

ONE REGION, TWO SPEEDS?

Challenges of the New Global
Economic Order for Latin America
and the Caribbean

Coordinated by
Alejandro Izquierdo and
Ernesto Talvi



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Foreword

The aftermath of the global financial crisis has reshaped world growth and demand patterns, leading to a two-speed recovery, with slow growth in industrial countries and fast growth in emerging markets. This new global scenario is defining a constellation of global macroeconomic conditions that has very different implications for subsets of countries in Latin America and the Caribbean. The report conveys three key messages: first, in this new global economic environment, key structural characteristics of Latin American and Caribbean countries are defining two quite different regional clusters in terms of opportunities and challenges ahead. Second, substantial changes in trade and capital flow patterns, as well as in the international financial architecture, are already taking place and will impact the regional clusters in different ways. Third, economic policy design will have to accommodate these differences in order to ensure widespread and stable growth.

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Executive Summary

The aftermath of the global financial crisis is reshaping the world environment, pointing to the emergence of a new economic order that differs considerably from that prevailing prior to the crisis in 2007. The world economy is currently facing a two-speed recovery process, with industrial countries growing sluggishly—while recovering from major financial disruption—and emerging markets growing at much higher speed.

Increasing commodity prices, the prominence gained by emerging markets in international trade—particularly Asia—to the detriment of industrial countries, low world interest rates and excess saving now being channeled to emerging markets, are setting the stage for considerable opportunities and challenges for Latin America and the Caribbean. However, this new global economic order has the potential to split performance in Latin America and the Caribbean into two regional clusters.

This report takes two paradigmatic cases—those of Mexico and Brazil—and distills the reasons behind the very different outcomes these economies experienced at the time of the global crisis and beyond. It then uses these findings as the basis for assessing future prospects among Latin American and Caribbean countries, depending on whether they belong to the “Brazilian cluster” or the “Mexican cluster.”

Chapter I of the report identifies those two subsets: a Brazilian cluster, whose members share with Brazil a particular set of structural characteristics, such as being net commodity exporters, having relatively high international trade exposure in goods and services with emerging markets and low dependence on remittances from industrial countries. In the view of this report, the Brazilian cluster is very well positioned in a world in which emerging economies are the engine of growth—and increasingly closer trading partners of this group—commodity prices are high, and capital flows pour towards this cluster to take advantage of improved opportunities and brighter prospects. The flip side of this coin is represented by the Mexican cluster—whose members share much stronger commercial ties, both in goods and services, with industrial countries,

are mostly net commodity importers and have a relatively high dependence on remittances from industrial countries—and thus is less well positioned to deal with the new global environment. The fortunes of these two clusters are largely validated by the market's current growth projections for 2010–2011, which are substantially higher on average for the Brazilian cluster (4.4 percent) than for the Mexican one (2.7 percent).

Chapter II documents the key characteristics of the new global economic order emerging after the global financial crisis, which is reshaping the world economy and already having a large impact on Latin America and the Caribbean. This chapter discusses four key characteristics of the new global economic order: i) the reallocation of world output and demand from industrial countries to emerging markets that have a high propensity to consume primary commodities and have become the engine of the world economy; ii) a substantial shift in Latin America and the Caribbean's trade towards emerging markets; iii) a reallocation of world saving towards emerging markets—Latin America and the Caribbean being one of the main beneficiaries—providing ample availability of inexpensive international capital and credit; and iv) a new international financial architecture characterized by a set of innovations to provide timely and sizeable liquidity assistance in times of crisis for emerging markets.

World demand growth has shifted markedly in favor of emerging markets, which currently account for 75 percent of growth in global demand, compared to 50 percent prior to the crisis. This trend is likely to continue in the foreseeable future given current medium term growth projections for industrial and emerging countries. This shift in demand growth towards countries with a higher propensity to consume primary commodities implies a potentially larger demand for products the Brazilian cluster produces and exports, and may very well explain the apparent paradox that in the midst of a contraction in industrial-country demand, the price of commodities today is higher than in the wake of the global crisis. Moreover, low interest rates likely boosted commodity prices further, as the carry costs of inventories were substantially reduced.

Large reallocations in global demand have had a significant impact on trade patterns in Latin America and the Caribbean. Take, for example, the paradigmatic case of Brazil: by 2006, exports to the other BRIC countries (Russia, India and China) represented 9% of total exports. This figure grew to 17% of total exports by 2009, while exports to industrial countries diminished to 44% of total exports in 2009, from 50% in 2006. This notable shift in trade shares is mostly due to an exceptionally large 94% increase in exports to other BRIC countries.

The Mexican economy displays a much different pattern. Although exports to BRICs also increased substantially from the very small levels prevailing in 2006, they only represented about 3% of total exports by 2009, while exports to industrial countries still represent 91 percent of total exports in spite of a severe decline. These shifts in trade patterns in the Mexican and Brazilian economies also apply to the regional

clusters defined previously. The natural implication is that Mexican-cluster countries, where export capacity is essentially oriented towards industrial countries and at a disadvantage in supplying demand stemming from emerging economies, may face the brunt of undergoing substantive productive restructuring in the years to come.

Despite a collapse in capital flows to the region in the aftermath of the Lehman crisis, these flows have bounced back very quickly, reaching a historical record of US\$ 266 billion in 2010. As a result, Latin America and the Caribbean's share in total capital inflows to Emerging Markets (EMs) has increased substantially, from 12% in 2006 to 25% in 2009. However, the increase in capital flows to the region comes in a new guise: non-FDI flows are now predominant. While by 2006 one third of total capital inflows were non-FDI—or financial—flows, they now represent 55%. This change in the composition of capital flows will definitely pose additional macroeconomic challenges to the region, as it is expected to put greater pressure on the real exchange rate and, if intermediated through Latin America and the Caribbean's financial system, will trigger rapid growth in credit.

Concerning FDI flows, there have been already substantial changes in the allocation of FDI between both clusters: while FDI pouring into the Mexican cluster represented 39% of total regional FDI in 2006, this figure decreased to 29% in 2009, in line with expectations given the favorable positioning of the Brazilian cluster in the new global order.

The global financial crisis brought with it not only changes in the engines of world growth, trade and capital flows patterns, but also a set of innovations regarding the international financial architecture available to support emerging markets in times of systemic liquidity crisis. The emergence of new international liquidity lines that were absent at the onset of the global crisis provides insurance facilities that are in line with the functions of an international lender of last resort. The existence of these facilities is likely to reduce risk perceptions of the region and further boost capital inflows. However, as Chapter II acknowledges, unprecedented progress notwithstanding, the multilateral global safety net is not yet up to the task and it is far from extending to all countries in the region, as current criteria for access to these lines are quite selective.

The analysis in this report proceeds under the assumption that the world economy will converge to a process of gradual global rebalancing characterized by progressive adjustment in fiscal accounts in industrial countries, and continued adjustment in their current account balances, juxtaposed with a cutback in current account balances in surplus emerging economies, without major disruptions in existing international trade and financial arrangements. However, it is important to emphasize that the huge adjustments and the massive reallocation of production, trade and capital that global rebalancing implies, will no doubt severely strain the current system of international trade and financial cooperation and thus raise the specter of trade protectionism,

currency wars and/or a new wave of financial panic. Although this report does not consider these risks in its depiction of the new global economic order, they certainly cannot be ignored.

The contrasts highlighted in Chapter II between the Brazilian and Mexican clusters have very different implications for each when it comes to the design of economic policy in the years ahead, an issue that is tackled in Chapter III. Large capital inflows, coupled with high commodity prices, will inevitably confront the Brazilian cluster with concerns related to overheating, real exchange rate appreciation, and rapid credit growth. Thus, challenges for this group include avoiding lax fiscal policies that put undue pressure on aggregate demand. In particular, it is important to quickly unwind the expansionary fiscal stimulus provided at the time of the global crisis. Moreover, countries may face a very complex monetary policy game, where standard policies consisting of interest rate hikes may not be effective, as they may bring about unintended consequences such as attracting even more capital inflows. In this context, counter-cyclical macro prudential policies may play an important role, not only in terms of keeping risks under control, but also in terms of influencing aggregate demand. The report argues that the burden should fall mainly on macro-prudential policies towards banks and other financial institutions, since the available evidence casts doubt on the effectiveness of capital controls.

In sharp contrast, countries belonging to the Mexican cluster will have to view fiscal policy in terms of sustainability rather than aggregate demand management. Many countries entered negative territory in their structurally adjusted fiscal balances during the global financial crisis, and the current international environment for this group now calls for a correction in fiscal accounts to the extent that lower growth rates relative to pre-crisis levels prevail. Regarding capital flows, there is a non-trivial possibility that FDI flows, which have typically financed a substantial share of the large current account deficits in many Central American and Caribbean countries, may ebb relative to pre-crisis levels, as FDI coming to this cluster has traditionally been oriented towards activities satisfying industrial-country demand. This could represent a challenge to current account deficit financing in this sub-region, since it may become more dependent on financial flows and thus make these countries more vulnerable to capital market turmoil. Moreover, current account financing becomes all the more relevant for this commodity-importing group if commodity price increases continue and current account deficits widen. Changes in international trade patterns will also require countries in this cluster to think creatively in terms of reshaping their production and trade strategies in order to connect the couplings of their growth train to the locomotive of faster-growing emerging markets.

In sum, the new global economic order poses different challenges for the Brazilian and Mexican clusters. In spite of these differences, much of the region is likely to enjoy an unprecedented favorable external environment, providing fertile ground for what

could be called “Latin America’s decade.” However, for this to happen, Brazilian-cluster countries will have to make good use of the external bonanza with sound macroeconomic and financial management—avoiding overheating, and keeping in check any buildup of vulnerabilities that may put countries at risk—while investing in raising productivity. Countries belonging to the Mexican cluster will need to successfully meet the challenges of macroeconomic stability—ensuring fiscal sustainability and stable financing of current account deficits—productive restructuring and the implementation of innovative trade policies that enhance chances of faster growth. Despite sub-regional differences, all countries will have to take advantage of this opportunity to tackle long-standing challenges that are common to all: raising the quality of education, reducing informality, and increasing productivity. In the absence of these actions, growth may not be sustained, and the region may continue to depend on the vagaries of the international context.

CHAPTER I

Two Latin Americas During and After the Global Crisis: Who Benefited, Who was Hurt and Why?

The Global Economy

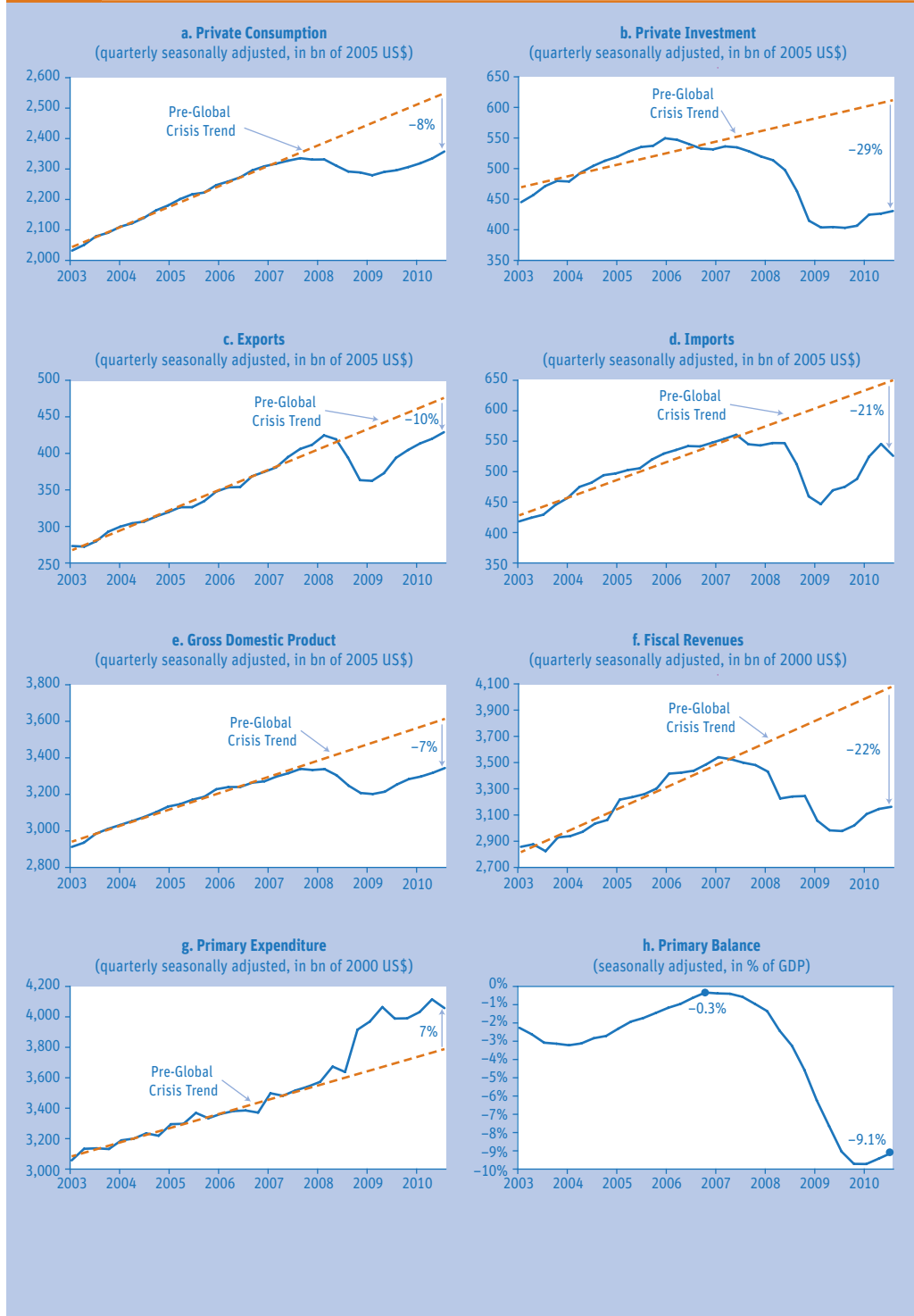
One of the most surprising aspects of the global financial crisis is the fact that, while the industrialized world is mired in the aftermath of the crisis, with sluggish growth and high unemployment forecasts, emerging economies are undergoing an exceptional expansionary period and have become the engine of global growth.

On the industrialized country front, key macroeconomic variables show severe and persistent deterioration relative to pre-crisis positions. In the United States, three components of aggregate demand, namely private consumption, investment and exports, lie 8%, 29%, and 10% below their pre-crisis trends, respectively. On the aggregate supply side, both imports and GDP stand 21% and 7% below pre-crisis trends (see Figure 1, panels *a*, *b*, *c*, *d* and *e*).

Such a marked slowdown has dealt a blow to fiscal revenues, which are 22% below their pre-crisis trend. The activation of automatic stabilizers, coupled with expansionary fiscal policies, has led to an increase in public expenditure, now standing 7% above its pre-crisis trend. As a result, a spectacular deterioration of the fiscal balance took place, leading to a deficit of about 9% of GDP, as well as an associated explosive increase in public debt, reaching 95% of GDP at the end of 2010 (see Figure 1, panels *f*, *g* and *h*).

The situation is also dire in the Euro area, where private consumption, investment and exports, lie 5%, 21%, and 21%, respectively, below their pre-crisis trends. On the aggregate supply side, both GDP and imports stand 8% and 16%, respectively, below pre-crisis trends. Moreover, substantial deterioration of fiscal balances in peripheral Euro-area countries and anemic growth prospects have drastically increased spreads on government debt, raising the specter of default in some of these countries.

In sharp contrast, the emerging market landscape is one of fast growth and substantial changes in the sources of aggregate demand. Taking the paradigmatic case of China as an example, the path of exports has fallen substantially due to recession in

FIGURE 1 Aggregate Demand, Aggregate Supply and Fiscal Balance in the United States

Data sources: National statistics.

industrialized countries. Exports currently stand 20% below pre-crisis trend levels. However, private consumption and total investment lie 6.5% and 14% above pre-crisis trend levels, respectively, largely due to aggressive expansionary expenditure policies channeled through public investment in order to avoid significant falls in output growth rates (see Figure 2, panels *a*, *b*, *c*, *d*, and *e*). This policy brought about a substantial change in the sources of growth in China: while in the period 2003–2007 exports represented the engine of growth, in the period 2008–2010 this role was played by public investment, which largely compensated for the deterioration in export growth.

