

UNU-WIDER

World Institute for Development Economics Research

Working Paper No. 2012/48

The Development Implications of External Integration in Latin America

José Antonio Ocampo*

May 2012

Abstract

This paper analyses the links between the integration into the international economy and development in Latin America over the past quarter century. It argues that external liberalization led to faster export growth but not to faster GDP or productivity growth. Growth also became more volatile, reflecting large vulnerabilities to external shocks. Looking forward, it argues for variable mixes of three strategies: (i) active production sector policies with a focus on technological upgrading existing and new production activities; (ii) growing links with China, while redressing the major asymmetries that characterize Latin America's trade with the Asian giant: and (iii) strengthened regional integration processes.

Keywords: trade liberalization, specialization patterns, regional integration, capital account openness, production sector policies, real exchange rate

JEL classification: F10, F36, F43

Copyright © UNU-WIDER 2012

* Columbia University, New York, New York, email: jao2128@columbia.edu

This study has been prepared within the UNU-WIDER project 'The New Policy Model, Inequality and Poverty in Latin America: Evidence from the Last Decade and Prospects for the Future', directed by Giovanni Andrea Cornia.

UNU-WIDER gratefully acknowledges the financial contributions to the research programme by the governments of Denmark (Ministry of Foreign Affairs), Finland (Ministry for Foreign Affairs), Sweden (Swedish International Development Cooperation Agency—Sida) and the United Kingdom (Department for International Development).

ISSN 1798-7237 ISBN 978-92-9230-511-6

Acknowledgements

This paper has benefited considerably from a parallel work by the author, particularly Bértola and Ocampo (2012).

Acronyms

CAF	Corporación Andina de Fomento (Development Bank of Latin America)
ECLAC	Economic Commission for Latin America & the Caribbean
FDI	foreign direct investment
NAFTA	North American Free Trade Agreement
UNASUR	Union of South American Countries
WTO	World Trade Organization

The World Institute for Development Economics Research (WIDER) was established by the United Nations University (UNU) as its first research and training centre and started work in Helsinki, Finland in 1985. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies, provides a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and promotes capacity strengthening and training in the field of economic and social policy making. Work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world. www.wider.unu.edu publications@wider.unu.edu

UNU World Institute for Development Economics Research (UNU-WIDER) Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Typescript prepared by Liisa Roponen at UNU-WIDER

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

1 Introduction

Deeper integration into the global economy has been a distinctive feature of Latin American development strategies over the past quarter century and, in a few countries, from earlier on. The dominant elements of such integration have been orthodox exportled growth (a concept I will define below) and an open capital account. This has been mixed in various ways across the region with two less orthodox elements: regional integration, and active intervention in foreign exchange markets; third is the promotion of free trade agreements which violate the neutrality of incentives. Industrial or, more broadly, production sector development policies were generally abandoned in the transition to the new model but have slowly come back, though the only case in which they are said to have returned to the centre of the policy agenda is Brazil since the second Lula Administration. In relation to the capital account, some countries have regulated capital flows and, in the case of Venezuela, kept or strengthened foreign exchange controls.

The addition of the adjective 'orthodox' to the concept of 'export-led growth' is meant to differentiate the strategy followed by the majority of Latin American countries from that which is equally export-led but involves active state intervention, and has been more characteristic of East Asia, and notably China in recent decades. With national variations, such interventions include industrial policies (or, more broadly, production sector policies, as they do not always focus narrowly on manufacturing), active technology policies, strategic trade interventions, some selectivity in the attraction of foreign direct investment (FDI) and the support to the expansion abroad of domestic firms. Such interventions can be said to focus mainly on improving export 'quality', meaning by this concept the technological contents and domestic value added of export activities. So, the essential feature of orthodox export-led growth followed by Latin America is that such an objective is generally absent and it relies much more on market forces to guarantee dynamic economic growth. Although it has generally aimed at a relative 'neutrality' of incentives, there have also been actually quite significant deviations, particularly subsidies (in the form of income tax exemptions) to foreign direct investment, the promotion of export processing zones (which tend to minimize domestic value added) and, as already pointed out, regional integration and free trade agreements.

This strategy was proposed as the alternative to the perceived inefficiency associated with state-led industrialization,¹ which in the view of the reformers had been blocking not only static efficiency but also technical change and, thus, economic growth. As we will see, however, with some exceptions in different time periods, the objective of accelerating growth through orthodox export-led growth generally failed. It did lead to faster export growth but *not* to faster GDP or productivity growth. Furthermore, growth was much more volatile than in the past, reflecting large vulnerabilities to external shocks, positive and negative. The two effects are interrelated, as growth volatility is one of the factors adversely affecting investment returns. Other forms of volatility, particularly real exchange rate volatility, have a similar effect. Domestic demand has

¹ This concept is better than that of import-substitution industrialization (ISI), a concept that emphasizes only one aspect of the policies that were typical of the past, and not necessarily the most important. See, in this regard, Cárdenas, Ocampo and Thorp (2000) and Bértola and Ocampo (2012).

been generally underestimated as a growth engine, except notably under the policy of 'consumption of the masses' of the Lula Administrations. The recourse to some protectionist measures has been recurrent in the case of a few countries (e.g., Argentina) but the most common focus on the domestic market may be said to be regional integration, which can be seen as a sort of 'expanded domestic market'.

This paper analyses the links between integration into the international economy and development in Latin America over the past quarter century. It is divided into six sections, the first of which is this introduction. The next one briefly considers the timing and nature of the relevant structural reforms associated with the external sector. The third and fourth sections focus, respectively, on the different patterns of trade integration into the world economy and openness to external capital flows. The fifth looks at effects in terms of growth dynamics and volatility, investment performance and employment generation. The last dwells into the policy implications of this analysis in terms of the policy options for the region.

It is important to notice that, aside from trade and capital flows, there is a third way of integration of Latin America into global markets: international migration. The 1990s and 2000s were characterized by large outward migration flows of regular and irregular character, particular to the United States and Spain, which were accompanied by a boom in workers' remittances to the migrants' countries of origin, and which became sizable shares of national income in Central America, the Dominican Republic and Ecuador. Migration flows seem to have been significantly hit by the great recession and are unlikely to resume, but there is no evidence of significant return flows. There is also intraregional migration flows with Argentina and Chile in South America and Costa Rica in Central America as major recipients of migrants (Venezuela was also a major recipient in the 1970s but ceased to be so since then).

2 The timing and character of external liberalization

External liberalization started in the 1970s but was then very uneven across the region and, with the exception of Chile, very gradual. Most of the efforts at the time focused at simplifying the complex system of trade interventions that characterized state-ledindustrialization. In the Southern Cone countries, trade liberalization was mixed at the time with financial liberalization, and ended up in massive balance of payments and domestic financing collapses in the early 1980s.

