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# International price volatility and economic policy challenges

# IN LATIN AMERICA AND THE CARIBBEAN









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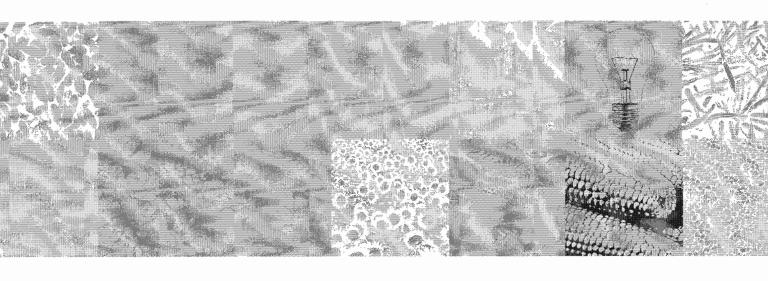






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# INTERNATIONAL PRICE VOLATILITY AND ECONOMIC POLICY CHALLENGES IN LATIN AMERICA AND THE CARIBBEAN<sup>1</sup>

### Introduction

In recent years, the Latin American and Caribbean region has been confronted with increasingly acute price volatility in the international economy. In some cases this volatility has been associated with an improvement and, in others, with a deterioration in the terms of trade. In all cases, however, the escalation of volatility has contributed to the climate of uncertainty and has strongly influenced the behaviour of crucial markets for the region, namely food and energy markets. Understanding the causes of this volatility is of the utmost importance for policymakers seeking to avert or soften its probable adverse impacts on consumption and production in the short run. Thus, it is quite important to understand what type of relative price structure is likely to emerge from the new conditions prevailing on the international market for longer-term policymaking

The high price volatility of raw materials, particularly food and hydrocarbons, is a global phenomenon attributable to a combination of factors. Some of these factors are structural in nature: population growth and rising incomes, which are in turn associated with growing food demand; rapid industrialization in Asia, which has fuelled the demand for raw materials and energy; and widespread subsidization of biofuel production in Europe and the United States, which is adding to the upward pressure on prices in agricultural markets. Other factors are of a more speculative nature, such as the subprime and financial crisis in the United States and the influence of hedge funds, which are increasingly oriented towards commodity markets. Whereas the recent drop in some raw material prices reflects the important role played by speculative movements in the volatility of those markets, the relative weights of structural and speculative factors in price movements are not yet clearly defined.

This situation poses complex economic policy challenges for Latin American and Caribbean countries. On the one hand, volatility in food and fuel markets must be reduced because of its perverse effects on income distribution (via inflationary pressures) and costs. On the other, market signals become harder to read under these circumstances. There is a great deal of uncertainty as to what the correct relative price structure should be in the long term. Various countries in the region feel that the exchange rate observed in recent years is unsustainable; moreover, because it encourages an ever-increasing specialization in commodities, it could lead to an over-concentration of production capacities in technologically lagging sectors. Decision-makers must look beyond the region's present position in the external economy and address the issues of volatility and price structure, which entail considerations not only about stability in the present, but also about the economy's growth path in the future.

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There is broad consensus that macroeconomic and sectoral policies must work together in order to deal with the challenges posed by volatility and uncertainty about relative prices. There is a great deal of controversy, however, surrounding such questions as exactly what combination of policies should be adopted, which instruments are the most appropriate, which target group should be aimed at, and how horizontal, selective or gradual the chosen policies should be. The measures to be adopted may influence a wide range of areas, including well-being, the government budget, the production structure, and poverty and income distribution. Because their effects in all of these different spheres must be reconciled, determining the correct policy mix becomes particularly difficult.

# Causes and effects of international price volatility

In the management of short-term macroeconomic policy, reducing volatility is one of the key concerns. Cyclical fluctuations in commodity prices are an inherent part of the market's behaviour. The use of countercyclical policies in response to these fluctuations is a well-known subject that is covered extensively in the literature. However, recent movements in commodity prices differ in some ways from those observed in past cycles. As a matter of fact, they seem to involve not only the business-cycle effect but also a change in trend, and both effects are associated with a major imbalance between the growth in global commodity demand and the slow and inadequate response of supply.