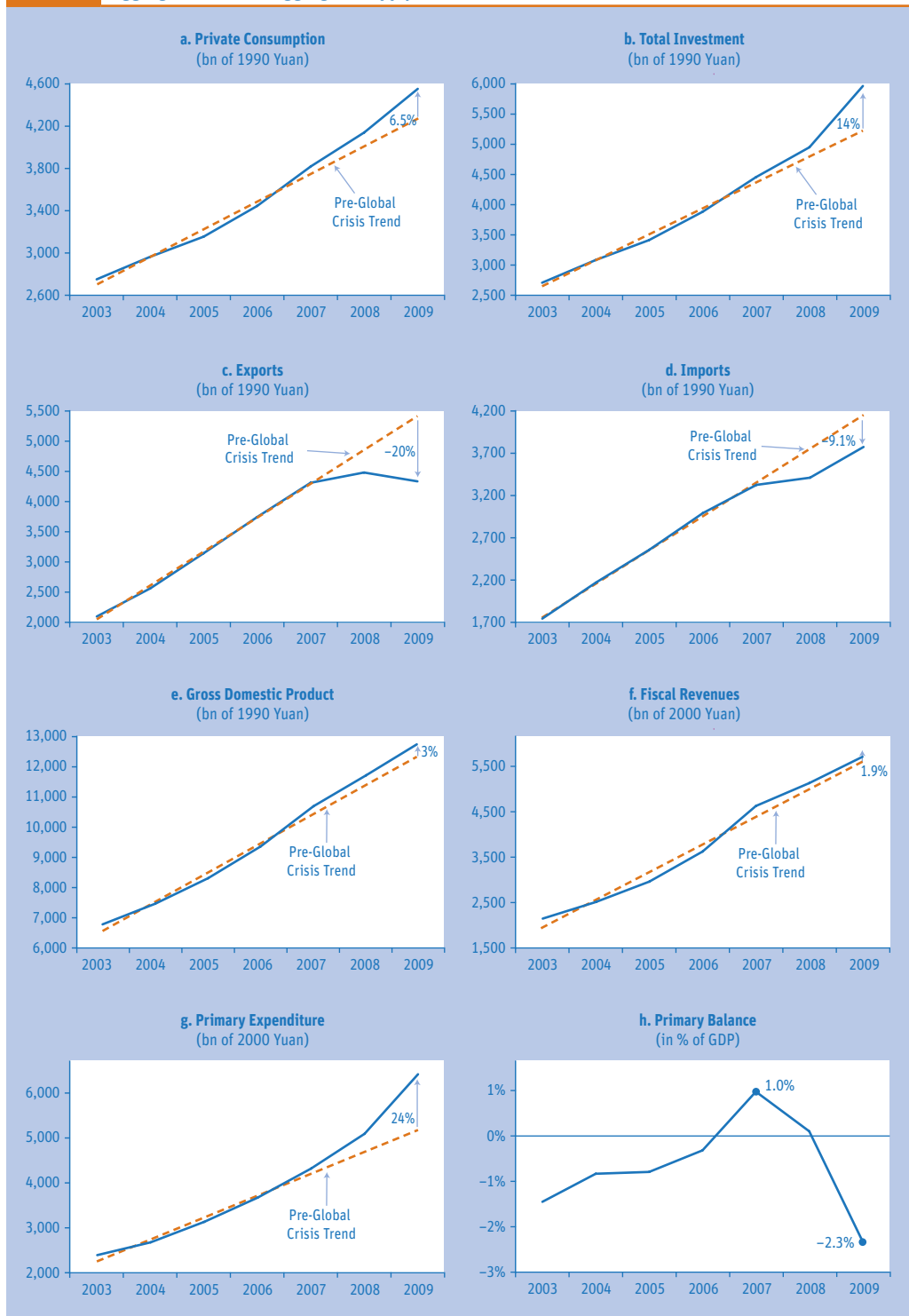
Although Chinese government revenues are slightly above their pre-crisis trend, a position that is consistent with the increase in domestic demand, public expenditure lies 24% above its pre-crisis trend as a result of explicit efforts to keep high levels of economic activity and thus offset the substantial fall in external demand. These changes led to deterioration in the fiscal balance, which swung from a surplus of 1% of GDP in 2007 to a deficit of 2.3% in 2009 (see Figure 2, panels *f*, *g* and *h*).

This realignment process—with industrial-country consumers engaged in a deleveraging process accompanied by lower consumption and higher savings, firms scaling down on investment projects in view of the deterioration in future prospects, while consumers in emerging economies increase consumption and reduce saving, and emerging-market firms step up investment plans given brighter prospects—has led to a gradual purge in excess expenditure in industrial countries, coupled with a contraction in excess saving in emerging economies. As a result, global imbalances have started a correction phase: the current account deficit in the US has narrowed substantially since the beginning of the crisis, while external surpluses in China have also abated.

In sum, the aftermath of the global financial crisis has two salient features. On the one hand, domestic demand in industrial countries is weak, growth is anemic, and unemployment is high, resulting in a important deterioration of fiscal balances and, in some cases, explosive growth in public debt levels. On the other hand, emerging markets (EMs) have faced increased domestic demand, faster growth, a fall in unemployment levels and relatively comfortable fiscal positions. In this context, a gradual correction of global imbalances has started to take place.

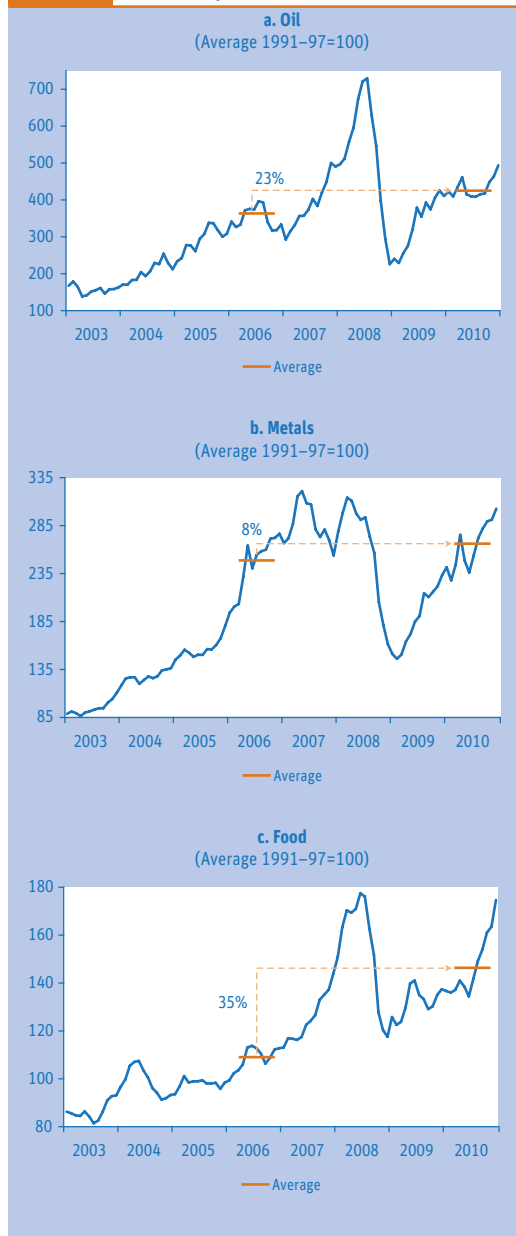
These global macroeconomic adjustments have set the stage for key external drivers of Latin America and the Caribbean's economic activity: world growth, international interest rates, sovereign risk premia, and commodity prices.³ Global production and demand remain below pre-crisis levels despite rapid emerging-markets expansion because of sluggish recovery in industrial countries. However, there has been a remarkable change in global growth composition: while emerging economies accounted for 50%

³ These variables have been shown to explain a large component of average growth variance in Latin America. See Izquierdo, Talvi, and Romero (2008) for more details.

FIGURE 2 Aggregate Demand, Aggregate Supply and Fiscal Balance in China

Data sources: National statistics.

of world demand growth in 2006, this figure has changed to 75% in 2010. This means that demand has shifted towards emerging economies with a much higher propensity to consume primary goods. This implies a potentially larger demand for products that Latin America and the Caribbean produces and exports, and it may very well explain the apparent paradox that in the midst of a contraction in industrial-country demand, the price of commodities today is higher than in the wake of the global crisis.⁴ The prices of oil, metals, and foods are 23%, 8%, and 35% higher, respectively, than prevailing levels in 2006 (see Figure 3). At the same time, the cost of financing for emerging economies is substantially lower than pre-crisis levels given that excess saving, generated mainly in Asia, is not being absorbed by industrial countries. This situation provides Latin America and the Caribbean with vast and relatively inexpensive financial resources. As a result, capital inflows to the region have resumed at a very rapid pace, reaching the heights obtained prior to the Lehman collapse, and leading to pre-crisis sovereign yields (see Figure 4). Moreover, low interest rates are likely to have given an additional boost to commodity prices by reducing the carry costs of inventories.

FIGURE 3 Commodity Prices

Data source: IMF.

⁴ This may better explain the rise in oil and metals prices; a set of supply shocks appears to account for much of the rise in agricultural commodities. In some cases the market clearly expects these to be reversed over time; there is considerable uncertainty, however, as evidenced by the implicit volatility of commodity option prices.

Differential Impact on Latin America and the Caribbean

What has been the impact of this realignment process and subsequent changes in key international macro-economic variables on Latin America and the Caribbean? The rest of this section argues that this may well depend on which Latin America and the Caribbean we are talking about—the “Mexican type” or the “Brazilian type”.

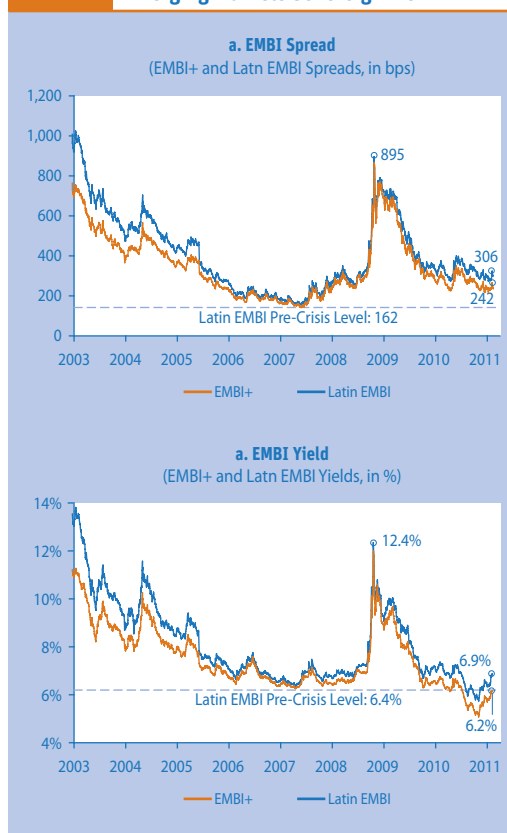
The Mexican economy has substantial performance similarities with the United States: strong and sustained contraction of all components of demand, with private consumption, investment and exports all currently below pre-crisis trends, as well as a strong and sustained contraction in the components of aggregate supply, both output and imports, which also remain well below pre-crisis trends (see left-hand side of Figure 5).

In contrast, the performance of the Brazilian economy is more akin to that of China. While Brazil also experienced a contraction in exports, it was accompanied by a strong expansion in private consumption and investment above pre-crisis trends (see right-hand side of Figure 5). These shifts brought about a notable change in the sources of growth: while between 2003 and 2007 exports were the key driver, now it is the turn of domestic demand: consumption, investment and public expenditure.

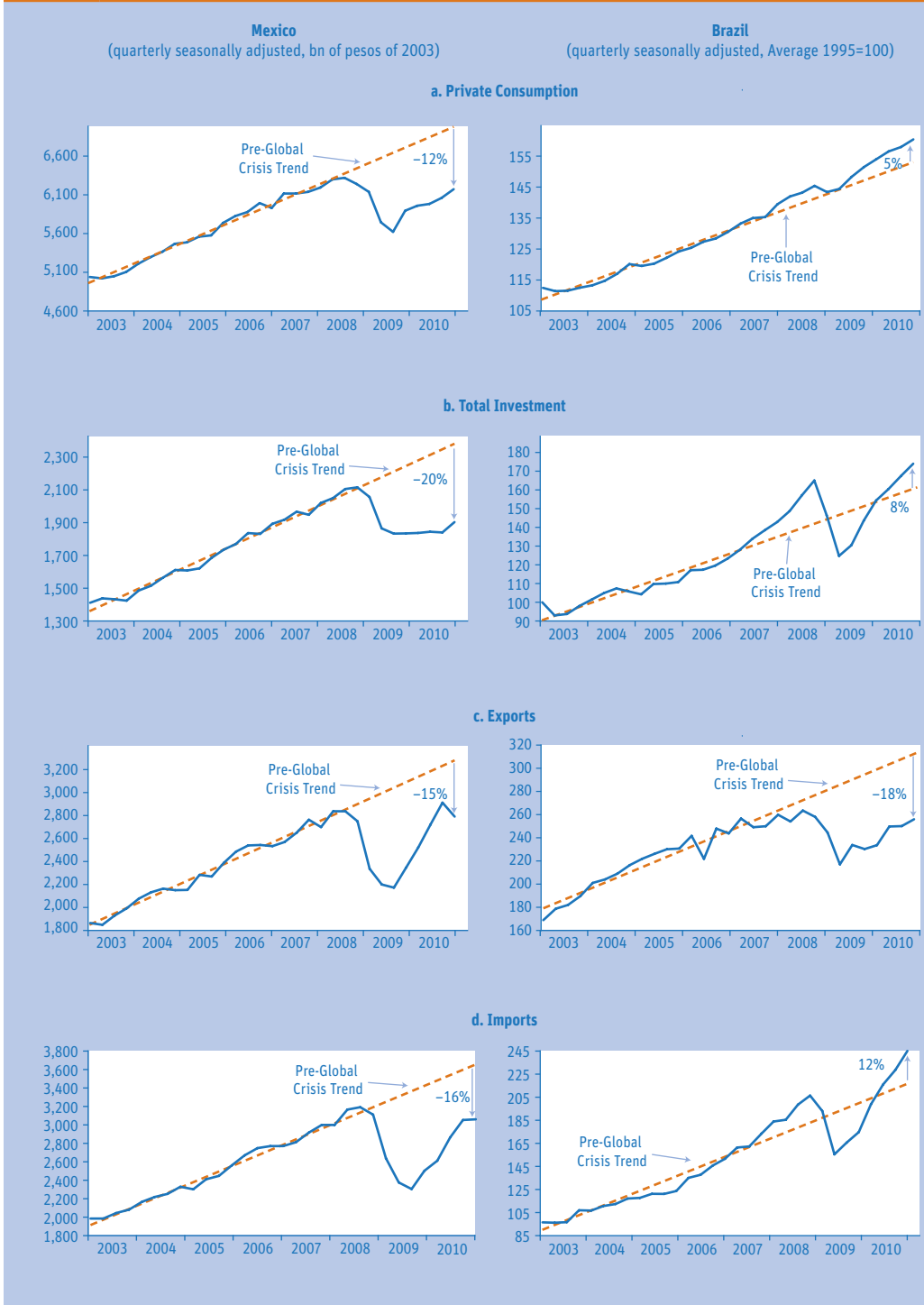
This contrast in performance has come hand in hand with contrasts in leading indicators tied to future performance prospects: consumer confidence and business confidence indicators in Mexico remain at lower levels than those prevailing before the beginning of the global financial crisis, while in Brazil they stand at significantly higher levels. Moreover, while the real exchange rate vis-à-vis the dollar has depreciated by 9% in Mexico, it has appreciated by 26% in Brazil compared with pre-crisis levels.

How can these differences in performance and prospects be reconciled for two countries that belong to the same region and face a common external environment?

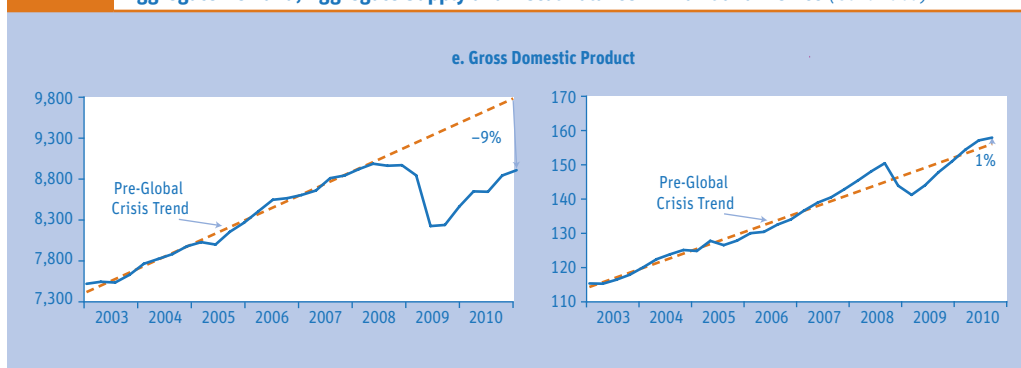
FIGURE 4 Emerging Markets Sovereign Risk



Data source: Bloomberg.

FIGURE 5 Aggregate Demand, Aggregate Supply and Fiscal Balance in Brazil and Mexico

(Continue to next page)

FIGURE 5 Aggregate Demand, Aggregate Supply and Fiscal Balance in Brazil and Mexico (Continued)

Data sources: National statistics.

In order to analyze this diverging behavior more deeply and understand the causes behind these contrasting patterns, it is useful to rely on a simple framework to shed some light on the issue.

For the purposes of this report a very simple model was constructed, in which a bloc of industrial economies was proxied by the economic structure of the United States, while a bloc of emerging economies was represented by the economic structure of China. A third bloc with a weight corresponding to that of Latin American and Caribbean economies was proxied, alternatively, by the structure of the Mexican or the Brazilian economy, and, given the region's small share in world output, it was assumed to be a taker of world output and demand, world interest rates, and commodity prices, which are determined by interactions between the industrial and emerging market blocs (excluding Latin America and the Caribbean).