In sharp contrast to these reforms, the trade liberalization processes adopted since the mid-1980s, under strong pressure by the Bretton Woods institutions, were more radical, broad-based, and extremely fast (Lora 2001); indeed, in several cases, reforms were adopted in one major blow, as part of shock macroeconomic treatment. They were accompanied by the weakening or even dismantling of the institutional apparatus put in place during state-led industrialization to promote new industrial sectors and support agriculture. Nonetheless, many institutions survived in several countries, notably development and some commercial public sector banks, and most agricultural research centres, although these institutions in most cases were significantly weakened. Institutions to support exports were the only ones that were strengthened during the

reform period, including trade development banks, export promotion agencies and export processing zones.

The dominant strategy was unilateral trade liberalization. The creation of WTO with the 1993 Marrakesh Agreement represented an important step in the same direction as, in contrast to GATT, all Latin American countries became members. Though this did not require trade liberalization beyond the unilateral policies adopted by most countries, they were restrictive in other areas, notably the much tougher restrictions on export subsidies, the prohibition of 'trade-related investment measures' (domestic contents and export requirements on foreign investors) and, most importantly, new rules on intellectual property rights and services. Before that, the United States had been pressuring several countries to protect intellectual property rights and to dismantle export subsidies. Overall, the new rules significantly reduced the space for active trade and industrial policies.

The major exceptions to the strategy of unilateral trade liberalization were regional integration and the free trade agreements. The former may truly be said to have been an ingredient introduced by politics. This included the creation of MERCOSUR in 1991 and the simultaneous revitalization of the Andean Community and the Central American Common Market. The second was pioneered by Mexico and Chile, the two countries outside regional integration agreements, and generated a 'neo-orthodoxy' which mixes unilateral trade liberalization with an aggressive push for free trade agreements, including with industrial countries. The landmark was obviously the subscription of the North American Free Trade Agreement (NAFTA) in 1993 but many others followed, including later those involving Central American and some Andean countries. The characteristics of these as well as later processes were the introduction of tougher rules in the areas where WTO had expanded the scope of trade agreements (intellectual property rights and services), as well as new rules in areas where there has been strong opposition to introducing the issues in WTO, particularly rules on investment and government procurement. The net result was further restrictions on the policy space for active production sector policies.

Trade liberalization was accompanied by the elimination of restrictions of foreign direct investments, with only a few remaining in place (including the Mexican constitutional monopoly in the oil sector). It was also accompanied by external financial liberalization. In the latter case, the process was moderated in the early 1990s by the system of reserve requirements on capital inflows introduced by Chile and Colombia, aimed mainly at reducing volatile short-term capital flows. Argentina introduced a similar framework in the 2000s. Colombia used them again in 2006-07 and Brazil has imposed taxes on capital flows more recently. To this we should add the strong exchange controls introduced by Venezuela in the 2000s and more recently by Argentina.

Interestingly, with notable examples, particularly that of Venezuela, the leftward political movement experienced in the region in the 2000s (in Venezuela in 1998) has not led to a reversal of most of these policies. Perhaps the most noticeable imprint of the new political movements in this area has been the rejection of free trade agreements with industrial countries and the strong support instead to regional integration. The other area where the rise of the left has made an indent is in the tougher negotiations of some countries with foreign investors in natural resources. Bolivia (where 'nationalization' of gas has really meant state control rather than full ownership),

Ecuador and Venezuela are the most important cases. Nationalization efforts have had a broader scope in Venezuela, but only rather recently (since 2009).

There is also the slow return of industrial policies, but this is unrelated to the political leaning of governments. Some policies to encourage the formation of clusters became fashionable since the 1990s, many times as local rather than national policies. The 1996 decision of INTEL to invest in Costa Rica, after extensive negotiations with the government, can be considered a major industrial policy decision that had significant domestic effects. The growing acceptability of more active industrial policies, with an emphasis on innovation and competitiveness, became more broadly based in the 2000s, with support from the national development banks that remained in place. However, only Brazil under the second Lula Administration can be said to have returned to the centre of public sector policies. Some regional institutions, particularly ECLAC and the Development Bank of Latin America (CAF, for its legal Spanish acronym²), have been supporters of some form of industrial policies all along, but the Inter-American Development Bank and, to a lesser extent, the World Bank, joined the trend more recently.

3 Diverging patterns of trade integration

External liberalization has generated deep structural changes in the Latin American economies. Trade ratios are much higher today than in the past; export structures have been transformed, albeit following different patterns across the region; and the industrial and agricultural sectors affected by trade liberalization have been restructured, which in many cases has involved the destruction or shrinking of some subsectors. This took place within a general pattern of de-industrialization that started earlier than liberalization proper, in the mid- or late 1970s, and has not ceased since then. Regional markets have increased in relative importance but have also experienced strong cyclical fluctuations, particularly in South America. Multinational enterprises have increased their presence in the region, and large regional firms have expanded abroad, creating the growing world of *translatinas*.

Figure 1 presents a first snapshot of this process: the rising external trade ratios.³ The upward trend in these ratios had started in the mid-1960s and had been strong since the mid-1970s. It thus clearly preceded the trade liberalization process, and was in fact the outcome of the more balanced 'mixed' industrialization strategy followed by most Latin American countries since the mid-1960s, which placed an increasing emphasis on export diversification. Whereas the upward trend of the export ratio has been interrupted only by the great recession of 2008-09, the import ratio shows a strong cyclical pattern, rising sharply during booms and falling equally sharply during crises. Long-term historical estimations indicate that trade openness during the past decade has exceeded the levels prior to the great depression, indicating that the Latin American economies are more open than ever before in history (Bértola and Ocampo 2012: Figure 4.12). A

² Corporación Andina de Fomento.

³ I exclude Venezuela from the calculations, whose oil exports are subject to OPEP agreements rather than trade policy trends.

point that has not been sufficiently emphasized, however, is that the rising ratio reflects not only export dynamism but also the *slower* growth of Latin America after 1980 relative to past patterns; this is particularly true of the 1980s and 1990s.

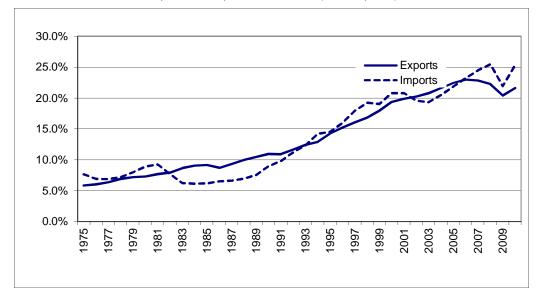


Figure 1 Exports and imports as % of GDP (at 2000 prices)

Source: Author's estimates based on ECLAC data. Excludes Venezuela.