Empirical evidence in Latin America and the Caribbean suggests a correlation between the factors involved in recent developments in terms of inflation and the rise in energy and food prices.2 The overall commodity price index shows a real increase of 140% over 25 consecutive quarters. Some of the sharpest increases have been seen in the series for petroleum (312%), steel (302%), copper (273%), silver (247%) and gold (192%). It is often the case that upswings are not confined to a single product or market but instead take in the prices of a range of possible substitutes and complementary products, but in the present cycle, a larger number of markets are exhibiting sharper price hikes than in the past.

The surge in energy prices seen since 2002 is attributable to a combination of factors. This expansionary phase has been driven primarily by the strong increase in demand generated by the manufacturing boom in China and India. Fuel subsidies have helped to keep demand buoyant, especially in emerging economies. On the supply side, since 2000 the market has also been affected by delays in the expansion of some of the leading world producers' capacity.

Finally, the situation created by the behaviour of these markets has also been affected by increasing speculative transactions on futures markets. As noted early on in the Economic Survey of Latin America and the Caribbean, 2007-2008,3 the factors that have influenced commodity prices in the short run have had more to do with the behaviour of financial markets than with product market equilibria. In particular, there is a strong demand for commodities as stores of value and for financial instruments linked to their prices, especially in the present economic context of high and volatile financial asset prices.

This correlation should not be interpreted as a linear causal relationship. There is no linear translation from increases in commodity prices to inflation, partly because foodstuffs account for a substantial proportion of the basic basket of goods in most developing countries.

Economic Commission for Latin America and the Caribbean (ECLAC), *Economic Survey for Latin America and the Caribbean*, 2007-2008 (LC/G.2386-P), Santiago, Chile, United Nations publication, Sales No. E.08.II.G.2

The uncertainty on international financial markets sparked by the subprime crisis in the United States has whetted investors' appetite for new financial instruments. This poses additional risks in terms of future price reversals because financial factors could make them sharper and deeper than expected. Meanwhile, there are reasons to believe that the impact of speculative buy-outs on these price trends may be of limited duration. This effect, in conjunction with weakening demand for some products and the slowdown that is occurring in several countries, may herald greater stability at more moderate price levels this year than in the recent past.

There are at least three channels through which the macroeconomic and social effects of any inflationary process are transmitted. The terms of trade are the first channel through which inflation influences real income, and the effect it has will depend on how the region has positioned itself within the international economy. In other words, the types of production in which the region specializes will largely determine its gains or losses. For example, Central America, the Dominican Republic and Haiti have sustained net losses in their terms of trade, whereas the great majority of countries in the region, including the English-speaking Caribbean, have recorded gains. In addition, the increase in the terms of trade has had a positive impact on government revenue, but it has also resulted in the appreciation of the region's exchange rates, and the countries are therefore exhibiting symptoms of Dutch disease as the competitiveness of their exports, particularly in the case of non-traditional products, declines. This situation has been exacerbated by the depreciation of the United States dollar.

A second channel of transmission is public finance. Commodity price trends have a strong, multidimensional impact on public accounts. Countries that are net commodity exporters and have therefore experienced an improvement in their terms of trade have to decide how to make the best use of the resulting surplus revenue. Net importers, on the other hand, are under pressure to cut back on public spending in order to mitigate the impact on domestic prices and on low-income consumers.

The third transmission channel of inflation is that of poverty and inequality. After having witnessed a steady decline in inflation rates since 2002, the Latin American and Caribbean region has been experiencing a significant upswing in prices, with inflation rising to 6.5% in 2007. As of June 2008, the 12-month rate had reached 8.9%. The rise in food prices has been even sharper, with a rate of increase of 10.7% in 2007 and of 15.7% in the 12 months to June 2008.

After years of determined efforts to hold down inflation rates, this upswing is a cause of concern for the countries of the region. First of all, inflation has a disproportionate effect on lower-income groups, and this is especially true when price hikes are particularly sharp in the case of food and transportation, which make up a large proportion of their household budgets. Second, since inflation generates uncertainty about the future course of the economy, it undermines the climate for investment and long-term growth. Third, since the origin of the current inflationary surge lies in exogenous supply factors, anti-inflation policies can have major short- and medium-term costs in terms of decreased growth and employment, notwithstanding their potential long-term benefits.