A description of the model is presented in Appendix I, but it suffices to say here that in all blocs output is demand determined, following a very simple Keynesian framework, where private and public consumption depend on output, investment depends on world interest rates, and exports of each bloc—industrial or emerging—are a function of the output of the other bloc. This framework is used to mimic the impact of a fall in consumption and investment in the industrial bloc quantitatively similar to the collapse in those variables observed in the United States in the aftermath of the global crisis.

According to the model, the fall in aggregate spending generates a fall in output in industrial countries, as well as decreases in imports and exports (due to the negative impact of the fall of industrial country output on the rest of the world), together with a fall in consumption and investment, an increase in private saving and an improvement in the current account balance (see Table I), all elements in line with observed outcomes in industrial countries. A similar pattern takes place in the emerging market bloc, where most components of aggregate demand fall, except for investment, which

increases, given the fall in world interest rates resulting from the fall in aggregate demand and a rise in world saving. At the same time, the current account balance in emerging markets deteriorates. Again, all these elements coincide with observed outcomes in emerging economies.⁵

These interactions result in a contraction of global output, a fall in world interest rates, and a fall in the price of commodities. With these values of the global variables at hand, it is now possible to analyze the differential impact on the Latin America and the Caribbean bloc when viewed à la Mexico, or à la Brazil. When the structure of the Mexican economy is imposed on the Latin America and the Caribbean bloc, the behavior of the components of aggregate demand goes hand in hand with that of the components of the industrial world: a fall in consumption, investment and exports. On the aggregate supply side, the effects are also similar to those in industrial countries: output falls, and so do imports (see Table 2).

The illuminating differences emerge when imposing the Brazilian structure on the Latin America and the Caribbean bloc: this time both consumption and investment *increase* and, despite the fact that exports fall given the slowdown in world demand, output *increases*, and so do imports

TABLE 1 Model Response to an Exogenous Reduction in Private Spending in Industrial Countries

	Industrial Countries	Emerging Markets
Aggregate Demand		
Consumption	↓	↓
Investment	↓	↑
Exports	↓	↓
Aggregate Supply		
Imports	↓	↓
Domestic Output	↓	↓
Fiscal Balance		
Revenues	↓	↓
Expenditure	↑	↑
Fiscal Balance	↓	↓
Sectoral & External Balances		
Private Savings	↑	↑
Public Savings	↓	↓
Current Account	↑	↓

TABLE 2 Model Response to an Exogenous Reduction in Private Spending in Industrial Countries

	Mexico	Brazil
Aggregate Demand		
Consumption	↓	↑
Investment	↓	↑
Exports	↓	↓
Aggregate Supply		
Imports	↓	↑
Domestic Output	↓	↑

⁵ These results are obtained for a given parameterization of the model (see Appendix I for more details).

(see Table 2). Two factors must be brought to the forefront in order to understand this differential behavior: i) the weight of exports in total output, and ii) the share of investment in total output. While the Mexican economy is highly integrated, with exports representing 27% of GDP, the Brazilian economy is relatively closed, with exports standing at 10% of GDP. Thus, the fall in world demand has much greater impact on the Mexican economy. On top of this, Mexico depends much more on industrial countries as a source of export demand than Brazil—as of 2007, 91% of Mexican exports went to industrial countries, as opposed to only 51% of Brazilian exports. Moreover, the fall in interest rates has a larger positive impact on the Brazilian economy given the fact that investment—which reacts favorably to a reduction in interest rates—represents a larger share of the Brazilian economy than of the Mexican economy.

It could be argued that the simplicity of the model at hand may not capture many additional ingredients that could alter the performance of Mexican-type or Brazilian-type economies used here to highlight their structural differences and the differential impact of changes in global macroeconomic environment. Thus, for robustness, a much more complex model was used instead to convey whether results would change qualitatively under a more sophisticated framework, involving five regional blocs, including China, the United States, the Euro area, Japan, and the rest of the world, in a new-Keynesian multi-country dynamic stochastic general equilibrium model of the world economy, based on household and firm optimizing behavior and on nominal as well as real rigidities.⁶ A fall in aggregate spending generated by a fall in consumption and investment in the United States leads to similar results in that larger trade shares, coupled with lower investment to output ratios in the Mexican-type economy, imply a much larger negative impact of the US-spending shock on a Mexican-type economy's GDP than a Brazilian-type economy.

Two Latin Americas: A Cluster Analysis Approach

The structural differences highlighted above are key in assessing future prospects for countries in the region. Brazilian-type countries, being net commodity exporters, with low exposure to industrial countries in terms of exports of goods and services—and much to gain from larger investment demand in response to low world interest rates—are the clear winners. On the other hand, Mexican-type countries, mainly net commodity importers and highly exposed to trade in goods and services with industrial countries, are likely to face substantial challenges, in spite of the fact that they too stand to gain from lower world interest rates. Could we be witnessing the emergence of two regional blocs, represented by a Brazilian cluster and a Mexican cluster?

⁶ See Cova, Pisani and Rebucci (2009, 2010) for details.

In order to assess this, cluster analysis techniques were employed to group countries using the three categories highlighted above: whether a country is a net commodity importer or exporter, is largely integrated or not with industrial countries in terms of export allocation of goods and services, and whether investment represents a large share of the economy. All categories are measured by their 2003–2006 pre-global crisis averages. The first category is measured as the ratio of net commodity exports relative to GDP. In order to make the analysis more illustrative, with the benefit of a two-dimensional framework, the second and third categories were subsumed into one indicator, namely the ratio of investment relative to exports of goods and services to industrial countries.⁷

A two-dimensional graph is presented in Figure 6, panel *a*, for all IDB borrowing member countries in the region.⁸ The southwest corner of the graph clearly defines a tight Mexican cluster comprised of Central American countries, Caribbean countries, and Mexico, practically all of them being net commodity importers with relatively low ratios of investment-to-exports of goods and services to industrial countries. A second, more dispersed Brazilian cluster is placed along the northeast corner, and it contains all South American countries (Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela) plus Trinidad and Tobago. A salient characteristic of this group is that they are all net commodity exporters, and for most, their ratio of investment-to-exports of goods and services to industrial countries is relatively high.⁹ Moreover, this classification of two regional clusters is robust to the inclusion of remittances, an issue that is particularly relevant for Central American and Caribbean countries.¹⁰ Results are shown in Figure 6, panel *b*, again for averages during the period 2003–2006. If anything, the Mexican cluster becomes more compact, pointing to an even clearer distinction among groups.¹¹

The cluster analysis above suggests that these underlying characteristics were already present before the global crisis. How has the global crisis changed these patterns? The answer comes in Figure 6, panel *c*, which shows that, in fact, the distance between the Mexican and Brazilian clusters has widened with the relative worsening

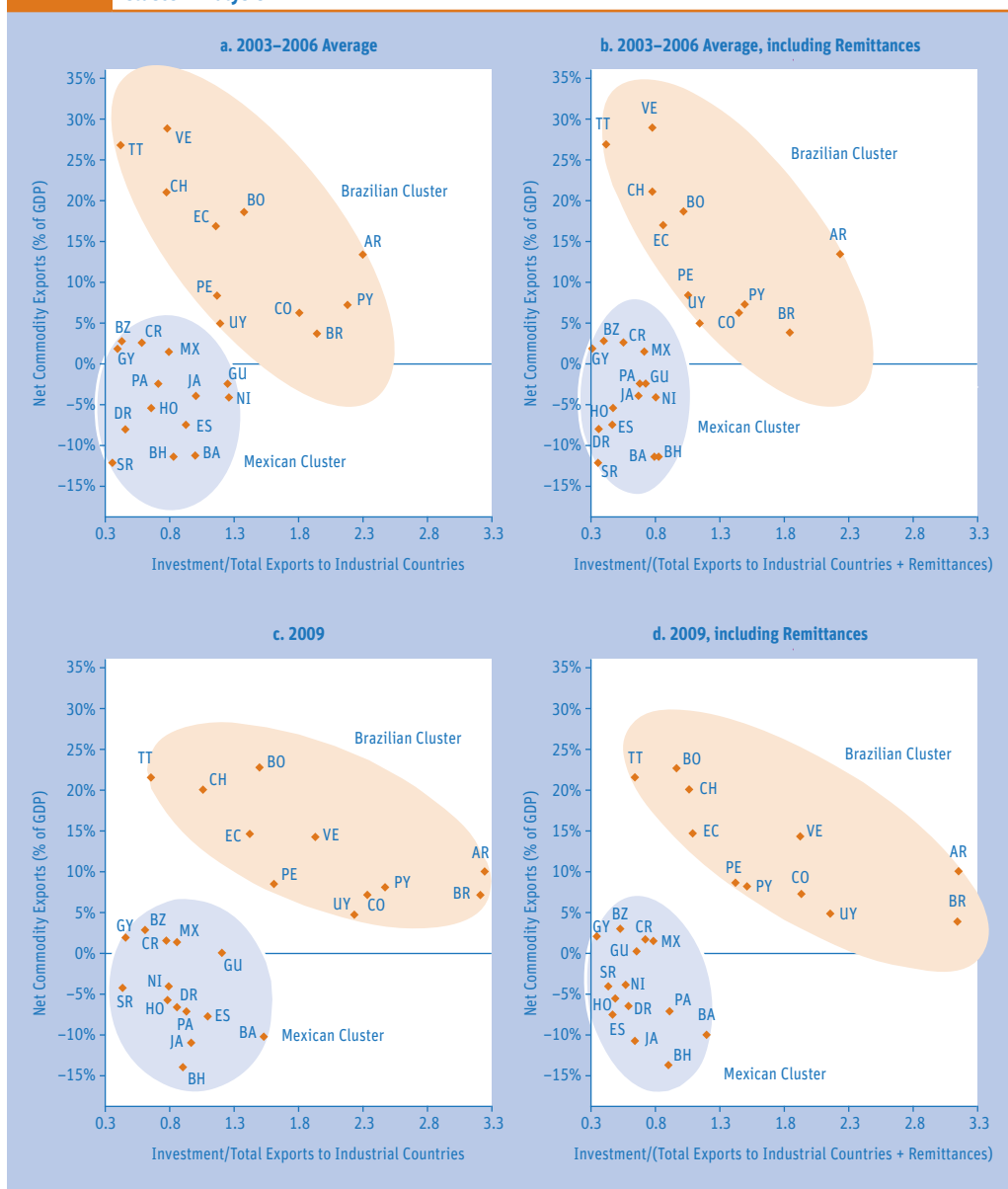
⁷ Results would not change qualitatively if, instead, the analysis were carried out in a three-dimensional framework, using the ratio of total exports to industrial countries relative to GDP, as well as the share of investment in GDP.

⁸ Except for Haiti (due to lack of data).

⁹ This visual assertion regarding the emergence of two groups is confirmed by cluster analysis using either conventional hierarchical cluster methods or K-means cluster methods. Standard grouping optimization tests confirm the usefulness of splitting Latin America and the Caribbean into two clusters. See Appendix II for details.

¹⁰ This is done by assuming that remittances come from industrial countries. Thus, remittances are added to exports of goods and services to industrial countries when computing ratios of investment to exports to industrial countries.

¹¹ Again, this result is confirmed by cluster analysis using either conventional hierarchical cluster methods or K-means cluster methods (see Appendix II).

FIGURE 6 Cluster Analysis

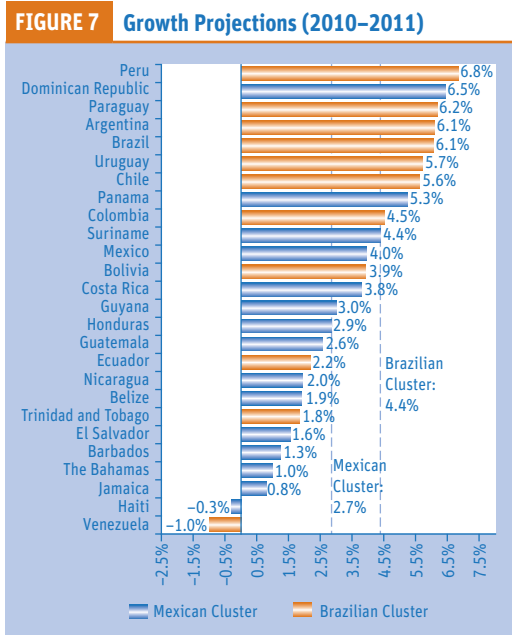
Data sources: DOT, WEO and WITS. Industrial Countries as defined in DOT.

of the Mexican cluster and the improvement of the Brazilian cluster using 2009 data. This widening is confirmed by the fact that the distance between the centroid of the Mexican cluster and that of the Brazilian cluster has increased relative to that prevailing in 2003–2006 (see Appendix II for details). Moreover, the Mexican cluster has become even more compact, pointing to the larger common challenges ahead for this

group.¹² Results remain the same when remittances are added into the equation, as depicted in Figure 6, panel *d*.

It is interesting to corroborate that the fortunes of these clusters are to a large extent validated by market growth estimates and forecasts for the years 2010 and 2011, respectively.¹³ While the Mexican cluster is expected to grow over this period at an average rate of 2.7%, the Brazilian cluster is expected to grow on average at a rate of 4.4%, close to 2 percentage points above the Mexican group.¹⁴ Figure 7

shows individual growth projections, together with cluster average growth projections. Average projections behave as expected; however, the average naturally hides certain heterogeneity, such as the cases of Venezuela and the Dominican Republic. These are good examples of how countries that may be particularly well positioned to profit from the current external environment, as in the case of Venezuela, or may be in a relatively unfavorable position, as in the case of the Dominican Republic, are affected by other factors not included in the cluster analysis that may be important in determining outcomes.



Data sources: LatinFocus and WEO.

¹² This is measured by the reduction in the mean squared error of the Mexican cluster (see Appendix II).

¹³ Forecasts are based on information coming from LatinFocus and WEO.

¹⁴ This difference in mean growth between clusters is significant at the 5% level.

CHAPTER II

What's Next? Latin America and the Caribbean's Insertion into the Post-Financial Crisis New Global Economic Order

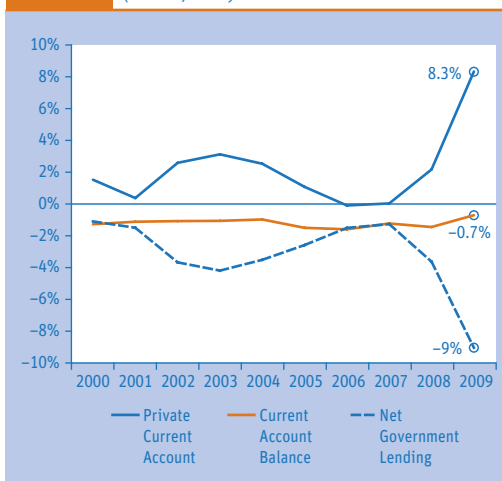
Chapter I hinted at the differential impact of the global financial crisis on the world economy's key players and concomitant changes in the composition of world output and demand from industrial countries to emerging markets, in commodity prices, and in the direction of capital flows, that could affect regional clusters differently. To what extent are these changes already taking place, and what have been the consequences so far of these changes for the patterns of trade, foreign direct investment and other capital flows across Latin America and the Caribbean? Moreover, how will developing changes in the international financial architecture affect the region? In other words, what will be the key characteristics of the new global economic order, and what will Latin America and the Caribbean's insertion into the new global economic order look like?

In the aftermath of the global crisis, industrial countries engaged in a process of gradual rebalancing at the economy-wide level, but with a remarkable contrast between the private and public sectors. A clear understanding of this pattern is crucial to assess future developments. Consider the set of industrial countries, displayed in Figure 8. In 2006, the deficit in the current account of this group was equivalent to 1.6% percent of GDP. In 2009 it was 0.7% of GDP, and a similar figure is expected to have materialized for 2010. At a first glance, this adjustment does not seem very relevant. However, key differences emerge when focusing on the current account balance of the private sector. While its current account was almost fully balanced by 2006 (–0.1% of GDP), net private saving soared by 2009, leading to a private current account surplus of 8.3% of GDP and showing an adjustment between 2006 and 2009 of 8.4 percentage points of GDP. In sharp contrast, the current account balance of the public sector deteriorated sharply, from a deficit of 1.5% of GDP in 2006 to a deficit of 9% of GDP in 2009, and it is expected to have narrowed only slightly in 2010.

Thus, so far the substantial adjustment in private sector accounts has been largely compensated for by massive public sector dissaving. However, mounting pressure continues to develop in industrial countries towards adjustment in government balances. Pressures for public sector adjustment rely on the fact that public debt in industrial country governments has soared in recent years, increasing from 77 to 95 percent of GDP since 2006 (see Figure 9). If the fiscal adjustment were swift enough, without substantial compensation from the private sector, aggregate demand in industrial countries is likely to grow sluggishly and the process of global rebalancing will continue.