	1990	1997	2003	2008
Commodities, %	51.1	31.8	30.1	38.0
Resource-based manufactures, %	19.7	17.4	15.7	19.1
Agricultural, %	9.2	8.7	8.5	7.9
Other, %	10.5	8.7	7.2	11.2
Subtotal resource-based goods, %	70.8	49.1	45.9	57.1
Low-tech manufactures, %	9.6	12.5	12.0	7.6
Textiles, apparel and footwear, %	5.2	6.4	5.6	3.0
Other products, %	4.4	6.1	6.3	4.6
Medium-tech manufactures, %	15.8	24.6	25.4	20.9
Automotive industry, %	4.2	9.2	9.5	7.6
Processing industries, %	6.1	5.3	5.1	5.7
Engineering industries, %	5.6	10.1	10.7	7.7
High-tech manufactures, %	2.6	10.8	14.8	11.4
Electronic and electrical, %	1.5	9.4	12.5	9.4
Other, %	1.0	1.5	2.3	2.0
Subtotal medium and high-tech, %	18.4	35.5	40.2	32.3
Other, %	1.2	2.9	2.0	3.0

Table 1 Composition of exports of goods, Latin America, 1990-2008

Source: Author's estimates based on UN-Comtrade.

				шлрс	nto or ge			3 by cot	intry, 10	90 and 2	_000, 70				Dom	inican		
	Me	xico	Costa	a Rica	El Sa	lvador	Guat	emala	Hone	duras	Nica	ragua	Pan	ama	Rep	ublic	Br	azil
	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2007	1990	2008	1997	2008	1990	2008
Commodities	37.4	18.8	41.2	17.3	29.9	7.1	44.5	25.4	65.5	32.9	62.8	47.1	13.7	12.8	3.0	4.9	21.6	26.1
Manufactures:																		
Resource-based	8.3	7.6	7.5	10.9	5.7	14.7	15.9	19.9	9.8	18.6	13.5	17.3	5.2	2.0	3.7	9.7	26.7	25.0
Low-tech	5.4	9.4	9.0	9.9	12.1	44.4	7.3	22.5	3.7	6.4	3.1	2.1	2.7	0.9	10.0	18.8	13.1	6.0
Medium-tech	21.3	32.1	4.3	12.3	4.9	8.7	4.8	9.8	0.9	10.9	1.8	3.6	1.0	0.2	6.6	14.0	22.9	20.7
High-tech	3.4	24.5	2.2	19.4	2.6	5.0	3.9	2.7	0.1	0.9	0.1	0.6	0.7	0.3	0.1	5.6	3.9	6.0
Other goods	0.6	1.6	6.3	0.4	0.2	1.4	0.1	0.3	0.2	3.3	3.7	4.2	0.6	0.3	46.9	0.0	1.2	2.7
Total goods	76.5	94.1	70.5	70.1	55.4	81.4	76.6	80.5	80.2	72.9	85.0	75.0	23.8	16.4	70.2	53.0	89.3	86.6
Services:																		
Transport	2.6	0.0	4.6	2.7	10.7	6.3	1.5	2.7	6.1	1.3	1.7	2.8	41.0	44.4	0.7	3.5	3.8	2.4
Tourism	16.0	4.4	13.8	16.5	10.3	7.6	7.8	11.1	4.2	19.1	3.1	17.3	12.0	20.2	25.5	39.8	3.9	2.5
Other	4.9	1.6	11.1	10.7	23.6	4.8	14.2	5.7	9.5	6.7	10.3	4.9	23.2	18.9	3.5	3.8	2.9	8.5
Total services	23.5	5.9	29.5	29.9	44.6	18.6	23.4	19.5	19.8	27.1	15.0	25.0	76.2	83.6	29.8	47.0	10.7	13.4
	Arge	ntina	Во	livia	CI	nile	Colc	mbia	Ecu	lador	Para	aguay	P	eru	Uru	guay	Vene	ezuela
	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008
Commodities	38.5	37.0	48.4	58.8	52.6	41.8	52.5	47.4	74.3	72.4	58.9	59.3	37.3	26.1	40.8	39.7	81.4	92.6
Manufactures:																		
Resource-based	24.4	21.8	34.8	28.2	21.2	36.1	10.5	15.3	7.6	14.5	6.0	14.8	29.1	37.4	10.0	15.3	4.0	1.3
Low-tech	10.0	3.7	2.9	3.2	1.9	1.4	10.8	10.9	0.9	2.0	3.8	3.1	11.8	7.6	19.7	9.3	3.7	0.7
Medium-tech	8.8	17.4	0.1	1.0	2.4	4.3	5.1	11.4	0.4	3.7	0.8	1.4	2.1	2.0	6.7	6.0	4.4	2.6
High-tech	1.5	2.4	0.0	0.0	0.5	0.4	0.4	2.1	0.2	0.4	0.0	0.7	0.3	0.2	0.5	1.4	0.2	0.1
Other goods	0.3	3.0	0.1	1.9	3.5	2.3	1.7	3.2	0.1	0.4	0.1	0.0	0.0	16.2	0.8	1.1	0.2	0.2
Total goods	83.5	85.2	86.3	93.2	82.2	86.3	80.9	90.3	83.5	93.4	69.6	79.4	80.6	89.5	78.6	72.9	93.8	97.5
Services																		
Transport	7.8	2.2	4.4	0.9	6.9	8.3	5.8	3.0	7.4	1.8	5.4	3.5	0.0	2.4	7.8	8.2	2.4	0.9
Tourism	6.1	5.7	5.4	3.7	5.1	2.1	4.9	4.4	5.8	3.7	6.2	2.0	-1.7	5.7	11.0	12.9	2.6	1.1
Other	2.6	6.8	3.8	2.2	5.8	3.3	8.5	2.3	3.3	1.0	18.8	15.1	21.1	2.4	2.7	6.0	1.2	0.6
Total services	16.5	14.8	13.7	6.8	17.8	13.7	19.1	9.7	16.5	6.6	30.4	20.6	19.4	10.5	21.4	27.1	6.2	2.5

Table 2 Exports of goods and services by country, 1990 and 2008, %

Source: Author's estimates based on UN-COMTRADE and ECLAC for data on trade in services.

6

Export growth was accompanied by a significant change in its structure. Overall, the trend up to 2003 was an increasing share of manufactures, particularly of those with mid- and high-technological contents, though in both cases with a high share of assembled goods. In contrast, natural resources based exports fell from 70.8 per cent of total exports in 1990 to 45.9 per cent in 2003, following a pattern that also dated from the mid-1960s. Since 2004, the commodity price boom that has characterized the world economy, particularly in the case of minerals and energy products, has led to a reprimarization of the export structure, particularly of South America. For the region as a whole, the share of natural resource-intensive goods increased from 45.9 per cent in 2003 to 57.1 per cent in 2008.

Within the general trend, Latin America followed two dominant patterns of specialization, which essentially follow a north-south line. The 'north' of the region is specialized in manufactures with high import contents (in the extreme case, pure *maquila*) that are largely destined for the US market. In Central America, growing intraregional trade is also important as well as traditional agricultural exports. The 'southern' pattern is based on a larger share of commodity-based exports to global markets, which are more diversified in terms of destinations, mixed with a more diversified but highly cyclical interregional trade. Brazil is clearly an intermediate case, as the country had a very diversified export structure in 1990 but shows only small changes in that structure since then. There is a third specialization pattern, which is that typical of the Panama, the Dominican Republic and Cuba, where service sectors dominate.

