The Business of Growth. Economic and Social Progress in Latin America*, 2001, Washington, D.C.

- Infante, R. (2011), “América Latina en el “umbral del desarrollo”. Un ejercicio de convergencia productiva”, *Working document*, No. 14, project on inclusive development, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), unpublished.
- Jiménez, Juan Pablo, Juan Carlos Gómez Sabaini and Andrea Podestá (comps.) (2010), “Evasión y equidad en América Latina”, *Project documents*, No. 309 (LC/W.309/Rev.1), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC)/ German Agency for Technical Cooperation (GTZ).
- Lin, Justin Yifu (2011), “New structural economics: a framework for rethinking development”, *World Bank Research Observer*, vol. 26, N° 2, Oxford University Press, July.
- Male, Rachel (2011), “Developing country business cycles: Characterizing the cycle”, *Emerging Markets Finance and Trade*, vol. 47, No. 2.
- Martner, Ricardo and Varinia Tromben (2004), “Public debt sustainability”, *CEPAL Review*, No. 84 (LC/G.2258-P/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (CEPAL), December.
- McCombie, J.S.L. and A.P. Thirlwall (1999), “Growth in an international context: A Post-Keynesian view”, *Foundations on International Economics: Post-Keynesian Perspectives*, J. Deprez and J. Harvey (eds.), London, Routledge.
- McMillan, M. and D. Rodrik (2011), “Globalization, Structural Change and Productivity Growth”, International Labour Organization (ILO)/World Trade Organization (WTO), February.
- Melo, A. (2001), “Industrial policy in Latin America and the Caribbean at the turn of the century”, *IDB Working Paper*, No. 459, Washington, D.C., Inter-American Development Bank (IDB).
- Moreno-Brid, J.C. (2002), “Liberalización comercial y la demanda de importaciones en México”, *Investigación económica*, vol. 62, No. 240, April-June.
- Ocampo, J.A. (2011), “Macroeconomy for development: countercyclical policies and production sector transformation”, *CEPAL Review*, No. 104 (LC/G.2498-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), August.

- Peres, Wilson (2010), “The (slow) return of industrial policies in Latin America and the Caribbean”, *The Political Economy of Capabilities Accumulation: the Past and Future of Policies for Industrial Development*, M. Cimoli, G. Dosi and J.E. Stiglitz (eds.), Oxford University Press.
- (coord.) (1997), *Políticas de competitividad industrial en América Latina y el Caribe en los años noventa*, Mexico City, Siglo XXI Editores.
- Pérez Caldentey, Esteban and Ramón Pineda (2010), “Does Latin America lag behind due to shaper recessions and/or slower recoveries?”, *MPRA Paper*, No. 25036, University Library of Munich.
- Prebisch, R. (1949), *The Economic Development of Latin America and its Principal Problems*, New York.
- Ros, Jaime (2012), “Institutional and policy convergence with growth divergence in Latin America: the role of industrial and macroeconomic policy”, paper presented at the International conference on industrial policies in the twenty-first century, Rio de Janeiro, 10-11 May.
- Rossignolo, Darío and Juan Carlos Gómez Sabaini (2011), “Impacto de las políticas tributarias sobre la equidad en los países de América Latina”, *La desigualdad y los impuestos* (II), José Nun (ed.), Buenos Aires, Capital Intelectual.
- Stern, Nicholas (2007), *The Economics of Climate Change: The Stern Review*, Cambridge University Press, January.
- Stiglitz, Joseph and others (2006), *Stability with Growth: Macroeconomics, Liberalization and Development*, New York, Oxford University Press.
- Thirlwall, A.P. (2011), “Balance of payments constrained growth models: history and overview”, *School of Economics Discussion Paper*, No. 1111, Kent University, May.
- (1979), “The balance of payments constraint as an explanation of international growth rate differences”, *Banca Nazionale del Lavoro Quarterly Review*, No. 128.
- Titelman, Daniel, Ramón Pineda and Esteban Pérez Caldentey (2008), “The bigness of smallness: The financial crisis, its contagion mechanisms and its effects in Latin America”, *CEPAL Review*, No. 98 (LC/G.2404-P/E), Santiago, Chile.

- UNCTAD (United Nations Conference on Trade and Development) (2010), “Background Note Prepared by the UNCTAD Secretariat for the Ad Hoc Expert Meeting on The Green Economy: Trade and Sustainable Development Implications” (UNCTAD/DITC/TED/2010/2), Geneva, 7 - 8 October [online] [www.unctad.org/en/docs/ditcted20102\\_en.pdf](http://www.unctad.org/en/docs/ditcted20102_en.pdf).
- Van Lieshout, M. and others (2008), “Converging Applications Enabling the Information Society. Technical Report” [online] <http://fiste.jrc.ec.europa.eu/pages/documents/ConvTechReportforWEBv9.pdf>.
- Wade, R. (1990), *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialisation*, Princeton, Princeton University Press.



In today's complex and changing global context, the Latin American and Caribbean region must persevere, more than ever, in three directions: structural change to underpin progress towards more knowledge-intensive sectors, convergence to reduce internal and external gaps in income and productivity, and equality of rights. This is the integrated approach proposed by ECLAC as a route towards the development the region needs.

This implies tackling three major challenges: to achieve high and sustained rates of growth so as to close structural gaps and generate quality jobs; to change consumption and production patterns in the context of a genuine technological revolution with environmental sustainability; and to guarantee equality on the basis of greater convergence in the production structure, with universal social protection and capacity-building.

Such an endeavour requires the return of politics and of the State's role in promoting investment and growth, redistribution and regulation with a view to structural change for equality, through industrial, macroeconomic, social and labour policies.

These are some of the key proposals of *Structural Change for Equality: An Integrated Approach to Development*, which ECLAC will present to its member States at the thirty-fourth session of the Commission (San Salvador, August 2012). The proposals in that document, which is summarized here, deepen and broaden the ideas set forth in *Time for equality: closing gaps, opening trails*, aiming towards sustainable development with equality and taking into account the diverse national conditions across the region.