The main working hypothesis in this report is that the new global economic order emerging in the aftermath of the global crisis will be one of gradual global rebalancing. Gradual adjustment in the public sector and continued adjustment in current account balances in industrial countries will be coupled with a reduction of current account surpluses in emerging countries, and this rebalancing will take place in a context of continued cooperative international trade and financial arrangements. As a matter of fact, the global rebalancing process has so far been portrayed by gradual adjustment in industrial countries, accompanied by a smooth reduction of current account balances in Emerging Markets, as depicted in Figure 10. Although the pace of rebalancing has slowed in 2010 relative to the period 2007–2009, adjustment is likely to continue, with fiscal retrenchment in the industrial world and sustained expansion of economic activity in emerging economies.¹⁵

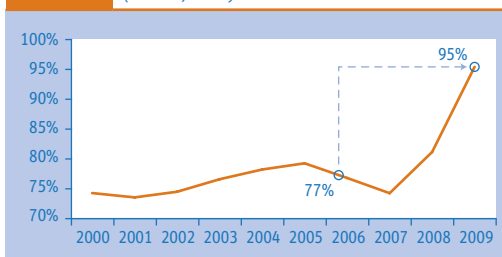
FIGURE 8 Industrial Countries' Sectoral Balances
(in % of GDP)



Data source: WEO.

Industrial Countries refers to Advanced Economies as defined by WEO. Ratios are calculated as Industrial Countries' aggregated variables in percentage of their aggregated GDP.

FIGURE 9 Industrial Countries' Public Debt
(in % of GDP)



Data source: WEO.

Industrial Countries refers to Advanced Economies as defined by WEO. Debt ratio is calculated as Industrial Countries' aggregated debt in percentage of their aggregated GDP.

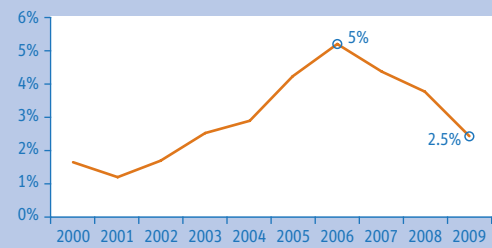
¹⁵ It must be acknowledged that some analysts—such as Blanchard and Milesi-Ferretti (2010)—suggest that global rebalancing could potentially revert.

New Trade Patterns

The reallocation of world output and world demand from industrial countries to emerging markets that have a high propensity to consume primary commodities was accompanied by the emergence of new world trade patterns. Although world output grew about 5% in 2010 (see Figure 11, panel *a*), the contribution of emerging economies to world growth increased substantially, to the detriment of advanced country growth. Moreover, as Figure 11, panel *b* shows, there have also been substantial changes in the composition of world demand growth. By 2006, world demand growth was divided evenly between industrial and emerging economies. This pattern was substantially different in 2010, with emerging economies now accounting for three-quarters of world demand growth.

As mentioned above, this shift in demand has implications for commodity prices given different propensities to consume primary commodities. Commodity imports in industrial countries are approximately 15% of total imports, while in BRIC countries this figure rises to 25%.¹⁶ This shift in demand growth towards countries with a higher

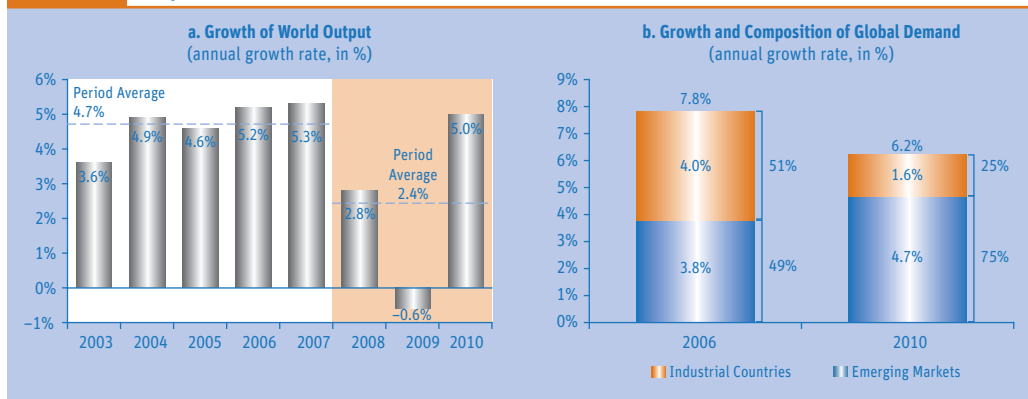
FIGURE 10 Emerging Markets' Current Account
(in % of GDP)



Data source: WEO.

Emerging Markets refers to Emerging and Developing Economies as defined by WEO. Ratios are calculated as Emerging Markets' aggregated current account in percentage of their aggregated GDP.

FIGURE 11 Output Growth and Global Demand



Data source: WEO.

Industrial Countries and Emerging Markets as defined in WEO.

¹⁶ The BRIC countries consist of Brazil, Russia, India, and China. A percentage of the commodity imports are re-exported in manufactured or other goods rather than consumed in the BRICs. BRIC manufacturing, however, tends to be more commodity intensive than advanced country manufacturing,

propensity to consume primary commodities is likely to continue supporting, together with low world interest rates, high commodity prices.

These substantive shifts due to global rebalancing and reallocations in global demand have had their impact on trade patterns in Latin America and the Caribbean, which have changed substantially in 2009 vis-à-vis 2006. Take, for example, the paradigmatic case of Brazil: by 2006, exports to other BRICs represented 9% of total exports. This figure grew to 17% of total exports by 2009, while exports to industrial countries diminished to 44% of total exports in 2009, from 50% in 2006 (see Figure 12, panel *a*). It could be argued that this shift in shares is due to the fact that exports to industrial countries fell during the period 2006–2009 as a consequence of the aftershocks of the global crisis. However, as shown in Figure 12, panel *b*, although exports to industrial countries fell by 4%, the notable shift in trade shares is mostly due to the exceptionally high 94% increase in exports to BRICs.¹⁷ The pattern is quite different for the contrasting Mexican economy where, despite the 9.8% fall in exports to industrial countries during the period 2006–2009, the latter still represented 91% of total exports by 2009 (see Figure 12, panel *c*). Although exports to BRICs also increased substantially from the very small levels prevailing in 2006 (see Figure 12, panel *d*), they only represented about 3% of total exports by 2009.

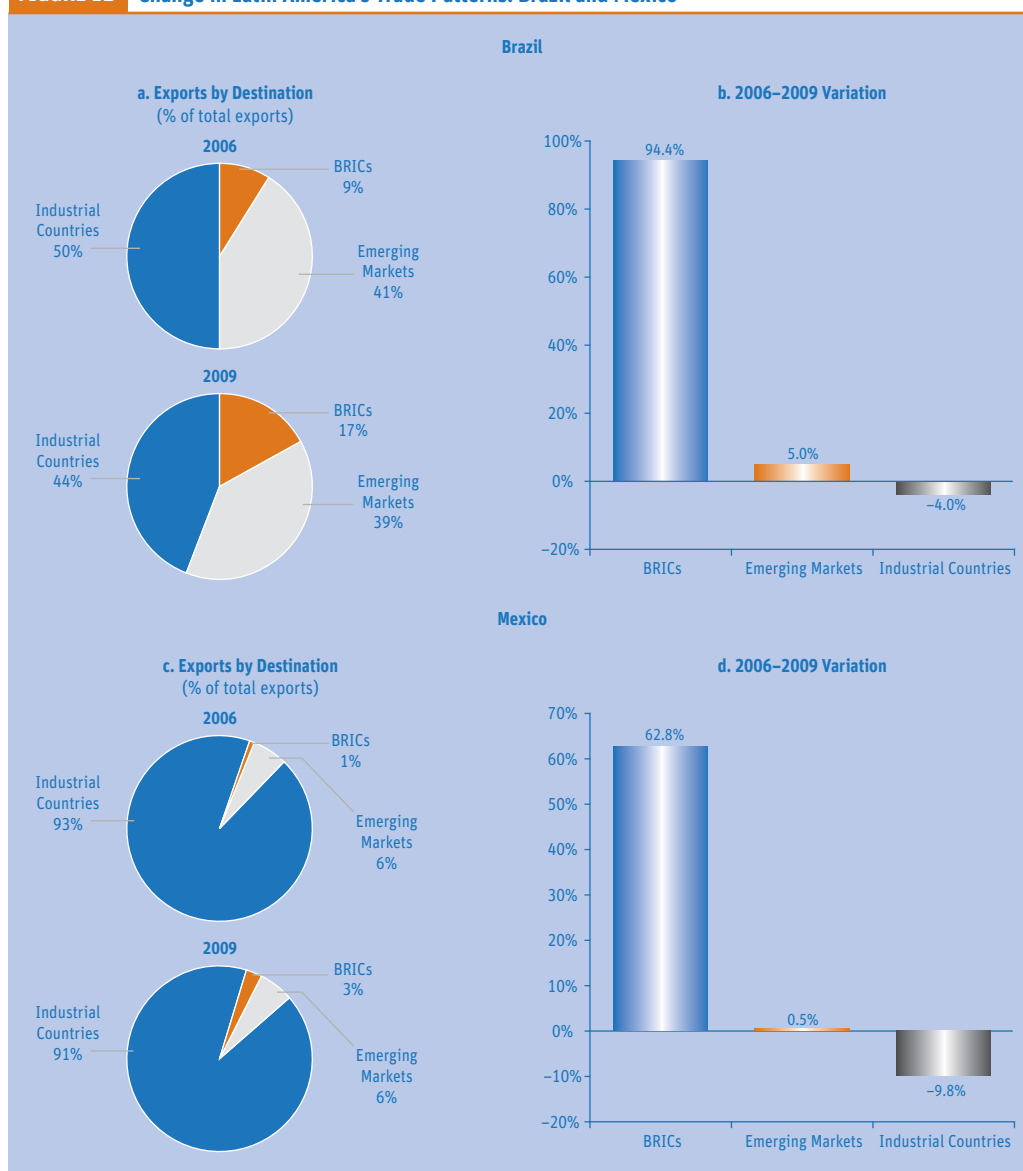
These shifts in trade patterns in the Mexican and Brazilian economies also apply to the regional clusters defined in Chapter I, as shown in Figure 13, panels *a* and *b*. The Brazilian cluster displays an increase in the share of exports to BRICs from 13% in 2006 to 19% in 2009, together with a declining share in exports to industrial countries, from 56% in 2006 to 49% in 2009. Variations are smaller for the Mexican cluster, where exports to BRICs increase their share from 2% to 3% of total exports, while export shares to industrial countries fall from 90% to 87%.¹⁸

Moreover, it is likely that these changing patterns will continue in the future, as they are not just a consequence of recession in industrial countries. Export projections based on growth forecasts of trading partners weighted by 2009 export shares suggest that by 2013 the Brazilian cluster is likely to ship more than *a quarter* of total exports to BRICs, while decreasing shipments to industrial countries so that their share in total exports falls to 42%. The Mexican cluster is also expected to show increases in the share of exports to BRICs to about 7% of total exports by 2013, but the weight of industrial

although this may decline over time given the high price of commodities and modernization of manufacturing processes.

¹⁷ It could also be argued that this change in patterns has resulted from changes in commodity prices. A careful inspection of Brazilian exports at constant prices—Brazil being one of the few countries in the sample with detailed data at constant prices—suggests that even when controlling for price effects, this change in patterns is still present in the data.

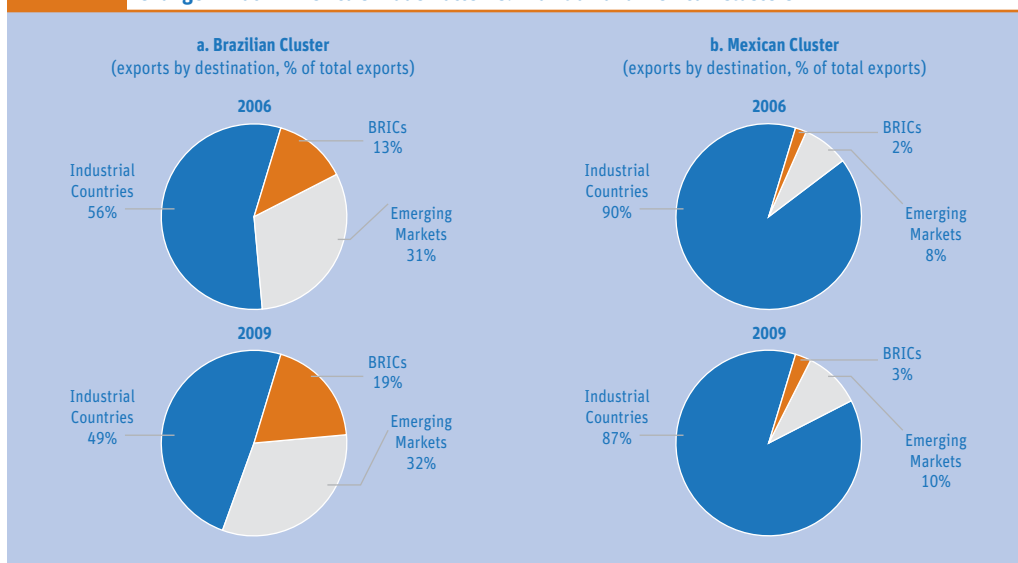
¹⁸ These results are qualitatively very similar using averages of individual country export shares.

FIGURE 12 Change in Latin America's Trade Patterns: Brazil and Mexico

Data source: Direction of Trade Statistics (DOT) – IMF.

BRICs includes Brazil, Russia, India and China. Industrial Countries and Emerging Markets as defined in DOT.

country exports is likely to remain large—at about 87%. These projections suggest that not every country in LAC will benefit equally from this change in trade patterns. Moreover, countries where export capacity is essentially oriented towards industrial countries—and at a disadvantage in supplying emerging economy demand—may bear the burden of undergoing substantive productive restructuring in the years to come. Figure 14 portrays the disparities mentioned above at the individual country level by looking at the

FIGURE 13 Change in Latin America's Trade Patterns: Brazilian and Mexican Clusters

Data source: DOT.

BRICs Includes Brazil, Russia, India and China. Industrial Countries and Emerging Markets as defined in DOT. Shares are calculated using the aggregated data of all the countries included in each cluster.

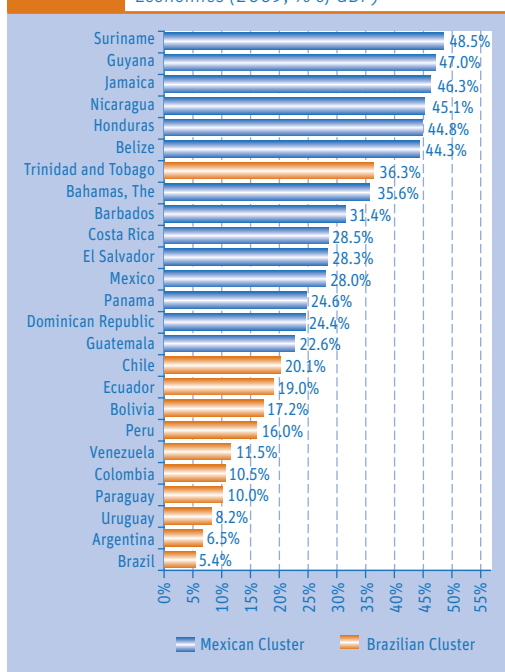
share of exports of goods and services to industrial countries as a share of GDP.¹⁹ At the low end of the spectrum lie most Brazilian-cluster countries—with Brazil and Argentina at the bottom of the list—while Mexican-cluster countries stand at the higher end of the spectrum.

New Capital Flow Patterns

The current global rebalancing process has so far been very favorable for Latin America and the Caribbean's capital account performance. Despite a collapse in capital flows to the region in the aftermath of the Lehman crisis, these

FIGURE 14 Exposure to Advanced Economies

Exports of Goods and Services to Advanced Economies (2009, % of GDP)



Data sources: WEO, Direction of Trade Statistics (DOT) and World Tourism Organization. Advanced Economies as defined in WEO.

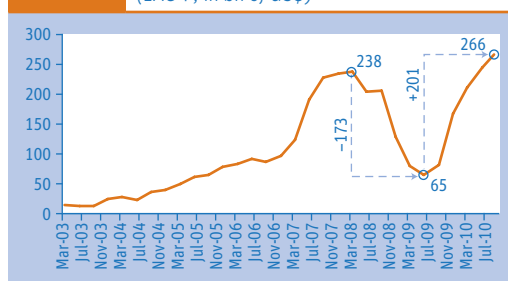
¹⁹ This analysis ignores second-round effects—i.e., exports to Emerging Markets that re-export to Advanced Economies—which in some cases could be important.

flows have bounced back very quickly, reaching a historical record of US\$ 266 billion in 2010 (see Figure 15).²⁰

This suggests ample availability of inexpensive capital and credit due to a reallocation of world saving towards EMs. However, it is worth highlighting that this effect has been particularly important for Latin America and the Caribbean, whose share in total flows to EMs has increased substantially, from 12% in 2006 to 25% in 2009, suggesting that markets are confident about the region's insertion into the new global economic order. Out of all other emerging regions used for comparison, only East Asia and China share Latin America and the Caribbean's fortune in that they also substantially increased their share in total flows to EMs (see Figure 16).