Table 2 shows the export structures of individual counties, showing some differentiation within the two major specialization patterns. If we focus first on the export of goods, a fairly common pattern has been the diversification towards natural resource-intensive manufactures, which has characterized about half of the countries in the region, with Chile, Peru, El Salvador and Honduras as the most important cases. The second is diversification towards mid-technology manufactures, with Mexico, Colombia, Argentina and Costa Rica as the most relevant examples (the specific products being very different across countries). In contrast, there has been very limited diversification towards low-technology manufactures; rather, the most important item, textiles and apparel, shows a downward trend in most countries, with El Salvador and Guatemala as exceptions. Diversification towards high-technology manufactures is only important in Mexico and Costa Rica.

Table 2 also shows the heterogeneity among countries in the two major specialization patterns. Thus, in South America, Brazil, Argentina, Colombia and Uruguay have a more diversified export structure, whereas the rest are closer to the southern export pattern. In Central America, Costa Rica and El Salvador have more diversified export structures. A clear pattern that comes from looking at these data is the legacy of stateled industrialization. Thus, the countries with the strongest advance in the industrialization process tend to have a more diversified export structure today. This is clear in the cases of Brazil and Mexico, as well as of Argentina and Colombia in South America, and El Salvador and Guatemala in Central America. Viewed from this perspective, Costa Rica is the clearest winner in terms of diversification during the recent liberalization period. In any case, diversification away from natural resources is the exception rather than the rule.

Service exports have been much less dynamic. In any case, as already pointed out, three economies belong to the third pattern of specialization, in which service exports predominate: Panama, which exports transport and financial services, and Cuba (not shown in the table) and the Dominican Republic, which mainly export tourism. However, most Central American economies have been characterized by a growing share of tourism exports. Brazil, Argentina and Uruguay have been the most successful in terms of the export of services with higher technological content, included in 'other' services. Two other South American countries have also an important share of service exports: Paraguay (electricity) and Chile (transport services).

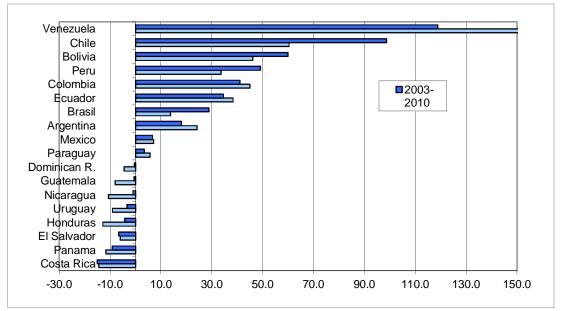
Intraregional trade has made an important contribution to diversification into manufacturing exports, but has faced a major problem: its instability in South America. Indeed, intraregional exports boomed during the great regional integration drive of 1990-97, particularly in MERCOSUR (Table 3). They then fell significantly during the crisis of the late twentieth and early twenty-first centuries in South America, recovered but incompletely so in 2003-08 boom only to fall again during the most recent crisis. Central American trade has grown in a steadier pattern and was much less affected by the recent crisis.

The higher technological content of intraregional trade has been a clear pattern since the 1960s. This pattern became even more marked in the Andean Community and MERCOSUR during the great integration drive of the 1990s but not in Central America, reflecting in this case the booming technological exports of Costa Rica to countries outside the region. This indicates that regional integration has been the best ally of Latin American industrialization, operating in a sense as an 'expanded domestic market'.

			3					
	Commodities	Manufactured goods	Resource- based	Low- technology	Medium- technology	High- technology	Other	Total
			MERCOSUF	र				
1990	13.4	20.1	16.2	15.7	27.4	25.8	8.2	17.7
1997	22.9	44.0	29.7	38.5	59.6	48.8	9.4	36.0
2003	18.8	31.2	21.2	28.9	45.4	26.9	5.9	26.2
2008	17.8	39.8	25.8	43.4	51.5	41.8	5.3	29.8
			Andean Con	nmunity				
1990	12.2	27.7	17.9	35.5	42.2	70.5	32.2	16.1
1997	11.5	42.6	32.4	51.9	67.9	84.7	10.8	23.7
2003	13.3	43.7	39.0	42.9	49.6	69.1	7.5	21.9
2008	12.9	51.5	38.4	71.3	61.9	65.8	5.6	21.1
			Central Ame	rican Comm	on Market			
1990	5.4	55.5	44.4	50.6	78.5	86.5	14.1	23.2
1997	6.1	50.7	50.2	42.4	67.8	45.6	32.1	28.5
2003	11.8	48.7	63.5	57.8	55.0	22.0	33.5	37.0
2008	13.9	48.4	63.7	50.5	54.5	19.2	58.4	39.3
Source:	Based on ECL	AC.						

Table 3 Intra-regional exports as a share of total exports

Figure 2 Gains and losses in the terms of trade since 2004



Source: Author's estimates based on ECLAC data.

This is in sharp contrast with trade with China, the booming commercial partner of Latin America over the past decade. This trade has generated a large opportunity for commodity exporters, particularly of South America. However, it is highly concentrated in a handful of commodities: soybeans, oil, copper and iron ore. In contrast to these patterns, China has increased exports to the region in a very diversified array of manufactures, with increasing technological contents. China in turn has become a major competitor to manufacturing exporters from the region. The net result is a highly imbalanced trade, which has contributed to the aforementioned re-primarization of Latin American export patterns (Gallagher and Porzecanski 2010).

The Asian giant has had another major effect: it has been the major factor behind the strong upward trend of commodity prices since 2004, which reversed the sharp downward trend that had characterized those prices in the 1980s and 1990s. However, there a significant difference between mineral (including oil) and agricultural commodity prices: in the first case, recent prices have reached record historical levels, whereas in the second case the recent price rise represents the recovery from the very depressed prices of the previous two decades, and in the case of tropical agricultural products only a partial one (Erten and Ocampo 2012). The result is that the large winners in the commodity lottery since 2004 have been all mineral exporters: Venezuela, Chile, Bolivia, Peru, Colombia⁴ and Ecuador. Major agricultural exporters, Brazil and Argentina, have also won, but in a more limited manner, whereas some economies have been negatively affected by their dependence on imported oil.

⁴ This may sound a bit strange in the case of Colombia, but in 2010 about three-fifths of Colombian exports were mineral goods: oil, coal, nickel and gold.

The great recession of 2008-09 cut short the commodity boom, but commodity prices recovered fast as the result, again, of strong Chinese demand. Thus, the rapid recovery of the Chinese giant benefited South America, whereas the 'north' faced the strong negative effects associated with the strong dependence on the US market.

4 The effects of FDI and capital market liberalization

FDI patterns have also followed a similar 'north-south' division: the north tends to capture more FDI from manufacturing firms involved in the integrated global production networks and the south more in natural resources, with the large (and indeed dominant) investment in services being a common feature. This process also involved a significant change in the source of capital, with Spanish investment becoming dominant, particularly in services. This process has also involved the transformation of major Latin American firms into transnationals. Some of the largest translatinas, generally Brazilian and Mexican, operate in the global market, but there is a larger group of smaller ones from a larger set of countries that are very active in intraregional investment.