# Volatility and external linkages

The impact of volatility in international raw material prices depends on each country's international trading position, which may be any one of three main types: a net importer of food (even if it is a net agricultural exporter) and hydrocarbons, a net food exporter but a net hydrocarbons importer, or a net food importer but a net hydrocarbons exporter.

The evidence indicates that net food and hydrocarbons importers tend to be more vulnerable to food price increases and that they are even more vulnerable if pre-existing conditions exacerbate the situation, as in the case of countries with high poverty and indigence rates and high levels of undernutrition, as well as large rural populations and a high degree of reliance on agriculture, particularly subsistence agriculture. This group includes 8 of the 11 countries where increases in the food price index and the overall consumer price index (CPI) in the past year were above the regional average. Furthermore, in all cases the food price index rose faster than the general index.

The second group of countries (net food exporters but net hydrocarbons importers) are subject to positive terms-of-trade shocks in terms of agriculture but negative ones in the energy sector. The increases in their food price indices have generally been below the regional average, which indicates that their status as net food exporters gives them greater resilience in dealing with rising food prices. In some cases, however, there is a considerable gap between the increase in the food price index and the overall CPI. This group includes the countries that are in the best position to benefit from rising prices for agricultural commodities, since they are all major agricultural exporters of various cereals or oilseeds.

Lastly, in the countries which are net food importers but net exporters of hydrocarbons, the added income provided by rising hydrocarbons prices provides them with greater flexibility for dealing with higher food import bills. Managing that income is therefore central to policy design. This seems to be the most mixed group in terms of impacts, especially in the case of those generated by food prices.

In sum, for both net exporters and net importers, the important points are how they handle the transference of higher commodity prices to consumers and what the fiscal impact is of avoiding a full pass-through to costs. This calls for a complex balancing act, since concerns about inflation are just one part of the problem. Production structures also respond to price variations and, in some cases, that response may take the form of a deepening specialization in commodities and less diversification of production. If price increases reflect, at least partially, temporary fluctuations or speculative movements rather than longer-term trends, this greater specialization will have a cost in terms of future export performance.

Short- and long-term policy dilemmas and complementarities

Unlike the situation during previous episodes, the current rise in inflation is being generated largely by external factors rather than internal ones. In most cases, the rise in prices cannot be attributed to excessive private or public spending or to domestic cost pressures, even though internal factors may play a part in determining how strongly inflation is affecting each country and its response capacity. These factors include the country's production structure, its degree of dependency on fuel and food imports and exports, the exchange rate regime in place, the procyclicality of government expenditure and the degree of confidence in the monetary authorities' ability to tackle inflation as well as their credibility in that regard.

In addition to the break in the downward trend in inflation, the current situation is highly complex because it entails three elements that are difficult for the region's economies to process. To begin with, the factors behind the rise in commodity prices exhibit a high degree of persistence and hysteresis, and the relative prices of these goods are likely to remain significantly higher than in the past. Both people and business will thus have to adjust to a new reality as far as relative prices are concerned.

Secondly, the Federal Reserve's response to the crisis in the United States financial market has boosted liquidity considerably and consequently weakened the dollar. As the United States dollar is the unit of account for many transactions, this has resulted in higher nominal prices for a wide array of goods and services.

Thirdly, the crisis in the United States mortgage market has generated greater uncertainty in international financial markets, both concerning how the crisis will affect the United States economy and demand for the region's exports and regarding how long it will last. Escalating inflation in Latin America and the Caribbean is heightening the monetary and exchange-rate policy dilemmas generally faced by decision-makers in economies with floating exchange rates and free capital mobility. The region's central banks have been obliged to raise interest rates to curb inflation, at the same time as the United States Federal Reserve has lowered them in response to the domestic crisis in that country.