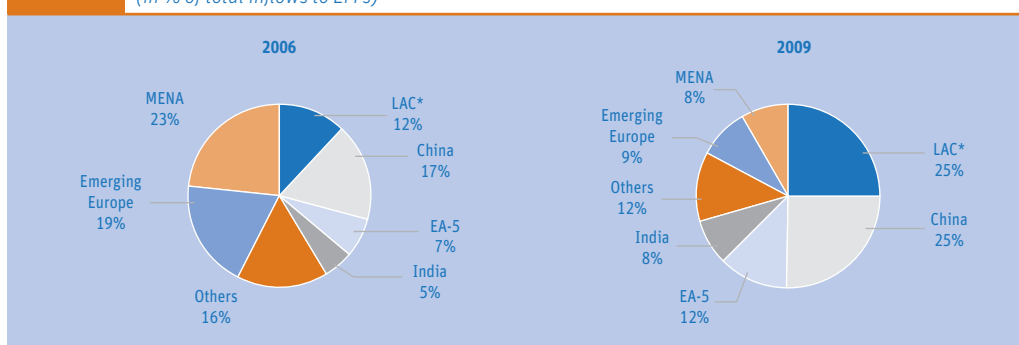
However, the increase in capital flows to the region comes in a new guise: non-FDI flows are now predominant. While by 2006 one third of total capital inflows were non-FDI—or financial—flows, they now represent 55% of total inflows (see Figure 17). This pattern is even starker for the seven largest Latin American economies (LAC-7), where financial flows, which only represented 37% of total flows in 2006, increased remarkably to 69% of total flows in the year ending in September 2010.²¹

FIGURE 15 Capital Inflows to Latin America
(LAC-7, in bn of US\$)



Data source: IFS.
LAC-7 is the sum of the seven major Latin American countries, namely Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. These countries represent 91% of Latin America's GDP.

FIGURE 16 Shares of Capital Inflows
(in % of total inflows to EM's)



Data source: WEO and IFS.

*Excludes The Bahamas.

LAC, MENA, EA-5 and Emerging Europe refer to Latin America and the Caribbean, Middle East and Africa, ASEAN-5 and Central and Eastern Europe as defined by WEO, respectively.

²⁰ Capital inflows are calculated as the sum of liabilities in the capital and financial accounts of the Balance of Payments of each country.

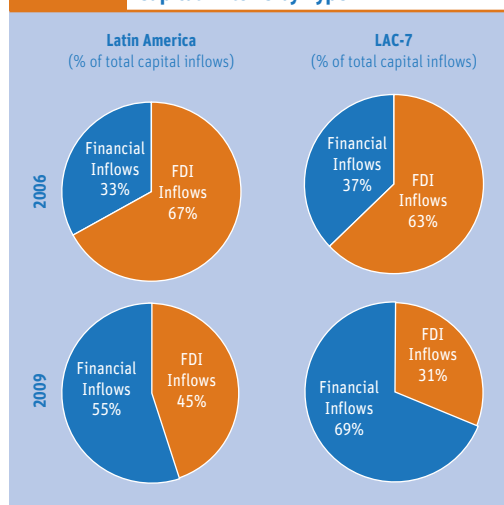
²¹ The LAC-7 group includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

This changing pattern in capital inflow composition is posing additional macroeconomic challenges to the region, as it is highly likely that the new composition of capital flows, if intermediated through Latin America and the Caribbean's financial system, will trigger rapid growth in credit and put greater pressure on the real exchange rate. As a general rule, the same magnitude of capital inflows in the form of FDI, more oriented towards purchases of tradable goods (such as imports of machinery and equipment), puts less pressure on the real exchange rate.²² Moreover, increased flows intermediated through Latin America and the Caribbean's financial system underlines the importance of ensuring that the re-

gion's financial systems remain sound. In a period of strong growth, all loans are good loans at the time they are extended; it is only when growth subsides that risks and vulnerabilities tend to be revealed. This suggests that banking regulation and supervision are key precisely at this time of strong credit growth. Chapter III on policies will tackle these issues and the relevant challenges in further detail.

Concerning FDI flows, which countries in the region will be the main recipients? In the new global economic order, the beneficiaries should be those countries who are recipients of FDI in sectors of activity oriented towards exports to emerging markets. In this vein, the Brazilian cluster appears *prima facie* more attractive for foreign investors, since natural-resource-related activities represent a significantly larger share in total FDI than in the Mexican cluster, where manufacturing-industry FDI is dominant (see Figure 18).^{23, 24} In fact, there have been already substantial changes in the allocation of FDI between both clusters: while FDI entering the Mexican cluster represented 39%

FIGURE 17 Capital Inflows by Type



Data sources: WEO and IFS.

*Data to September 2010 for LAC-7.

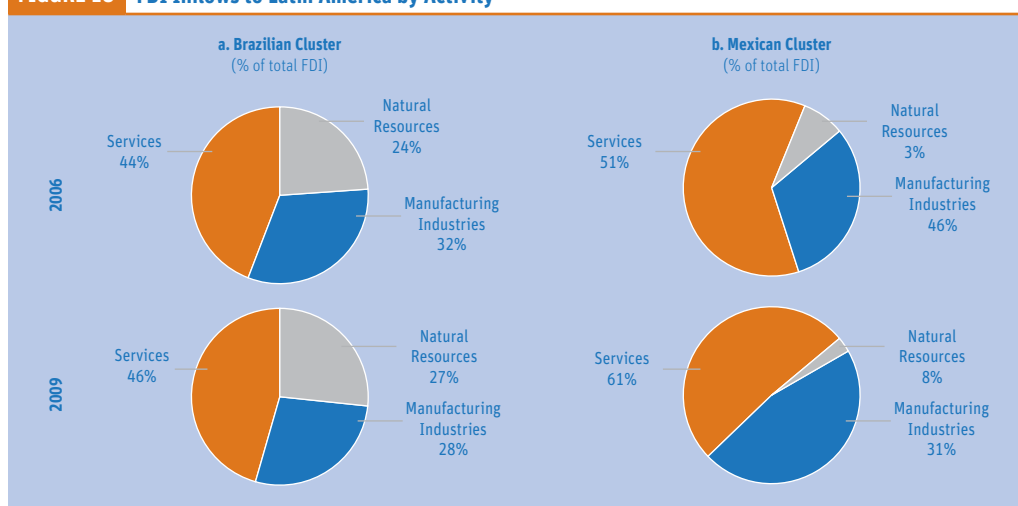
LAC-7 is the sum of the seven major Latin American countries, namely Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. These countries represent 91% of Latin America's GDP.

Shares are calculated using the aggregated flows of all countries in each group.

²² See Combes, Kinda and Plane (2011), Jongwanich (2010) and Athukorala and Rajapatirana (2003).

²³ This measure was obtained with information from Argentina, Brazil, Chile, Colombia and Peru for the Brazilian Cluster, and from Costa Rica, Dominican Republic, El Salvador, Honduras, Mexico and Nicaragua for the Mexican Cluster. Information was not available for the remaining countries belonging to each of these clusters.

²⁴ This is probably a lower bound since this measure does not include infrastructure FDI related to the extraction of natural resources.

FIGURE 18 FDI Inflows to Latin America by Activity

Data sources: National statistics.

Brazilian Cluster is the simple average of Argentina, Brazil, Chile, Colombia and Peru.

Mexican Cluster is the simple average of Costa Rica, Dominican Republic, El Salvador, Honduras, Mexico and Nicaragua.

BRICs includes Brazil, China, India and Russia.

Industrial Countries as defined in WEO.

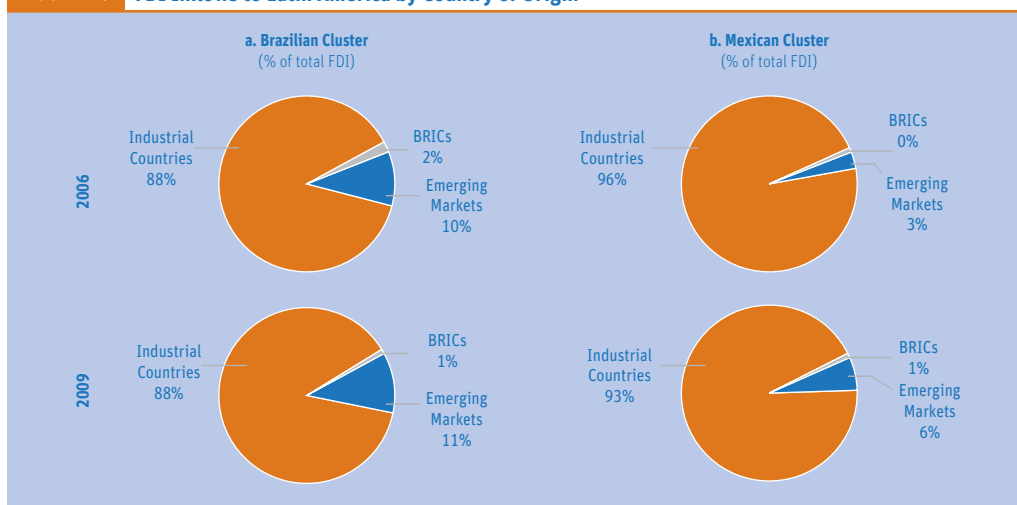
Emerging Markets as defined in WEO.

of total regional FDI in 2006, this figure decreased to 29% in 2009, in line with expectations given the favorable positioning of the Brazilian cluster in the new global order.

It is interesting to note, however, that the origin of FDI has not changed substantially in either cluster between 2006 and 2009, and that industrial countries are still the dominant players: in 2009, FDI stemming from industrial countries represented about 88% of total FDI in the Brazilian cluster, and 93% in the Mexican cluster (see Figure 19, panels a, b, c and d). Therefore, the key characteristic to notice is not the origin of FDI flows but the ultimate market to which FDI investments are targeted. FDI that is complementary with demand stemming from industrial countries will be adversely affected relative to FDI that is complementary with demand stemming from EMs. This fact may pose substantial challenges to the Mexican cluster, particularly so in economies that have traditionally financed their current account deficits with FDI flows, as is the case in many Central American countries. This issue will be addressed in the next chapter.

New International Financial Architecture

The global financial crisis brought with it not only changes in the engines of world growth, trade and capital flows patterns, but also a set of innovations regarding the international financial architecture available to support emerging markets in times of

FIGURE 19 FDI Inflows to Latin America by Country of Origin

Data sources: National statistics.

Brazilian Cluster is the sum of Argentina, Brazil, Chile, Colombia and Peru.

Mexican Cluster is the sum Costa Rica, Dominican Republic, El Salvador, Honduras and Mexico.

BRICs includes Brazil, China, India and Russia.

Industrial Countries as defined in WEO.

Emerging Markets as defined in WEO.

systemic liquidity crisis. As stated in the IDB's 2010 Macro Report, many of these innovations came as a byproduct of the fact that the global financial crisis was triggered by events in industrial countries, leaving emerging markets as innocent bystanders. The collapse of emerging markets in such a scenario would have hampered global recovery and raised the question of whether such collapses could have been avoided.

Instruments now available to emerging markets include the IMF's Flexible Credit Line (FCL), currently used by three member countries, but potentially available to other countries. In light of the partial success of the FCL, the IMF is currently exploring several ways to enhance its menu of liquidity facilities.²⁵ These include, most notably, enhancements to the FCL to achieve two objectives: i) make it available, under less generous conditions, to members that are not eligible under the current ex-ante conditionality; and ii) make it more attractive to already eligible or potentially eligible but indifferent members.

Regarding the first objective, the IMF launched a Precautionary Credit Line (PCL) subject to lower requirements than the FCL but with ex-post conditions on performance, albeit lighter than High Access Precautionary Arrangements (HAPA)—the second line offered by the IMF during the global financial crisis, available to several countries that would not qualify for FCL status. Essentially, this new facility lies halfway between a

²⁵ This section draws on Fernández-Arias and Levy-Yeyati (2010).

HAPA (itself a streamlined Stand-By Arrangement) and the original FCL. Regarding the second objective, the lengthening of the FCL eligibility period (FCL arrangements can now be approved for one year, or two years with an interim review after one year) and the fact that the lending cap was removed—access levels are to be assigned on a country-by-country basis, presumably *ex ante*—are steps in the right direction.

Some of the more ambitious innovations are still proposals waiting for IMF Board consideration under a new encompassing name: the Global Stabilization Mechanism (GSM). The GSM, which in principle would be activated at the onset of a global crisis, introduces two important additions. The first is the option to unilaterally grant access to the FCL to “systemic” countries such as Brazil and Mexico. Second, the GSM would manage a new liquidity window (the Short-Term Liquidity Line, or SLL) without *ex-post* conditionality, which would be available to PCL-eligible countries during episodes of global distress—in other words, extending an FCL type of assistance to PCL-eligible countries. Overall, the GSM probably reflects the current frontier where the internal policy discussion and the external member demand for reform can bring about new IMF facilities, and this would be a positive development. Nevertheless, from the perspective of emerging economies, the proposal has some drawbacks in terms of its ability to constitute a full-fledged International Lender of Last Resort (ILOLR). These considerations are discussed in Box 1.

Irrespective of future potential arrangements, it is undeniable that Emerging Markets (EMs) currently have access to a set of international liquidity tools that were unimaginable at the time of the previous systemic crisis faced by EMs in the aftermath of the Russian collapse of 1998. In particular, Latin America was able to establish enhanced credibility in the aftermath of the global crisis, having weathered the storm without a single financial crisis in the region. While several issues remain in terms of access to liquidity facilities, increased resilience to financial crises, coupled with the availability of new liquidity instruments, implies a reduction in the risk of contagion from other EM crises to EMs with sound fundamentals and access to ILOLR facilities. This reduction in the probability of disruptive liquidity crises in otherwise fundamentally sound economies—so prevalent in the past—implies significant improvements in long-term prospects as the incidence of disruptive liquidity crises diminishes. Thus, it is conceivable that the global economy may experience a further reallocation of world capital in favor of EMs with sound fundamentals and access to ILOLR facilities, over and above the reallocation implicit in global rebalancing. This scenario entails the possibility of even larger inflows of capital to Latin America and the Caribbean—particularly countries belonging to the Brazilian cluster—that will pose severe challenges for EM policymakers, as will be discussed below.

The combination of factors described throughout this chapter—new trade patterns, new capital flow patterns and new international liquidity arrangements—point

to a generally favorable environment for Latin America and the Caribbean countries. However, as has already been argued, the favorable environment applies more forcefully to Brazilian-cluster economies, and in particular, to those with sound domestic policies and preferred access to international liquidity arrangements.

Risks to Global Conditions

The analysis above proceeds under the assumption that the world economy will converge to a process of gradual global rebalancing characterized by progressive adjustment in fiscal accounts in industrial countries, and continued adjustment in their current account balances, juxtaposed with a cutback in current account balances in surplus emerging economies, without major disruptions in international trade and financial arrangements.

However, global rebalancing carries the seeds of severe tensions for the current system of international trade and financial cooperation, thus raising the specter of trade protectionism, currency wars and/or a new wave of financial panic.

First, sluggish growth and high unemployment in industrial countries have led to very lax monetary policies which, to the extent that they are not absorbed domestically, may pose substantial exchange rate appreciation pressure in emerging economies. The latter may decide to intervene in exchange rate markets with further reserve accumulation and/or introducing capital controls, thus resisting global rebalancing. This inherent conflict of interest may lead to tensions between industrial countries and emerging economies, as illustrated by ongoing tensions in the US-China relationship.

Second, very severe tensions in some countries in the Euro area (due to the need for exchange rate realignments while lacking their own currencies), and the possibility that liquidity risks on their sovereign debt may turn into solvency risk—further raising the specter of insolvency in their financial systems—may lead to massive adjustment and further recession. Recent developments, such as the Irish financial crisis and its subsequent bailout—though currently contained—point in this direction.

Although the report does not consider the abovementioned risks in its depiction of the new world economic order, the huge adjustments and the massive reallocation of production, trade and capital that global rebalancing implies will no doubt severely strain the system in such a way that the materialization of these risks cannot be completely discarded.

BOX 1 Remaining Issues for a Full-Fledged Multilateral Safety Net

Financial integration is deepening, and more countries are enjoying the benefits. However, as the recent global crisis has demonstrated, this process also entails risks, and there is an increasing need for a system of ILOLR to deal with potential systemic financial liquidity crises in vulnerable countries. Moreover, as financial sectors grow in emerging economies, there is also the need to ensure that the international financial architecture is adequate to deal with country-specific financial crises, which besides lending may call for country economic adjustment and, in some cases, debt restructuring, to regain sound fundamentals and solvency. Unprecedented progress notwithstanding, the multilateral global safety net is not yet up to the task.^a

The Need for a Wide-Coverage International Liquidity Window

While the IMF has made commendable progress with the creation of the FCL/PCL, this progress has not yet translated into an effective global liquidity safety net. The FCL/PCL retains some of the characteristics that impeded the development of its predecessors, namely: i) the need for country application to qualify, which discourages participation due to political stigma; and ii) the need for Board approval of access, which will cause delay and fuel uncertainty, directly contradicting the essence of a protection mechanism. Moreover, the FCL, and now the PCL, are necessarily selective because they offer support for any kind of financial crisis. An ILOLR specifically triggered by a systemic liquidity crisis should include automatic eligibility requirements, consistent with the kind of comprehensive coverage required of a global liquidity safety net to protect broadly and curtail contagion. The GSM under discussion does contain specific triggers (albeit as certified by the IMF Board), but being built on top of FCL/PCL countries plus selected “systemic” countries, it cannot deliver broad coverage.