FDI experienced a spectacular rise in the second half of the 1990s, peaking at 4.6 per cent of GDP in 1999 (Figure 3.B). During this boom, a large share of these investments represented the acquisition of existing firms rather than greenfield investment. Inward flows fell significantly thereafter, but stabilized at a relatively high level, between 2 and 3 per cent of GDP. However, growing profit remittances (a large part of which may in fact be reinvested) and outward investment by translatinas have led to a sharp fall in the net transfer of resources through FDI, which has become insignificant since 2005 and negative in some years. Therefore, in terms of net transfer of resources, the region experienced a boom that lasted about a decade. This does not exhaust the contributions of FDI, which also include technology and integration into the global production networks.

In contrast to FDI, financial flows have been highly volatile (Figure 3.A). Inflows have shown two medium-term cycles with a third still underway. The first, which had started in the mid-1970s continued to generate positive net transfer of resources until 1981 and then turned into massive net outflows during the rest of the 1980s. The second was characterized by the return of net inflows in 1990 and, with a short interruption generated by the Mexican crisis of December 1994, kept in the positive territory until 1998, before returning to a situation of net outflows in 1999-2004. The third peaked at high levels in 2007 before experiencing a strong contraction in 2008 and a strong recovery thereafter (strictly since mid-2009).

The nature of the inflows has changed. Bank lending was the dominant feature during the boom of the second half of the 1970s and early 1980s, bond financing during that of the 1990s and a mix of portfolio debt and equity flows in the most recent booms. The second and, particularly, the third boom have also been characterized by growing outward flows by residents. This may reflect in part the fact that outward flows are now legal whereas they were not registered before but also reflects the role of institutional investors that invest abroad.

A. Financial flows 8.0% 6.0% 4.0% 2.0% 0.0% 2000 1994 2010 ુજી 10gr -2.0% **`**Q -4.0% -6.0% -8.0% -10.0% Gross inflows Net flows Net transfer of resources **B.** Foreign direct investment 5.0% 4.0% 3.0% 2.0% 1.0% 0.0% 0,000 090 1992 2002 7090 -1000 080 199A 709° 2004

Figure 3 Capital flows (% of GDP), 1980-2010

Source: Author's estimates based on ECLAC data.

0,84

-1.0%

-2.0%

Viewed in this light, liberalization of FDI has generated positive effects, including the transformation of several Latin American firms as actors in the world of transnationals. In contrast, financial liberalization has generally made a negative contribution in terms of net resource transfers and particularly in terms of the output volatility it has generated, as the sharp coincidence of external financing and business indicates (see below).

Investments abroad

Inflows

One particular channel of crucial importance through which financial flows have affected the macroeconomic performance is through the exchange rate, particularly through real exchange rate volatility. This problem has been particularly strong in South America, where it has been mixed since 2004 with booming terms of trade, generating a significant risk of a Dutch disease. There are, in fact, three distinctive issues here. The

first one refers to the level of over- or undervaluation of the real exchange rate, which has shown to be a clear relation to long-term economic growth.⁵ The second is the effect that volatility itself has on incentives to invest in tradables: it tends to reduce capital accumulation if investors are risk averse. The third, as a copious literature has shown, is the risk of future crises, which tend to rise with the level of overvaluation and associated current account deficits.

Figure 4 concentrates on the most recent cycle. Countries are classified in three categories according to the IMF classification of *de facto* exchange rate regimes: flexible (though not free floating), administered and dollarized. It shows that real exchange rate volatility has two distinctive features in the region. First, with the major exception of Venezuela,⁶ real exchange rate volatility is a feature of countries with flexible exchange rates regimes, which generate, in particular, major risks of overvaluation during booms. The second feature is the greater abundance of real exchange rate volatility in South America, a fact that reflects commodity dependence.

In any case, a careful look at different country experiences indicates that the overall macroeconomic policy package is a major determinant of real exchange rate volatility. So, there is a sharp contrast between Brazil and Colombia, the countries with the most volatile real exchange rate, and Peru, a mining economy experiencing booming terms of trade and equally sharp fluctuations in capital flows, that has been able to significantly moderate real exchange rate instability, thanks to active interventions in the foreign exchange market.

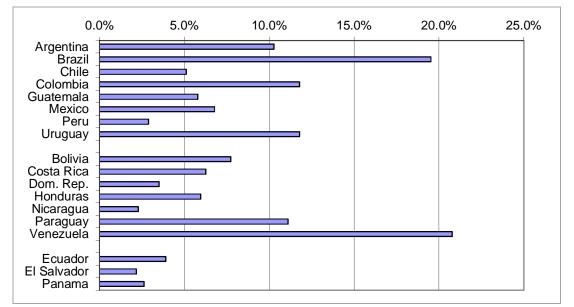


Figure 4 Coefficient of variation of the real exchange rate, 2004-11

Source: Author's estimates based on ECLAC data.

⁵ See a review of the literature in Frenkel and Rapetti (2010).

⁶ In the case of the Dominican Republic we exclude the year 2004. If we included it, that country would also show as having experienced a significant level of real exchange rate volatility.

5 Macroeconomic effects of external integration

Market reforms were clearly successful in generating rapid export growth, in attracting FDI and in creating opportunities for the expansion of the largest regional firms. However, these advances are in sharp contrast with the limited success in terms of GDP and productivity growth. Indeed, compared to the period of state-led industrialization, the two remarkable features of economic growth over the past two decades have been a sharp business cycle and slower long-term economic growth. The latter is even more remarkable if we compare the Latin American experience with the remarkable growth of the Asian economies over the past two decades. These two features are shown in Figure 5 and in the simple descriptive statistics of Table 4. Whether we look at the weighted or the simple average rate of growth, growth volatility, as measured by the coefficient of variation of annual rates of growth, is more than twice what was characteristic of the period of state-led industrialization. The fact that the evolution of the simple average is very similar to the weighted average indicates that there has been significant synchrony in the business cycles of different countries and, therefore, that they have common determinants.

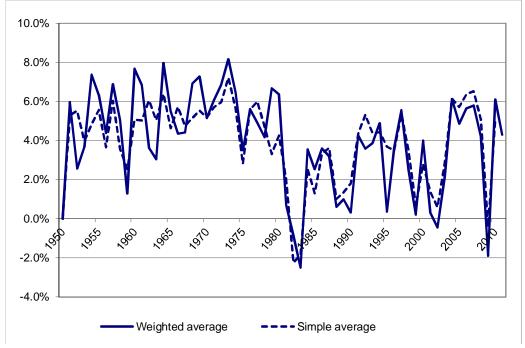


Figure 5 GDP growth rates, 1950-2011

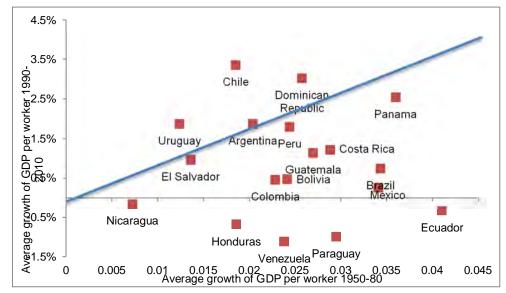
Source: Author's estimates based on ECLAC data.

	Table 4		
GDP growth:	dynamics and	volatility,	%

	Average growth	Standard deviation	Coefficient of variation
Weighted average			
1950-80	5.5	1.7	31.4
1990-2010	3.2	2.4	73.7
Simple average			
1950-80	5.0	1.1	21.3
1990-2010	3.9	2.0	52.4

Source: Author's estimates based on ECLAC data.

Figure 6 Labour productivity, 1990-2010 vs 1950-80



Source: GDP according to ECLAC series; economically active population for 1950-80 according to CELADE/ECLAC and for 1990-2010 according to ILO.

GDP volatility has been associated with that of financial flows, as a simple comparison of Figure 5 with Figure 3.A indicates. Indeed, the two major business cycles have been largely determined by external events, particularly in international capital markets. So, the return of capital flows was the framework in which the region returned to growth in the early 1990s after the 'lost decade'. But the reversal of such flows as a result of the 1997 Asian and the 1998 Russian crises led to a new 'lost half-decade', which was particularly marked in South America. The return of capital flows, together with the commodity price boom and the growth of remittances was the framework for rapid growth in 2004-08, the fastest since the late 1960s and early 1970s. This process was interrupted by the global financial crisis but the rapid renewal of capital flows and the return of high commodity prices formed the background for the rapid return to growth in 2010 (in fact, since the second semester of 2009). Due to the behaviour of commodity markets, and lesser dependence on the US market and remittances, South America behaved better than the north of the region on this occasion.

An additional snapshot of comparative growth performance versus the period of stateled industrialization is provided by Figure 6, which presents the evolution of a simple measure of labour productivity (GDP per worker). As it indicates, productivity growth has been much weaker over the past two decades than in 1950-80. The only two clear exceptions are Chile and the Dominican Republic. Two other countries, El Salvador and Uruguay, show a similar but poor performance in both periods. For the region as a whole, GDP per worker grew at 0.8 per cent per year since 1990 versus 2.6 per cent in 1950-80. Estimates of total factor productivity indicate a similar poorer comparative performance in recent decades relative to the phase of rapid industrialization that ended in the mid-1970s (IDB 2010; Palma 2011).

What went wrong? In terms of volatility, the incapacity to manage the strong procyclical effects generated by global financial markets is, as already noticed, the key explanation. Macroeconomic policy has generally reinforced these cyclical swings (IDB 2008; Ocampo 2009). Thus, capital account booms have been generally accompanied by rapid increases in public sector spending, moderate interest rates, booming credit and asset prices and exchange rate appreciation. In turn, negative external shocks have tended to be accompanied by a slowdown of public spending, sharp reduction in credit growth, and exchange rate depreciation; until the crisis of the late twentieth century, they were also accompanied by rising interest rates. Improved external balance sheets during the 2004-08 boom associated with the reduction in debt ratios and the accumulation of foreign exchange reserves constitute the basic factor behind the resilience of Latin America during the recent global financial crisis. Macroeconomic management also represented an advance in terms of designing countercyclical policies, but it remains to be seen whether this will lead to the development of stable countercyclical policy frameworks (Ocampo 2011).

In terms of productivity growth, the orthodox export-led model ignored the fact that there is a link between growth and production structures, associated to the very different technological content of alternative economic activities. It also ignored that, although access to foreign capital and intermediate goods may enhance the competitiveness of export activities, the strength or weakness of *domestic* linkages matter in terms of the multiplier effect of orthodox export growth. Indeed, it is peculiar that some of the major subsidies that have been granted during the export-led growth era have reduced rather than increased domestic value added (e.g., income and other tax exemptions for export proceeding zones and foreign direct investment). In other words, low technological content and domestic value added led to poor export 'quality' and to weak linkages between export and GDP growth. This is in sharp contrast with East Asia, where exports have a rising technological content and are part of a regional technology cluster, so that even if the local content in a specific location is low, the regional content is high.

Furthermore, the leading economic activities and firms have been unable to absorb the growing labour force, nor that labour force which became idle due to the contraction of previous protected activities that were unable to survive under the new context. The net result is increased dualism (or structural heterogeneity, in ECLAC's terminology): reforms led to the creation of highly productive 'world class' firms and activities, including transnationals present in the region and translatinas, but also rising labour market informality. Indeed, the major assumption of orthodox thinking—that rising productivity in the dynamic sectors would lead to faster overall productivity growth—failed to materialize, due to the growing proportion of the labour force in low-productivity sectors, which dragged down overall productivity.

The production restructuring that reforms unleashed reinforced, in turn, the premature de-industrialization that had started in the mid-1970s. The industrial restructuring that took place generated an increase of natural resource-intensive sectors at the cost of engineering-intensive activities (Katz 2000; Cimoli and Porcile 2011). Productivity performance lagged behind in relation to the world technological frontier, even in natural resource-intensive activities. Equally worrisome, the industrial structure not only became increasingly distant, not only from the East Asian economies (which, in turn, narrowed down their differences with the leading industrial countries), but also in relation to industrial economies with a high share of commodities in their export structure. The latter are indeed more similar to other advanced economies in terms of the share of engineering sectors in industrial production, research and development and capacity to generate technical innovations (patents). These are all areas in which Latin

America has fallen significantly behind, reflecting also very limited efforts in the area of science and technology (see Table 5; ECLAC 2007; Cimoli and Porcile 2011).

It is unclear in this context whether investment and domestic savings have been constraints on economic growth or rather the outcome of poor overall economic dynamics. Certainly, Latin American investment and savings rates are significantly below those of the dynamic economies of East Asia. However, the evolution of investment indicates that it is not an autonomous variable but rather responds to faster economic growth. This is particularly clear when we look at the simple average of the investment rates, which tended to accelerate during both the 1990-97 and 2004-08 upswings, indeed reaching at the end of the second growth period levels similar to the previous historical peak, 1976-80 (Figure 7). The weighted average also responded during the second growth period but less so than during the first and still remains below the historical peak. However, a closer look at the data indicates that this is the result of poor investment performance relative to the past in two economies, Brazil and Venezuela, rather than an overall pattern.

A focus on domestic savings or external financing as determinant of investment involves other misconceptions. The first one is that, whereas higher investment generally leads to higher savings through Keynesian mechanisms, it is unclear how higher domestic savings would, by itself, lead to higher investment. External financing, including FDI, can lead to higher investment, as the debt boom in the second half of the 1970s actually did. However, later periods of external indebtedness were partly reflected in an increase in consumption. Only greenfield FDI could be thought of as leading to additional domestic investment, but a large share of the FDI received by Latin America was for the acquisition of existing firms. In fact, a cursory look at the trajectory of the net transfer of resources via FDI (Figure 3.B) with the dynamics of the investment ratio (Figure 7) indicates that they are largely uncorrelated.