An effective ILOLR needs to provide liquidity funded by the world’s “issuers (or hoarders) of last resort” in a position to lend liquidity in a global crunch following the traditional IMF model of agreement to borrow, thus eliminating the inefficient carrying cost of reserve hoarding. An effective global safety net requires assurances that liquidity would be made widely available to emerging economies as a class and not on a selective case-by-case basis. An effective and workable ILOLR for systemic liquidity crises centered in the IMF would rest on two pillars: i) unilateral country pre-qualification for the facility in the course of Article IV consultations to ensure broad-based country participation, and ii) an automatic trigger to allow access to the facility to ensure decisive response.

Unilateral country pre-qualification is needed to eliminate the political stigma countries associate with applying for IMF approval, which has hampered previous attempts to establish credit line programs. The key eligibility condition would be adequate financial safeguards for repayment. Given the excellent historical record of repayment to the IMF and the fact that this

(continued on next page)

^a The following analysis draws from Fernández-Arias (2010a, 2010b).

BOX 1 Remaining Issues for a Full-Fledged Multilateral Safety Net *(continued)*

facility specifically deals with systemic liquidity crises, there is a presumption of eligibility; the Article IV process would identify the exceptional cases in which that presumption should not hold. As a result, comprehensive participation would occur.

An automatic trigger to give free access to the facility to qualified countries is needed for a credible and agile facility. Countries with the highest standards (e.g., FCL grade) and those able to pledge marketable collateral (e.g., sovereign wealth funds) could have free access (at penalty rates to discourage non-emergency use). In order to obtain comprehensive protection, for the rest of emerging markets, access would be contingent on the objective verification of a systemic liquidity crisis, for example in the form of a widespread increase in the EMBI beyond an agreed-upon threshold.

Adjustment and Debt Restructuring Windows

The more developed the ILOLR, the greater the need for an appropriate exit strategy for the ILOLR if the problem turns out to be one of solvency rather than liquidity. A possible arrangement would be to have several windows that offer programs structured in tiers defined by pre-qualification standards catering to countries' capacity. Country eligibility to these windows would depend on the nature of the crisis being faced. For example, a facility designed to cover systemic liquidity crises would deliver substantial upfront lending to almost all countries in need, but particular cases may then require a transition to another window designed to address a solvency rather than a pure liquidity crisis. This other window would be more akin to that created to deal with idiosyncratic financial crises traceable to weak fundamentals. In general, this would tie continuing financial support to specified ex-post conditionality.

In some cases, countries may need to restructure debts. The current system has led to a bipolar approach whereby countries either pursue a market friendly restructuring that risks not solving the underlying problem, or one with deep principal haircuts that have led to serious legal problems.^b Improvements are urgently required to enable orderly and equitable solutions. A possible framework would be to encourage a legal reform to enable the multilateral system to protect borrowers with standstills and to be able to impose seniority rules, as in domestic bankruptcy. The ability to legally impose standstills on payments empowers the ILOLR and reduces the risk that financial support to the country becomes a bailout to private creditors that have already earned substantial risk premia. In that way, standstills facilitate orderly workouts when debt restructuring is necessary to restore solvency. Seniority rules allow for greater efficiency in the work-out by enabling new private lending—which would then be more senior. This allows the ILOLR to leverage new private money. The Debt Restructuring Facility (DRF) would be voluntary and would be called by the country in need of “bankruptcy” protection.

(continued on next page)

^b See Powell (2011).

BOX 1 Remaining Issues for a Full-Fledged Multilateral Safety Net *(continued)*

In practice, this decision is intimately tied to that of the ILOLR, transitioning a country from its window designed to deal with a liquidity crisis to a window designed to deal with a severe solvency crisis.^c The ILOLR and DRF would then indicate an internationally agreed road map for countries to restructure their debts to regain solvency in an orderly and equitable fashion. Countries unfortunate enough to be in this position would not be forced to go through a period of contentious unilateral default and live with the legal and reputational consequences, and given the existence of an agreed road map, would be less tempted to delay in seeking a resolution or tempted to gamble for redemption.

On the Issue of Moral hazard

The concern with moral hazard among funding countries—i.e., that financial markets will over-lend and countries over-borrow because of a deep-pocketed ILOLR ready to come to the rescue in the case of a financial crisis—is probably the most serious impediment to progress in developing a more full ILOLR. However, both Arozamena and Powell (2005) and Fernández-Arias (2010a) suggest that moral hazard concerns are exaggerated. The former shows, in a repeated game theoretic model that explicitly allows for moral hazard, that in most cases moral hazard is controlled. The latter argues that a multilateral ILOLR is in a good position to avoid moral hazard and implement a number of effective solutions to control problems commonly associated with the moral hazard issue.

^c Arozamena and Powell (2005) present a game theoretic model where the IMF gives liquidity protection against pure liquidity shocks, but as fundamentals deteriorate, a first best solution breaks down; the authors argue that the financial architecture is incomplete unless there is a well-defined exit strategy for the lender of last resort.

CHAPTER III

Building Latin America and the Caribbean's Decade: Policy Challenges for the New Global Economic Order²⁶

A successful insertion of Latin America and the Caribbean into the new global economic order requires addressing a set of policy challenges that will ensure comprehensive use of the opportunities brought about by the post-global crisis international context. This policy analysis will proceed under the assumption that the new global economic order depicted in the previous chapters—implying no major disruptions in current cooperative rules of the international trade and the financial system—prevails.²⁷

Although many of the policy options described below may apply to most countries in Latin America and the Caribbean—particularly those related to productivity—the clear distinction made in previous chapters between Brazilian-cluster countries and Mexican-cluster countries calls for different sets of policies. While Brazilian-cluster economies are likely to experience substantive capital inflows and strong commodity exports, therefore facing issues of overheating, appreciating exchange rates and mounting macro-prudential risks, the challenges could be quite different for Mexican-cluster countries. For the latter group, monetary and fiscal policies may need to address other concerns, and their productive and export structures may be challenged in a new global economic order with a slow-growing industrial country zone. Thus, specific issues for each cluster will be pinpointed when appropriate.

Latin America and the Caribbean in general and the Brazilian cluster in particular are likely to receive very large amounts of capital inflows. The region is well aware of

²⁶ This chapter is based on contributions by Eduardo Lora, Mauricio Mesquita-Moreira, Andrew Powell, and Alessandro Rebucci.

²⁷ Were a crisis-mode scenario to materialize, policy recommendations would be more in line with those discussed in IDB's 2009 Macroeconomic Report.

the dangers that this situation might pose. Indeed, this is not a new problem for the region, although the appropriate policy response remains controversial. What are the dangers of this capital flow bonanza, particularly for the Brazilian cluster? The dangers range from macro to micro and, arguably, deleterious interactions between the two. For example, risks in the financial system might, as has happened in the United States and now in Europe, lead to fiscal and currency and macroeconomic risks. On the other hand, as has previously occurred in the region, macroeconomic imbalances have led to severe problems in financial systems, provoking runs that feed back to amplify macroeconomic risks.²⁸ In relation to capital inflows, a significant macroeconomic risk is that of overheating, or in other words, an excess in the demand for domestic goods and assets which may then manifest itself as a sharp appreciation of the real exchange rate, consumer price inflation, and in particular the rise in the price of non-tradables and domestic assets in restricted supply. Such a period of overheating could mask several macroeconomic risks.²⁹ Most opinion makers would argue that the recent global crisis was in large part fueled by a massive credit boom, arguably driven by complacency due to a perceived low level of risk (the Great Moderation period) and a search for yield in a very low interest rate environment.³⁰

While a steady and permanent increase in capital inflows may be an unambiguously good thing, an abrupt, large increase may cause a set of potential adjustment issues. Moreover, there is surely uncertainty regarding whether the new levels of inflows will remain, eventually fall or even be reversed. In this respect, from a macroeconomic perspective, a sharp rise in capital inflows is quite analogous to a commodity boom for commodity exporters and the associated problems analogous to those known collectively as Dutch Disease. Moreover, in the case of the Brazilian cluster, the effect of capital inflows will be compounded by the rise in commodity prices currently taking place, thus making this effect all the more relevant.

Key Macroeconomic Challenges

Regarding macroeconomic management, the first-best response is likely to rely on many measures rather than just one, as there are likely to be multiple objectives. The three objectives in the policymaker's mind might be thought of as internal balance, external

²⁸ Powell (2002) claims the Argentine 2002 crisis was largely the result of fiscal imbalances with feedbacks to the financial system, rather than a problem of "competitiveness" or a traditional balance of payments crisis. A similar claim, but focused on the balance-sheet effects of real exchange rate depreciation on public debt, and its impact on the banking sector is made in Calvo, Izquierdo and Talvi (2003).

²⁹ See for example, the IDB's 2008 macroeconomic report "All That Glitters May Not Be Gold."

³⁰ See for example Borio (2008), particularly Graph 3 on the credit boom.

balance, and risk reduction. And three policy categories to cope with these objectives are fiscal policy, monetary (and exchange rate) policy and, macro-prudential policies. However, these policies can affect more than one objective at a time, as will become clear below.³¹

Fiscal Policy

The literature on Dutch disease has stressed the danger of a sharp real appreciation that then depresses the (non-commodity) manufacturing sector. When the price of the relevant commodity then falls, or the commodity export is exhausted, then the country is left with a weak export base. Moreover, during the boom period governments may increase inflexible fiscal spending commitments that are subsequently difficult to reverse. Thus, while fiscal accounts appear healthy in the boom period, they may yet hide severe fiscal weaknesses.

A first-best macroeconomic response to achieve internal balance in the current context is surely a more conservative fiscal policy.³² Certainly, the countries in Latin America and the Caribbean experiencing such booms that deployed more expansionary fiscal policies during the global crisis, should quickly reverse them, and if capital inflows are large and growth strong, they should seek to attain fiscal surpluses such that cyclically adjusted fiscal balances attain a long-run fiscal target. This will no doubt imply building up fiscal savings or buying back or retiring debt in many countries belonging to the Brazilian cluster. For the first time in recent history, the region has been able to follow counter-cyclical fiscal policies in the recent global crisis, yet it remains to be seen whether countries will follow counter-cyclical fiscal policy during the upcoming expansionary phase. Following such policies through public expenditure adjustment during the upcoming expansion is crucial if Latin America and the Caribbean is going to gain a reputation of solid fiscal performance. Moreover, early unwinding of expansionary fiscal stances reached during the global crisis must be accomplished in order to ensure that the region will have enough ammunition in its arsenal to fight future financial shocks. In this regard, a fiscal rule may prove an effective instrument to make a clear commitment and also to ensure transparency regarding objectives and execution. However, it must be acknowledged that from a demand management perspective, a fiscal rule's effectiveness may be limited in countries where the private sector tends to take offsetting measures (so-called Ricardian equivalence).

³¹ Many of the arguments below are developed from Powell and Rebucci (2010)'s discussion of the policy conundrum in countries facing significant capital imports.

³² All the more so if monetary policy is constrained, as will be clear below.

Monetary Policy

An appropriate monetary and exchange rate policy is also a necessary complement to a conservative fiscal rule, contributing at the same time to achieve external balance. Although there is clearly no one-size-fits-all monetary policy definition for the region, many countries in the region have moved towards more flexible exchange rates with some type of inflation-targeting mechanism. However, a lesson of the recent crisis is that a standard inflation-targeting regime may not be sufficient in the current context. In particular, price stability may be a necessary condition for economic stability, but the recent crisis has shown that it is not sufficient.³³ Indeed, stable prices and low assessments of risk may promote a sharp expansion of credit and investment in riskier assets in a “quest for yield.” Recent studies suggest that banks with a specified level of capital will seek to use that capital in such a period by expanding their balance sheets and moving into riskier assets, thus acting both pro-cyclically and potentially storing up risks for the future.³⁴ This suggests the need to consider macro-prudential policies, which are visited below.

Moreover, the traditional tool of inflation targeting is a policy interest rate. Raising the policy rate to curb excess demand may work well in a closed economy or one where foreign capital plays little role. However, given the small and financially open nature of Latin America and the Caribbean economies, raising the policy interest rate to reduce domestic demand may actually increase capital inflows and hence may not reverse overheating at all, or may even exacerbate it.³⁵ Hence, there has been considerable interest in augmenting policy interest rates with other tools and widening the traditional definition of what constitutes an inflation-targeting regime.

For example, countries may also respond by “leaning against the wind” of nominal currency appreciation through the sterilization of capital inflows, issuing central bank debt and building up reserves. This policy may ensure a more competitive exchange rate, with a healthier export sector and lower consumer imports, but it also carries risks. When capital flows in, interest rates are likely to be low, such that the return on international reserves is likely to exceed the cost of issuing domestic debt. However, if at some future date capital inflows subside, domestic interest rates may rise and the country may be faced with the dilemma of rolling over debt at much higher costs or a sharp alteration in the central bank’s balance sheet if debt is not renewed. Moreover,

³³ See, for example, Borio (2008) on this point in reference to the recent crisis.

³⁴ Adrian, Moench and Shin (2010) show this to be the case if banks operate under a Basel I, a VAR or a Basel II framework, hence their advocacy for strong counter-cyclical capital rules.

³⁵ Capital inflows here may also include repatriation of the significant amount of residents’ wealth invested abroad, reflecting a long history in the region of capital flight and capital repatriation cycles.

this policy cannot be sustained in the medium term, as liabilities incurred through sterilization will accumulate and sterilization will not necessarily stem capital inflows as domestic interest rates are forced higher and exchange rate appreciation expectations remain.³⁶

In those cases where resisting overheating stemming from capital inflows is particularly difficult because of the effects of traditional monetary policy, sterilization or fiscal policy are limited for the reasons outlined above, and putting macro-prudential actions in place becomes all the more relevant. While these policies act first and foremost to reduce risks, they may also have an impact on both external and internal balance, particularly if implemented with counter-cyclical provisions in mind.

Macro-Prudential Policies

Macro-prudential tools will be treated here explicitly as policies that reduce risks, while at the same time having an impact on macroeconomic management (internal or external balance). The experience of the recent global crisis has been that such policies may help to reduce domestic demand (reduce overheating) and may also help to reduce the risk of potential future problems in the financial system. Clearly, these policies are crucial and more compelling to consider for the Brazilian cluster, given ongoing overheating pressures in this zone.

Capital Controls

A first tool in the macro-prudential armory is that of capital controls,³⁷ which take many and varied forms to meet a variety of specific objectives, ranging from economy-wide controls in the form of taxes on all types of inflows to specific taxes such as particular forms of liquidity requirements. The latter occurred in Chile, which imposed a non-remunerated deposit or reserve requirement in the Central Bank. This requirement applied to all inflows, and the non-remunerated deposit had to be maintained for 12 months irrespective of the type of inflow. It is classified as a capital control because it applied to non-residents bringing money into the economy and discriminated on the basis of residency, rather than, say, a reserve requirement that applied to all deposits

³⁶ See Calvo (1990) and IDB (2010).

³⁷ In a recent paper, Bianchi (2010) argues in favor of imposing capital controls to prevent over-borrowing. Using an endowment economy model with a credit constraint-based on tradable and non-tradable goods collateral, it is shown that private agents do not internalize the externality produced by borrowing on the price of non-tradable goods that, in turn, further relaxes credit constraints, leading to over-borrowing relative to the constrained-efficient solution of a social planner. This wedge justifies the introduction of capital controls.

in the domestic banking system. The Chilean capital control was then a mix of a tax component (as the 12-month deposit was not remunerated) and a liquidity component, as Central Bank reserves increased as a result.

Empirical tests on the Chilean system have indeed concluded that the reserve requirement did not reduce overall capital inflows.³⁸ This system did not then have a significant impact on the exchange rate level or on monetary policy independence more generally.³⁹ However, studies have also concluded that the composition of inflows did change towards longer-term investments.⁴⁰

The capital controls being employed in Brazil currently take the form of a tax on certain types of inflows (equity purchases), and were implemented in response to substantial appreciation threats on the Brazilian Real. It is still too early to tell whether this tax on capital flows will be effective to stem appreciation pressures.

In this report's view, the use of capital controls should be approached with caution, particularly in countries where the capital account is already open, for several reasons. From an individual country's standpoint, the evidence on the effectiveness of capital controls in dealing with the probability of a crisis, the size of capital inflows, or the degree of currency appreciation is mixed.^{41, 42} Moreover, it could be argued that if the objective is to control overheating and real exchange rate appreciation while reducing financial risk, then other macro-prudential tools—such as counter-cyclical liquidity requirements on banks (discussed below)—are, if applied appropriately, likely to dominate capital controls. More importantly, from an aggregate perspective, emerging markets—including Latin America and the Caribbean—must realize that if capital controls were adopted in widespread fashion, making most countries deviate from a cooperative equilibrium in the new global order, this could lead to a scenario in which the world could conceivably plunge into currency wars—indeed a dangerous game.

³⁸ See Edwards (1999), Edwards and Rigobón (2005).

³⁹ Analyzing 109 episodes of large capital inflows since the mid-1980s, Cardarelli et al. (2009) show that tightening capital controls is ineffective in dealing with real exchange rate appreciation. Moreover, they present evidence that episodes ending in an abrupt reversal of net inflows do not seem to be associated with less restrictive capital controls.

⁴⁰ See for example, Reinhart and Smith (1998).