I.	, 1	6	
	Share of engineering industries vs. USA 2002-07 ^{(a}	Spending in R&D as a share of GDP 1996-2007	Patents per million inhabitants 1995-2008
Latin America	0.23	0.40	0.5
Natural resource-intensive			
developed economies	0.72	1.89	65.4
Developing Asia	0.99	1.21	30.5
Mature economies	0.97	2.43	132.6

Table 5 Specialization, productive structure, TCs and growth

Note: ^{(a} Share of engineering industries in manufacturing value added (ratio with respect to share in the USA);

Latin America: Argentina, Bolivia, Brazil, Chile, Colombia, Peru, Mexico and Uruguay;

Natural-resource-intensive developed economies where more than 40 % of total exports are based on natural resources: Australia, Canada, Denmark, Finland, Ireland, Norway and New Zealand;

Developing Asia: Republic of Korea, Philippines, India, Malaysia, Singapore and Taiwan POC; Mature economies: France, Italy, Japan, Sweden, UK and USA.

Source: Based on Cimoli and Porcile (2011).

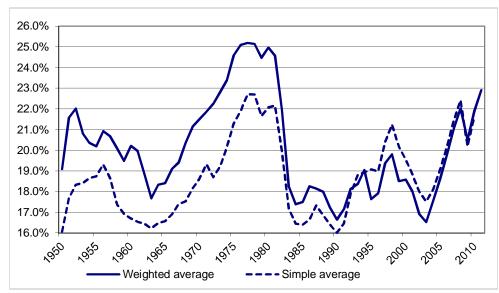


Figure 7 Latin American investment rates, 1950-2011 (2000 dollars)

Source: Author's estimates based on ECLAC data.

A final implication relates to how labour markets behave under different specialization patterns. The northern pattern has been more favourable to employment creation. In the 1990s, the restructuring of labour markets associated with market reforms essentially implied creation of employment in the north and destruction in the south (Stallings and Weller 2001). But even in the 2000s, the north has generated more employment than the natural resource-intensive south. Finally, experience seems to indicate that, although the tendency towards growing informality is universal, the north adjusts through informality, whereas open unemployment also plays an important role in the south (Ocampo and Vallejo 2012).

6 Policy implications looking forward

Integration into global markets has not proven to be a successful story for most Latin American countries, which so far, and contrary to mainstream analysis, have underperformed during the stage of market reforms relative to state-led industrialization. Although there are individual countries that have done well during specific periods under the new economic model, the average pattern has been of weak and volatile growth, with overall productivity performance lagging behind. Good export performance has been the most positive outcome of reforms, with intraregional trade playing a particularly positive role (though subject to instability in South America). However, good trade performance has not been reflected in dynamic GDP or productivity growth in most economies. The recent commodity boom has been a windfall, particularly for South American mineral exporters, but generates risks of further accelerating the premature de-industrialization process that has been in place since the mid- or late-1970s. Overall, the structural transition has left a legacy of weaknesses in terms of technological upgrading of the production structure. In turn, although FDI and the rise of translatinas have been positive features of the ongoing transformations, openness to volatile financial flows has been a major source of the strong business cycles that have characterized the past decades.

This raises policy challenges that relate to the two major links between external integration and development. The first has to do with trade and production sector structures, which now must furthermore take into account weak conditions in the world economy and, particularly, international trade. The second relates to the management of unstable capital flows and its effects on growth volatility.

The collapse of global trade during the great recession and its incomplete recovery have no doubt added an extra element of uncertainty in the first of these dimensions. It means, in particular, that the weak engine of growth that Latin America has been using is likely to run at an even slower pace. Weak trade growth may also encourage increased protectionism—an effect that has so far remained limited but may re-surface in the face of prolonged high unemployment in many economies. Natural resource exporters may continue to benefit from high commodity prices, but there is also a level of uncertainty about how long exceptional conditions in commodity markets are likely to last. Under these conditions, it is essential for Latin American countries to adjust the development strategy to replace the weak growth engine upon which they have relied.

There are three alternatives in this regard, which could be adopted in various mixes, as they are not necessarily incompatible among themselves. The first and most important issue is the need to adopt active production sector policies with a focus on technological upgrading for existing and new activities. Although this may be expressed in terms of a return to industrial policies, the focus of these activities may be natural resource or service sectors, and for that reason they may be better called production sector strategies. The second would be to strengthen the links with the new dynamic poles of the world economy, particularly China, while redressing the major asymmetries that characterize such trade linkages. The third would be a greater focus on domestic markets, which at a regional level means strengthening the regional integration processes. This is the area where improved social conditions can have synergies with economic development.

The essence of the first of these strategies is the emphasis on technological upgrading and innovation, through a mix of support to research and development but also through the encouragement of productive branches, firms and exports with higher technological contents. The essential instruments are strong national innovation systems and development banks. Brazil has been the country that most clearly moved in that direction, with others doing so in a much weaker form (e.g., Colombia and Chile). Among the smaller countries, Costa Rica also took a major step forward in that direction through the attraction of a global player in technology-intensive exports (INTEL). The rest of Latin America still falls significantly behind, though there are now seeds of a new strategy in several countries, more as local than national strategies in many cases.

It is important to emphasize that this strategy may be pursed in natural resourceintensive sectors, following the route of the Scandinavian countries but also of Australian and New Zealand of adding technological content and strong domestic linkages to natural resource exports. In a way, some of the dynamic agribusiness of Argentina and Brazil are demonstrations of a link between natural resource development and the innovation systems in place, but the best example is perhaps the Brazilian policy of building up the linkages between its new oil resources and manufacturing and service sectors, that has already produced impressive results (IPEA and PETROBRAS 2010). Positive commodity terms of trade trends could work to reinforce growth, but long-term development effects will be stronger if the commodity boom is seen as a complement and not as a substitute to a shift towards a technology oriented policy.

The second strategy—growing integration with the dynamic parts of the world economy, particularly China—has already been followed by several countries, particularly in South America. But this strategy must be accompanied by an emphasis on the diversification of Latin American exports to the Asian giant, which is still dominated by a few commodities. Explicit agreements with the Chinese authorities on a strategy to redress these imbalances should be part of the solution. The pure, and in a sense inertial strategy of becoming a natural resource-intensive periphery of China does not look particularly attractive for Latin America.

The third strategy is refocusing on the domestic market, including the expanded domestic market generated by regional integration. Rediscovering the links between improvements in social conditions analysed elsewhere and dynamic domestic markets should be part of this strategy, as reflected in the concept of 'consumption of the masses' of the Lula Administrations. In any case, this should not be understood as a return to the protectionist past, which would not make sense given the strong structural transformations that have already taken place in the world and Latin American economies.

Furthermore, a strict focus on the domestic market may make sense for Brazil, and could be partly successful in Argentina or Colombia, but not many more countries. Strengthened regional integration is therefore a more appropriate basis. Its basic advantage is that intraregional trade has a much larger share of manufactures and, particularly, of manufactures with higher technological content. It also gives broader opportunities to small- and medium-sized firms. But it must overcome its two major problems: its strong cyclical performance and the political divisions within the region that have significantly weakened one of the major integration processes (the Andean Community).

It must be accompanied, as has been recognized, by more active processes aimed at improving the regional infrastructure, particularly the highways, regional electricity grids and oil and gas pipelines connecting Latin American countries. Development of the regional infrastructure has been a focus of Central American integration for some time and has made some advance over the past decade or so in South America, with strong support from the multilateral development banks (particularly of the Development Bank of Latin America, CAF) and now of the Union of South American Countries (UNASUR).7 Indeed, the development of that infrastructure can become new engines of growth, as they were in the past in western Europe, due both to the direct effects that it would have on aggregate demand in the short term but, particularly, to the dynamics that it would generate in the integration process.

⁷ This can also be true of new institutions, such as the Bank of the South, which so far remains just an aspiration.

On the other hand, managing capital account volatility remains one of the major challenges of macroeconomic policy, as part of the very incomplete process of building up strong countercyclical macroeconomic policy frameworks (Ocampo 2011). A major implication, when looking at the links between macroeconomic policy and external integration is the need to give greater attention to current account balances and exchange rate competitiveness in the design of macroeconomic policies in the region. The reason is that there is strong evidence that both a strong current account and a stable and competitive exchange rate help accelerate economic growth.

This has several implications. The first relates to macroeconomic policy. It implies that central banks should place exchange rate management at the centre of their strategies. This is, in a sense, an accepted doctrine in several parts of East Asia but runs counter to inflation targeting, the dominant doctrine in several Latin American central banks. In a sense, one of the essential contradictions of the orthodox export-led strategies followed by Latin American countries is that they place export growth at the centre but then subject it to the instabilities associated with exchange rate volatility. Adopting competitive exchange rates as part of the explicit central bank targets does not mean, of course, announcing such targets, as past experience in Latin America indicates that such exchange rate announcements may not be sustainable in the face of major shocks. It also means that other policy instruments must be put in place, including the broader use of fiscal policy as a countercyclical tool, an area where a few countries have made progress over the past decade, notably Chile. This is particularly true of countries highly dependent on natural resource exports, where the design of explicit stabilization funds should be in the cards.

Another implication is that central banks need broader instruments to manage their broader objectives, including returning to more active management of the capital account, an area where Latin America does have positive experience, and/or the design of domestic countercyclical macro-prudential frameworks (Ocampo 2011; Terrier et al. 2011). The final implication is that this may require that countries take minimal steps at exchange rate policy coordination, particularly if deeper regional integration is part of the strategy. Divergent exchange rate regimes were a major reason behind the collapse of Argentine-Brazilian trade in the late twentieth century and again in recent years. It also had its toll on Andean trade during the 2000s.

It makes sense to revisit the orthodox export-led model that Latin America has followed for a quarter century. Its performance has been weak and may be ever weaker in the near future, and has generated excess real macroeconomic volatility. But this requires stronger state intervention in several areas, particularly a return to active production sector development strategies and strong countercyclical macroeconomic policy frameworks to manage capital account volatility. Many of the ideas of how to go about this have been developed by Latin American academics in recent decades. At the institutional level, ECLAC led regional thinking on how to revisit the role of production sector policies and design countercyclical policy frameworks for today's more open economies (see, for example, ECLAC 2000, 2008). It is time for its views to be heard more broadly in the region. And, it is time for the multilateral development banks to embrace those views, particularly the World Bank, which played a central role in disseminating the orthodox strategies that are still in place in Latin America today.

References

- Bértola, L., and J. A. Ocampo (2012). *The Economic Development of Latin American since Independence*. New York: Oxford University Press (forthcoming).
- Cárdenas, E., J. A. Ocampo, and R. Thorp (eds) (2000). *Industrialization and the State in Latin America: The Postwar Years,* vol. 3 of *An Economic History of Twentieth-Century Latin America.* Houndmills: Palgrave Macmillan.
- Cimoli, M., and G. Porcile (2011). 'Learning, Technological Capabilities and Structural Dynamics'. In J. A. Ocampo and J. Ros (eds), *The Oxford Handbook of Latin American Economics*. New York: Oxford University Press.
- ECLAC (Economic Commission for Latin America and the Caribbean) (2000). *Equidad, desarrollo y ciudadanía.* Bogotá: ECLAC and Alfaomega.
- ECLAC (2007). *Progreso técnico y cambio estructural en América Latina*. Santiago de Chile: ECLAC and IDRC.
- ECLAC (2008). The Productive Transformation 20 Years after. Old Problems, New Opportunities. Santiago de Chile: ECLAC.
- Erten, B., and J. A. Ocampo (2012). 'Supercycles of Commodity Prices since the Midnineteenth Century'. DESA Working Paper 110. New York: UN-DESA.
- Frenkel, R., and M. Rapetti (2010). 'Economic Development and the International Financial System'. In S. Griffith-Jones, J. A. Ocampo and J. E. Stiglitz (eds), *Time* for a Visible Hand: Lessons from the 2008 World Financial Crisis. New York: Oxford University Press..
- Gallagher, K., and R. Porzecanski (2010). *The Dragon in the Room: China and the Future of Latin American Industrialization*. Palo Alto: Stanford University Press.
- IDB (Inter-American Development Bank) (2008). 'All that Glitters May not be Gold: Assessing Latin America's Recent Macroeconomic Performance'. Washington, DC: Inter-American Development Bank. Mimeo.
- IDB (2010). *The Age of Productivity: Transforming Economies from the Bottom Up.* New York: Palgrave Macmillan.
- IPEA (Instituto de Investigación Económica Aplicada) and PETROBRAS (2010). Poder de compra da Petrobras: Impactos econômicos no seus fornecedores. Brasilia: IPEA and PETROBRAS.
- Katz, J. (2000). *Reformas estructurales, productividad y conducta tecnológica,* Santiago: CEPAL and Fondo de Cultura Económica.
- Lora, E. (2001). 'Structural Reforms in Latin America: What Has Been Reformed and how to Measure it'. IDB Research Department Working Paper WP 466. Washington, DC: Inter-American Development Bank.
- Ocampo, J. A. (2009). 'Latin America and the Global Financial Crisis'. *Cambridge Journal of Economics*, 33(4): 703–24.
- Ocampo, J. A. (2011). 'Macroeconomy for Development: Countercyclical Policies and Production Sector Transformation'. *CEPAL Review*, 104: August.

- Ocampo, J. A., and J. Vallejo (2012). 'Economic Growth, Equity and Human Development in Latin America'. *Journal of Human Development and Capabilities*, 13(1): 107–33.
- Palma, G. (2011). 'Why Has Productivity Growth Stagnated in Latin America since the Neo-Liberal Reforms?'. In J. A. Ocampo and J. Ros (eds), *The Oxford Handbook of Latin American Economics*. New York: Oxford University Press.
- Stallings, B., and J. Weller (2001). 'Employment in Latin America: Cornerstone of Social Policy'. *CEPAL Review*, 75: December.
- Terrier, G., R. Valdés, C. E. Tovar et al. (2011). 'Policy Instruments to Lean Against the Wind in Latin America'. IMF Working Paper WP/11/159. Washington, DC: IMF.