⁴¹ In recent work, Benigno et al. (2011) argue that in an economy that is not endowment-based (such as Bianchi, 2010) but production-based (implying that not only consumption, but also labor and sectoral allocation decisions must be made), it is not clear that credit constraints based on the value of collateral lead to over-borrowing. Indeed, in their benchmark production economy, under-borrowing prevails. In this context, they show that—in contrast to findings in Bianchi (2010)—imposing a one percent tax on borrowing in “tranquil times” on the competitive equilibrium allocation is welfare-reducing. Despite reducing the probability of a crisis to zero, this macro-prudential capital control policy is costly as it reduces the average consumption level.

⁴² See Cardarelli et al. (2009).

Macro-Prudential Regulations on the Financial Sector

Latin America and the Caribbean already has considerable experience in this area and, indeed, has developed a set of macro-prudential policies. The region's relatively strong performance in the recent crisis arguably derived in part from lessons learned during its own turbulent financial history. Despite its experience, there are additional issues that merit deeper consideration.

Most financial systems in Latin America and the Caribbean are dominated by banks, as opposed to capital markets. Because of its size, its critical role as an intermediary of capital and, in the payments system, as the holder of many small and less informed actors, banking is a critical sector whose risks must be contained. Here only liquidity and capital regulations are reviewed. From a risk perspective, liquidity and capital regulations play two distinct roles: liquidity requirements attempt to control liquidity risks, whereas capital requirements are designed to protect the solvency of financial institutions. Increasing liquidity and capital requirements may also have an impact on internal balance by reducing overheating. Strongly counter-cyclical liquidity and capital requirements may then complement traditional fiscal and monetary policy.

A. Liquidity Regulations

Liquidity requirements imply a restriction on the composition of bank balance sheets, as banks must maintain a certain percentage of their assets in certain assets—specified as liquid—to satisfy the requirement. Assuming liquid assets are available, such a requirement may not restrict the growth of banks' balance sheets. The measure would then be more prudential than macroeconomic. However, liquid assets normally include deposits or other deposit-like operations with the central bank. Increasing these liquidity requirements on banks and issuing central bank paper to sterilize capital inflows are then close cousins. The former, though, may be considered safer, as the central bank may simply act as an intermediary, investing the funds taken from banks in a parallel portfolio of international reserves and passing on the proceeds net of any intermediation costs to banks. Increasing liquidity requirements that must be held at the central bank is then a very direct way of affecting liquidity entering into the banking system, and an indirect way of affecting aggregate demand.

Liquidity has been shown to be a vital resource for banking systems and countries to survive periods of intense stress. Several Latin America and the Caribbean countries have significant reserve or liquidity requirements on their banking institutions, such that those banks must hold sizeable deposits or other assets in the central bank. To the extent that the reserve requirements are not remunerated, these are simply a tax on the financial system. But the consensus view is that the optimal tax on financial

systems, either from a monetary policy or a fiscal standpoint, is very small if not zero. There is then a trend to consider remunerated liquidity requirements that minimize the tax element but still play an important macro-prudential liquidity role. Moreover, such policies can be adjusted through the cycle, increasing requirements during periods of strong credit growth and reducing them in the event of a negative shock, thus allowing banks to play more of a smoothing role. One additional point is the use of lower remuneration rates for liquidity requirements on bank dollar liabilities to provide incentives for intermediation in domestic currency and reduce dollarization, which has been a source of financial fragility in the region.

The Basel Committee for Banking Supervision (BCBS) has recently published a proposal for liquidity regulation at the level of each financial institution. However, while controlling risks at the level of each institution is clearly important, the experience in Latin America and the Caribbean is that systemic liquidity—to ensure that markets continue to function smoothly—is also critically important. This may involve financial institutions' liquid assets being held in the central bank or other central institution and monitored on a daily basis rather than held on individual institutions' balance sheets with less frequent on-site monitoring.

B. Capital Requirements and Provisions

Capital requirements place limits on the overall expansion of bank balance sheets. Indeed, if the objective is pure macroeconomic management, arguably the appropriate form of requirement is a simple leverage ratio ignoring risk. To the extent that the requirement reflects risk, banks may expand their balance sheets so long as the assets they purchase are safe and, hence, assuming again safe assets are available, a risk-adjusted measure of capital may not serve to curtail the expansion of bank balance sheets as a simple leverage ratio would. The introduction of counter-cyclical capital requirements could affect balance sheet growth and thus indirectly affect aggregate demand.⁴³

Recent advances in financial regulation have suggested that provisions should cover banks' expected losses, while capital requirements should cover banks' unexpected losses up to a statistical tolerance value.⁴⁴ Latin America and the Caribbean, in part due to its experiences with financial crises and higher economic volatility, tends to have significantly higher capital requirements than international standards, and also tougher rules on provisioning. Moreover, several countries in the region have developed extensive databases covering a large percentage of lending which are used to control

⁴³ However, as will be argued later, counter-cyclical policies may need to be very aggressive in Latin America in order for this channel to work.

⁴⁴ Basel II uses a 99.9% confidence limit, which roughly means that 1 bank in 1,000 might fail, or that a bank might be expected to fail in one year out of a thousand.

provisioning, monitor related lending, and also monitor the potential risks posed by loan concentration and large debtors of financial systems. Interestingly, these systems and the region's French Law tradition have tended to make lawmakers and regulators keen to define standard products in the financial system, thus possibly restricting financial innovation. The latter, in turn, may have protected the region from the risks of forms of securitization and opaque over-the-counter derivative transactions that particularly affected the Anglo-Saxon financial systems in the recent crisis.⁴⁵

With respect to provisioning, several countries in the region, following the example of Spain, have also introduced counter-cyclical provisioning systems such that these reserves increase in periods of strong growth and may be drawn down in periods of stress. That said, many countries also maintain provisions based on a past loss rather than an expected loss basis.⁴⁶

With respect to bank capital, Latin American countries average over 15.6% of assets at risk compared to the Basel 8% standard.⁴⁷ New rules, known collectively as Basel III, have been suggested by the Basel Committee for Banking Supervision in this area. Are those rules applicable to LAC, however, and if so, how?⁴⁸ Basel III tightens the quantity and the quality of required capital relative to Basel II. However, it remains unclear how relevant this is to Latin America. Given the higher capital levels and the substantial buffers the region possesses—over and above Basel III buffers—as written, it appears that Basel III may not bind in this regard.⁴⁹ It also remains an open question whether capital rules should be tightened further in the region.

On the other hand, counter-cyclical measures are surely desirable at this stage of the cycle. If capital inflows are large and economic growth is strong, this is the time to build up bank capital (and liquidity) and a rule-based “cyclically adjusted” bank capital regulation may be needed. One innovation in Basel III is that of a counter-cyclical capital buffer. Research conducted at the IDB, however, has found that, given high levels of bank capital that are well in excess of actual requirements, such a buffer may have very little effect. If banks already comply with the current requirements plus the additional

⁴⁵ Virtually all countries in LAC claim to have adopted Basel I and thus adopted rules which were extremely favorable to securitization. These banks certainly had incentives to securitize to minimize their levels of required capital.

⁴⁶ In an attempt to gauge the quality of provisioning rules, Galindo and Rojas-Suárez (forthcoming) create an index and find considerable variation in the region.

⁴⁷ This figure refers to IMF Financial Stability Report (2009).

⁴⁸ In fact, G20 countries have in principle made a commitment to implement Basel III (Argentina, Brazil and Mexico in Latin America), and the IMF will conduct mandatory FSAP-type analyses to feed into Article IV consultations for systemic countries (Brazil and Mexico in Latin America) which will no doubt comment on implementation efforts. Basel III nonetheless remains strictly voluntary for other countries; the vast majority in Latin America claim to have a Basel I standard.

⁴⁹ A caveat, however, is that much of Latin America does not have a clear core tier-one capital definition, so it is not clear how the new rules on the quality of bank capital would apply.

counter-cyclical buffer, they may expect the buffer to be reduced in bad times—possibly reducing their incentive to hold excess capital.⁵⁰ For such rules to be effective, then, a much more aggressive counter-cyclical rule would be required.

While much of the detail of Basel III comes directly from Basel II, the region has been rather skeptical towards Basel II, with different countries adopting very different Basel II alternatives. In particular, Chile has been working towards adopting the Standardized Approach that employs external rating agencies, while Brazil aims to keep most banks on a Simplified Standardized Approach (akin to Basel I) and move larger banks to the so called Internal Rating Based Approach—where banks assess the risks of their clients internally and use a formula to calculate capital requirements. Other countries such as Uruguay and El Salvador have no explicit Basel II adoption policy but are taking some measures consistent with Basel II.⁵¹

These developments are sacrificing homogeneity and standardization, but they may also be occurring because the various alternatives on offer do not really fit the characteristics of the region. Some studies suggest a new alternative, namely a Central Rating Based Approach where banks assess the risks of their clients according to a standard scale.⁵² Since many countries in the region are already doing something along these lines, most countries could adopt this successfully, maintaining greater homogeneity. More generally, this discussion underlines the importance of considering very carefully the new proposals coming from Basel, and to conduct detailed research on Latin America and the Caribbean.

Foreign Bank Regulation and Supervision

Recent work suggests that spikes in international risk aversion have spread more forcefully by foreign banks than by domestic banks.⁵³ In particular, the recent global financial crisis has exposed existing difficulties in designing appropriate regulation and supervision of large complex international banks. One strong lesson from the crisis is that such banks are so complex that it is difficult for supervisors to truly understand the risks of the institution as a whole or how the different parts of such an institution would be affected if it did experience financial difficulties. Financial systems in the region have been strengthened significantly by the entry of many such institutions into the domestic market, and for some financial systems in the region foreign banks indeed play a dominant role. Yet what might be a bank of systemic importance for a Latin

⁵⁰ See Aliaga-Díaz, Olivero and Powell (2009).

⁵¹ See IDB Project on, “Basel II Adoption and Adaptation”.

⁵² See Majnoni and Powell (2005).

⁵³ See for example Galindo, Izquierdo and Rojas-Suárez (2010). This is also consistent with Galindo, Micco and Powell (2004) and Martínez Peria, Powell and Vladkova (2002).

America and the Caribbean economy may be only a small part of a large and complex international financial institution. A lesson from this crisis and previous ones in Latin America and the Caribbean is that consolidated supervision of such global entities may be necessary, but it is not sufficient.⁵⁴

Home and host regulators both have very significant roles to play, and these roles should be clearly articulated in the international standards.⁵⁵ In particular, a lesson from this crisis is that host regulators should have full information regarding the potential risks that stem from other parts of such complex institutions that may be relevant to their tasks, especially when those banks are systemic for the relevant host country.

Specific Macroeconomic Challenges for the Mexican Cluster

The overheating pressures described above will be less intense for the Mexican cluster. Therefore, many of the policies discussed above, though relevant in the long run, do not have an immediate urgency for countries in this cluster.

Regarding fiscal policy, countries in this cluster must focus more on sustainability concerns than overheating concerns. Many countries entered negative territory in their structurally adjusted fiscal accounts during the global financial crisis, partly in an effort to smooth the impact on economic activity. However, if lower growth rates relative to pre-crisis levels will prevail for this cluster—given the slow pace of aggregate demand in industrial countries and higher commodity prices for these net commodity importers—a correction of fiscal accounts seems in order so that sustainability concerns do not arise. An idea of the magnitude of this problem is revealed by looking at average structural fiscal balances as a share of revenues for 2010 across different sub-regions. While this figure represents a deficit of about 4% of revenues for the LAC-7 group excluding Mexico—composed entirely of Brazilian-cluster countries—it jumps all the way to almost 20% of revenues for the Central American CAC-5 group—composed of entirely Mexican-cluster countries.⁵⁶ Similar figures obtain for the Caribbean CAR-4 group, which become even larger once Trinidad and Tobago—a Brazilian-cluster country—is excluded.⁵⁷

Regarding monetary policy, the main focus should rely on credibility, moving towards further transparency and exchange rate flexibility in order to accommodate shocks more easily than at the time of the global crisis. In some countries, this implies

⁵⁴ See Majnoni and Powell (2005) and Majnoni and Powell (2007).

⁵⁵ In particular it seems reasonable that Pillar II of Basel II, which deals with what supervisors should do, should cover the specific roles of home and host supervisors.

⁵⁶ The LAC-7 group includes Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. The CAC-5 group contains Costa Rica, Dominican Republic, El Salvador, Guatemala, and Panama.

⁵⁷ The CAR-4 group includes Bahamas, Barbados, Jamaica, and Trinidad and Tobago.

redoubling de-dollarization efforts so as to improve the ability to use the exchange rate as a buffer.

Regarding capital flows, there is a non-trivial possibility that FDI flows, which have typically financed a large share of the current account deficits many Central American and Caribbean countries incur, may ebb relative to pre-global crisis levels. The fact that much of FDI coming to this cluster was oriented towards industries satisfying industrial-country demand—mostly the United States—raises the question of whether these flows will continue if industrial countries' growth prospects remain dim. Such a reduction in FDI could represent a challenge to current account deficit financing in this sub-region, since it may become more dependent on financial flows and thus make these countries more vulnerable to capital market turmoil. This challenge becomes all the more relevant for this commodity-importing group if commodity price increases continue and current account deficits widen.

However, despite these concerns, there is a risk that this cluster could enter a period of “stag-appreciation,” i.e., relatively slow growth combined with capital inflows and currency appreciation. To the extent that financial capital inflows compensate for losses in trade and FDI flows, it is possible to conceive of a scenario in which, despite low external demand growth for goods and services provided by countries in this cluster, currency appreciation takes place. Although financial flows could help in sustaining current account deficits, this may occur at the expense of exchange rate appreciation and a loss in competitiveness. Thus, this scenario would still raise challenges of its own, more in line with those discussed above for Brazilian-cluster countries, but with the additional challenge of facing more sluggish export demand and more expensive commodity imports. Moreover, the change in the composition of the capital account towards financial flows could introduce an additional layer of vulnerability.

Trade Challenges

What does this new global scenario, with an enlarged Asian presence in the world economy, mean for Latin America and the Caribbean? Two important and interrelated effects can be distinguished: i) growing and insatiable demand for Latin America and the Caribbean's natural resources (the commodity effect), driven by the complementarity between the two regions; and ii) growing and relentless competitive pressure on Latin America and the Caribbean's manufacturing producers, both at home and abroad (the competition effect), driven by Asia's many competitive advantages (e.g., labor costs, scale, productivity and government support), an element that is compounded, mainly for the Brazilian cluster, by the price and exchange-rate effects of the commodity boom.

The magnitude, composition and geographic distribution of these effects have closely followed the different spatial distribution of resource endowments and

manufacturing production of the economies in each cluster. The Brazilian cluster, which accounts for approximately 90% of Latin America and the Caribbean's exports to China, concentrates the benefits of Asia's demand for raw materials. By contrast, the Mexican cluster, where the competition effect has been predominant, has received little or no benefit on the export side, with the possible exception of Costa Rica (via the so-called "Intel effect").

This diverse regional scenario entails different bilateral and worldwide challenges. For the Brazilian cluster, there is the challenge of diversifying exports to Asia beyond a very limited number of basic commodities (i.e., oil, copper, soy and iron ore). For those in this group with a stronger industrial base (e.g., Brazil and Argentina), there is an additional and related challenge of remaining a relevant producer and exporter of manufacturing goods in the face of Asian competition, particularly in a context where the boom in commodity prices can be expected to bring to the surface the abovementioned Dutch disease effects and the subsequent loss of competitiveness of the manufacturing sector. For the Mexican cluster, the challenges range from establishing a foothold in the booming Asian market, by exploiting promising export niches in manufacturing and services, to restructuring their manufacturing sector to better face and accommodate Asia's competition. An additional element to consider is the fact that, at higher commodity prices, some previously active but now abandoned practices in mining and the production of certain crops may become profitable once again, providing opportunities to engage in trade with the fastest-growing part of the world.

The challenges cover a wide spectrum, but it is possible to argue that all groups should pursue two common objectives: i) increase market access to Asian, United States and European markets by reducing both tariffs and non-tariff barriers as well as transport costs and other trade facilitation issues; and ii) unify markets at home.

In Latin America and the Caribbean, the approach to addressing tariff and non-tariff barriers should closely reflect countries' production base and their degree of complementarity with Asian partners. Higher complementarity calls for more aggressive free trade agreements (FTA) strategies, as has been the case of Brazilian-cluster countries like Chile, and Peru, which have signed FTAs with China and other Asian countries. Less complementarity calls for more cautious, sector-specific strategies to avoid major dislocations, particularly with transitional economies such as China. There is less need for nuance in addressing transport costs and other trade facilitation issues, which calls for aggressive, across-the-board policies towards improving infrastructure, promoting competition in transport services and facilitating and harmonizing customs procedures.

At home and in the United States and European markets, there are grounds for a common strategy, which is key for the region's ability to face Asia's competition and build a diversified portfolio of export opportunities. Both the United States and Europe offer unique opportunities for more diversified, inter-industry trade based on factor

price differences and proximity. This calls for a more aggressive FTA strategy, along the lines of NAFTA and the agreements of Chile, Peru and Colombia with the United States. Broad, deep and stable preferences can be an important factor in keeping Asian manufacturing competition at bay. Likewise, the advantages of proximity cannot be fully exploited without an aggressive program that brings down transport costs and enhances trade facilitation. In this respect, regional initiatives such as Plan Mesoamerica in Central America, which target regional transport infrastructure alongside energy and communications, are welcome.

Mexican-cluster countries in particular would benefit from stronger trade ties with Brazilian-cluster countries, perhaps finding a way of benefiting, albeit indirectly, from faster growth in emerging markets where they cannot directly compete. At the same time, building a unified market would allow firms to enjoy more effectively the economies of scale and other gains of trade that the region's sizeable domestic market can offer. In order to achieve this, there is a clear policy agenda that could bring important benefits for the countries involved, particularly in their adjustment to Asia's competition. This agenda includes perfecting and harmonizing existing trade agreements and addressing non-traditional trade costs.

The agenda for perfecting existing trade agreements is well known and in most cases would involve measures such as removal of intra-zone tariffs and non-tariff measures; completion of a custom union; harmonization of customs procedures, sanitary measures and technical standards; harmonization and fully implementation of antitrust legislation; establishment of a well-functioning and institutionalized dispute settlement mechanism, and abolition of rules of origin.

The agenda for harmonizing and bridging existing agreements, whose gains can be substantial, is bound to be complex, particularly considering the several regional trade agreements (RTAs) and the vast range of RTA provisions in the hemispheric agreements that would have to be reconciled. The first step in such a process might thus be to launch a regional mechanism—perhaps a technical group of experts—that monitors and catalogues RTA tariffs and disciplines, reports to the members on the existing rules, solicits views from the stakeholders about the functioning and pitfalls of the status quo spaghetti bowl of agreements, and puts forth technical proposals for reforms to RTAs that would make them more effective.

Factor Allocation and Productivity Challenges

The demands posed by the new global economic order on market efficiency and productivity in Latin America and the Caribbean will be major. This is clearly the case for the Mexican cluster, where reallocation into new activities more closely linked to the fastest-growing part of the world, as well as improved productivity in order to compete

more effectively against Asian exports, will be crucial. However, these issues are not limited to the Mexican cluster, since Brazilian-cluster countries will also face allocation and productivity issues as they strive to keep non-tradable goods price increases at bay and their manufacturing sectors competitive.

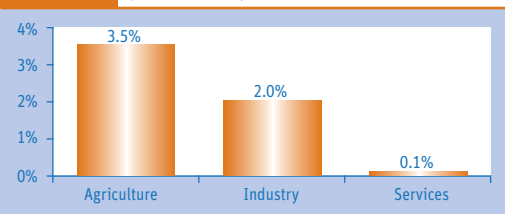
For Mexican-cluster countries, it will be crucial to remove distortions in order to facilitate intra-firm and intra-sector restructuring that will be necessary to accommodate changes in trade patterns and the new constellation of relative prices, including policies that facilitate reallocation of labor, capital and financial resources to emerging sectors.

For Brazilian-cluster countries, a key challenge will be dealing with the pressures on non-tradable good prices that the commodity and capital flow boom will inevitably bring to the extent that supply of those goods does not catch up with increased demand. As mentioned earlier, changes in trade patterns and in relative prices will call for a reallocation of resources towards the non-trading sectors. Moreover, not only allocation issues are at stake here, but also the very low productivity levels for non-tradable goods from which the region departs. More productive non-tradable sectors would contribute to strengthening non-commodity tradable sectors by offering cheaper and better services that will reduce costs for manufacturing sectors, thus strengthening their competitiveness.

The sheer size of non-trading sectors in most Latin America and the Caribbean economies implies that they hold the key to increasing overall productivity and growth. The service sectors occupy 60% of the labor force, compared to about 20% each in the primary and the manufacturing sector. Unlike in tradable sectors, there is considerable room for productivity increases in the service sector: while labor productivity in agriculture has increased at the respectable rate of 3.5% since 1990, and at over 2% in manufacturing, productivity in services has been virtually stagnant over the last two decades (see Figure 20). The picture is even grimmer in some categories of services, particularly for retail and wholesale trade; finance; community and personal services; and transportation. Productivity growth is also low in construction, a large and fast-growing sector in many economies.⁵⁸

The relative decline in service productivity with respect to the United States is simply abysmal. Data for 2004 indicate that services attained productivity levels of less than 15% of those of the United States. Even in the countries

FIGURE 20 Average Annual Labor Productivity Growth in Latin America (1990–2005)



Data source: IDB's 2010 report *"The Age of Productivity"*.

⁵⁸ For more details, see the IDB 2010 report *The Age of Productivity*.

with the highest relative efficiency, labor productivity in services is only 30% of that attained in the United States. In some countries (including Bolivia, Brazil, Colombia and Mexico), this figure is dismally low, standing at less than 10% of the frontier level. The service sectors show very low productivity levels because they have become the last refuge for the productive resources not used elsewhere and a large source of informality. The problem is especially acute among the smallest firms, which absorb much of the redundant work force. Although small firms are the majority of all firms in any economy (in the United States, for example, 54% of firms have 10 or fewer workers), in Latin American countries the excess of small firms is overwhelming: in Argentina 84% of firms have 10 or fewer workers, while in Mexico and Bolivia over 90% do not even have 10. Needless to say, most of these small firms operate in the service sectors.

Productivity policies usually put an emphasis on removing the constraints that impede the expansion of the most productive firms and/or hobble productivity improvements in other firms. Policies aimed at widening and cheapening the supply of credit, reducing transport costs, lowering taxes and encouraging innovation pertain to this set of policies. There is nothing wrong with pursuing these policies, and some of them may be instrumental in increasing productivity among small firms. Scarce credit is one of the reasons why there are firms with such varied levels of productivity, especially in the small and medium-sized sector. Due to lack of access to credit, the most productive firms cannot expand and the less productive cannot make the technological changes and investment needed to increase their productivity. As a result, in sectors where small firms predominate, productivity is heavily dependent on access to credit. A recent study on Colombia⁵⁹ found that in the small business sectors, a 14% increase in the amount of credit received during a decade produced increases of 50% in productivity.

However, removing constraints such as lack of credit is probably insufficient to remedy the productivity problem of the service sectors, which is largely due to the fact that a host of other policies promote the survival of unproductive firms. Among those policies stand out tax regimes that discriminate in favor of small and informal firms, social programs that subsidize informal employment at the expense of formal jobs, and a variety of interventions aimed at supporting micro- and small firms that face productivity problems that are beyond remedy. These low-productivity firms crowd out some other firms that are somewhat more efficient, which helps explain the relative scarcity of medium-sized firms.

To summarize, the new global economic order poses different challenges for the Brazilian and Mexican clusters identified in this report. In spite of these differences, much of the region is likely to enjoy an unprecedented favorable external environment, providing the seeds of what could be called “Latin America’s decade.” For this to happen,

⁵⁹ Prepared by Eslava, Galindo, Hofstetter, and Izquierdo for the 2010 IDB report on productivity.

Brazilian-cluster countries will have to make good use of the external bonanza with sound macroeconomic and financial management—avoiding overheating, and keeping in check any buildup of vulnerabilities that may put countries at risk—while investing in raising productivity, especially in the non-traded sectors. Countries belonging to the Mexican cluster will need to successfully meet the challenges of macroeconomic stability—ensuring fiscal sustainability and stable financing of current account deficits—productive restructuring and the implementation of innovative trade policies that enhance chances of faster growth.

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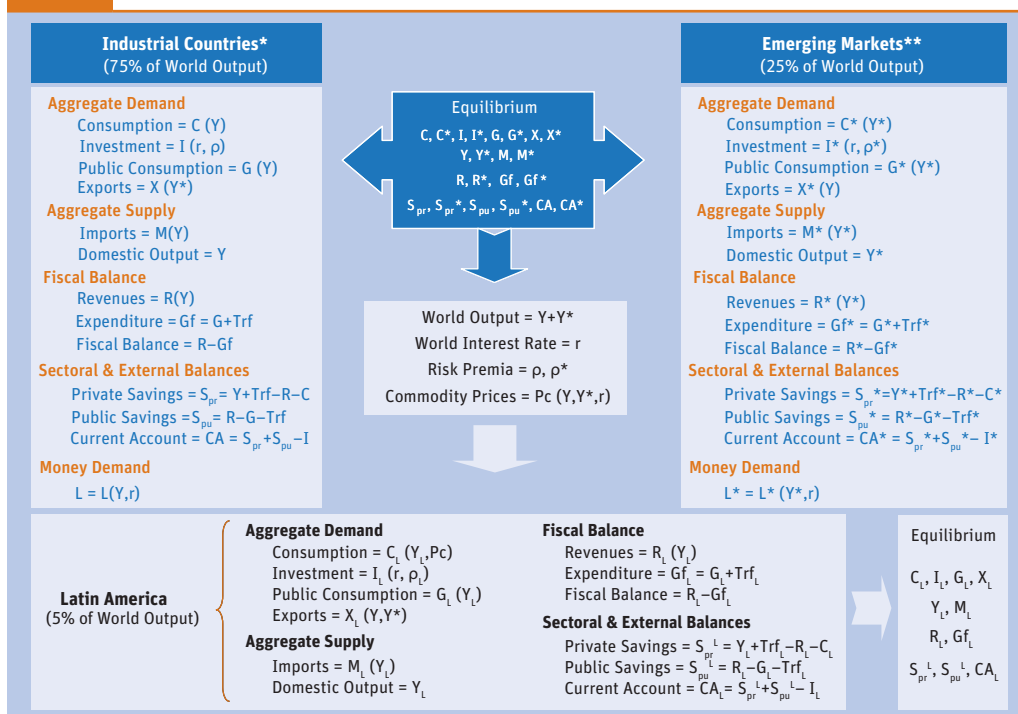
Appendix I: Three-Region Basic Model

This appendix briefly presents the very simple three-region Keynesian model used in this report to provide a sense of the forces behind the macro adjustment in Latin American economies in the aftermath of the global financial crisis.

In this model output is demand determined, private and public consumption depend on output, investment depends on interest rates, exports of each bloc—industrial or emerging—are a function of the output of the other bloc and imports depend on output. The model was closed by introducing a money demand function that depends positively on output and negatively on interest rates (see Figure 1). Uncovered interest rate parity was assumed to avoid international arbitrage.

The representative industrial region (70 percent of world output) was proxied by the economic structure of the United States, while the representative emerging market region (25 percent of world output) was proxied by the economic structure of China. Finally, given its small share in world output (5%), Latin America was assumed to be a taker of world demand, international interest rates, and commodity prices, which are determined by interactions between the industrial and emerging market blocks. For Latin America, the model recognizes that there exist two different representative countries with significant structural differences: Brazil and Mexico. For instance, while the Mexican economy is highly integrated, with exports representing 27% of GDP, the Brazilian economy is relatively closed, with exports standing at 10% of GDP. Additionally, Mexico depends much more on industrial countries as a source of export demand than Brazil—as of 2007, 91% of Mexican exports were placed in industrial countries, whereas only 51% of Brazilian exports found their way into industrial economies. In all cases, linear functions were imposed for the calibration of the parameters of the model in order to match relevant macro aggregates (see Table 1).

FIGURE 1



* Calibrated for US

** Calibrated for China

TABLE 1 Calibrated Variables (in percent of GDP)

	USA	China	Mexico	Brazil
Private Consumption	70%	38%	69%	56%
Private Investment	17%	30%	19%	22%
Public Expenditure*	19%	29%	14%	19%
Imports*	17%	32%	32%	8%
Exports*	11%	40%	30%	11%
General Government Total Expenditure	32%	19%	—	—
General Government Revenue	30%	19%	—	—
Fiscal Deficit	-2%	-1%	—	—
Exports to Industrial Countries**	—	—	92%	44%

* from National Accounts

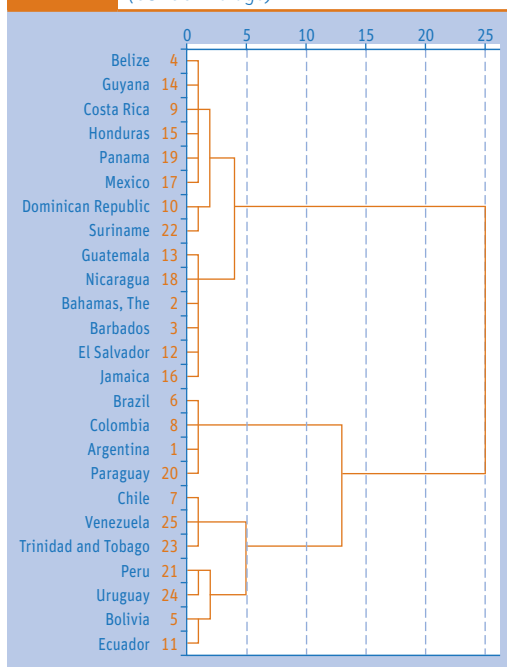
**in percent of total exports

Appendix II: Cluster Analysis

This appendix introduces the details of the cluster analysis that was performed to group Latin American and Caribbean economies based on relevant structural characteristics.⁶⁰ A three dimensional cluster analysis for Latin American and Caribbean countries was carried out using 2003–06 average data of: i) net commodity exports (in percent of GDP); ii) the investment to GDP ratio; and iii) export exposure to industrial countries, captured as the share of exports to industrial countries in GDP. Alternatively, a two-dimensional cluster analysis was performed considering: i) net commodity exports (in percent of GDP) and ii) the ratio between the investment ratio and that of exposure to advanced countries. Since the results were identical, the two-dimensional version is preferred for simplicity.

The agglomerative hierarchical clustering initially considers each country as a cluster and progressively merges them until the whole sample is considered a single cluster. The result of this is a cluster tree that shows the distance between the clusters that merge and which can be cut at any level to produce different clusterings (see Figure I). According to a Bayesian

FIGURE 1 Dendrogram
(03–06 Average)



⁶⁰ The relevance is defined in terms of the features of the new global order discussed in this report.

Information Criterion (BIC) and Akaike’s Information Criterion (AIC) the optimal number of clusters is two. Thus, two different regional clusters were defined: i) the “Brazilian Cluster,” which includes South American countries and Trinidad and Tobago, and ii) the “Mexican Cluster,” which includes Central American and the Caribbean countries (see Table 1).

Robustness

For robustness, k-means clustering was carried out setting the number of clusters to two.⁶¹ The seeds for these clusters were the centroids of the clusters previously defined in the hierarchical method.⁶² Under this alternative approach the results obtained were exactly the same.

In a final robustness check, a new relevant structural characteristic such as the dependence on remittances from industrial countries (in percent of GDP) was added to export exposure. After performing hierarchical clustering, and k-means clustering, the results remain unchanged (if anything, the distance between the two clusters increases).

Clusters Before and After the Global Crisis

The clustering analysis above presents two contrasting groups of Latin American and Caribbean economies based on underlying characteristics before the global crisis (2003–06). Graphical analysis suggests that the distance between both clusters has widened during the global crisis and, while the Brazilian cluster is relatively better, the Mexican cluster is relatively worse. This widening is confirmed by the fact that

TABLE 1 Clustering Results

Brazilian Cluster	Mexican Cluster
Brazil	Mexico
Argentina	The Bahamas
Bolivia	Barbados
Chile	Belize
Colombia	Costa Rica
Ecuador	Dominican Republic
Paraguay	El Salvador
Peru	Guatemala
Trinidad and Tobago	Guyana
Uruguay	Honduras
Venezuela	Jamaica
	Nicaragua
	Panama
	Suriname

⁶¹ K-means clustering requires fixing the number of clusters beforehand.

⁶² The centroid of each cluster (k) is calculated as

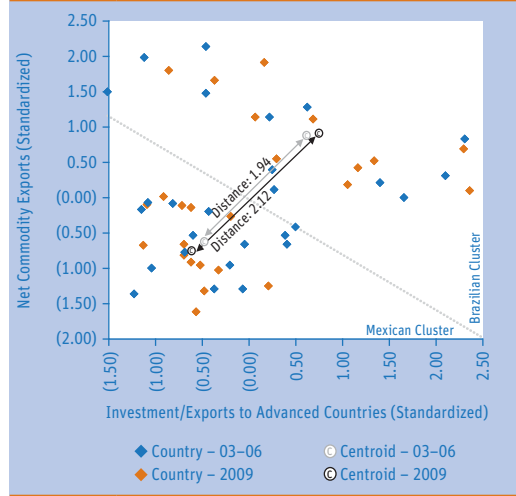
$$c_k = \frac{1}{n} \sum_{x \in n} x ,$$

n being the number of members of the cluster, and x the value of the variable used to clusterize.

the Euclidean distance between the centroid of the Mexican cluster and that of the Brazilian cluster in 2009, if anything, has increased relative to that corresponding to 2003–2006 (see Figure 2).

Moreover, both clusters became even more compact after the global financial crisis. To measure the compactness of each cluster the mean squared error (MSE) was calculated.⁶³ The MSE of the Mexican Cluster fell from 6.5 in 2003–06 to 5.1 in 2009, while the MSE of Brazilian Cluster also decreased from 18.3 in 2003–06 to 15.1 in 2009.

FIGURE 2 Distance Between Centroids
(03–06 Average, 2009)



⁶³ $MSE_k = \sum_{x_i \in k} (x_i - c_k)^2$



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