The interplay of these factors has given rise to a crucial policy dilemma which must be addressed by the region's decision-makers. On the one hand, if the central banks decide to raise interest rates in order to contain demand at a time when international rates are coming down, capital flows may increase and pressure for an appreciation of the exchange rate will mount. On the other, if monetary authorities adopt a passive stance, price rises may spread to other key prices and end up triggering an inflationary spiral. The dilemma lies in the fact that, given the largely exogenous nature of current inflation, restraining domestic demand may be a way of partially blocking the spread of this externally generated inflation to the rest of the economy and of softening the effects of feedback mechanisms, but it will not completely neutralize price hikes. This approach would also entail a heavy cost in terms of the level of economic activity, especially in sectors linked to domestic markets. The only course of action is thus to choose the lesser of two evils: inflation or less growth. Although no "virtuous" policy mixes seem to be on hand under the present circumstances or even in the short term, experience has shown that in the medium and long terms, lower levels of inflation have a positive effect on growth.

How has the region responded to the challenges posed by the new international situation?

First, short-term macroeconomic policy measures have been the most widely used instrument in the region. For example, policies to protect the population's purchasing power in relation to food products are in place in all the countries of the region, a fact which attests to the importance they place on meeting the needs of the most vulnerable groups. The most common policy measure in this connection has been a reduction of taxes on food imports.

Second, net food- and hydrocarbons-importing countries, particularly in Central America, have made the most use of sectoral and production policies. The most widely used measures have targeted producers and include the distribution of inputs and financing in conjunction with some form of technical cooperation. Brazil, Mexico and Ecuador have also introduced production support measures.

Third, social policies have mainly been geared towards protecting the population's food and nutritional security. These types of measures have been introduced almost exclusively in net food- and oil-importing countries. Income transfers (which have also been applied in Uruguay, Mexico and Ecuador) have been the most broadly used mechanism.

Fourth, institutional policies encompass a wider array of measures, although they, too, have been applied primarily in net food- and hydrocarbons-importing countries. The countries that have made the least use of this kind of policy measure are the net hydrocarbons importing countries that are net food exporters. Intraregional cooperation initiatives have also been undertaken between net-hydrocarbons

exporters and countries that fall into other categories. The PETROCARIBE Energy Cooperation Agreement, which has been promoted by the Bolivarian Republic of Venezuela since 2005 and signed by 15 countries,4 is one measure, for example, that aims to reduce the impact of higher international oil prices. Proposals are on the table for cooperation agreements between net food exporters in the areas of trade in foodstuffs, price and market information, and technological development. Intraregional cooperation schemes are also being considered in Central America for the creation of a basic grains fund and in the Caribbean for the establishment of an agricultural fund.

# Policies for sustainable regional development

As noted earlier, policymakers are faced with short- and long-term challenges in a variety of areas that oblige them to reconcile and employ a diverse range of instruments. Although there are some very challenging short-term trade-offs, the long-term complementarities are no less important. Unless the region strengthens its production capacities and competitiveness, it cannot hope to reduce its vulnerability to external shocks.

With regard to agriculture and food security, the first recommendation is to develop policy frameworks that can tie in short-run concerns relating to price shocks with the medium- and long-term need to strengthen production and reposition agriculture. The second is to enhance the capacities and assets of the Latin American and Caribbean countries in both the public and private sectors. Although the region's countries are facing a range of differing conditions, most of them are in a position to take advantage of the opportunities offered by the present circumstances.

In the short run, interventions should target the most vulnerable groups in terms of both food and nutrition. Some of the possible measures, such as subsidies or income transfers, carry a high cost, even if they are confined to the poorest groups; they also require a type of institutional and administrative framework which does not exist in all the countries and which may be burdensome to develop. Short-term responses may be divided into two types of measures: (i) increasing access to food, especially for the poorest population groups (using a broad range of measures, such as lowering import duties, reducing taxes, setting prices, negotiating price rises, providing cash transfers and expanding food programmes); and (ii) promoting rapid or short-term responses in agricultural production (e.g., by subsidizing or distributing inputs, bulking and the extension of agricultural areas). What the best combination of measures will be in each case will depend on the conditions and budgetary constraints in the country concerned.

With regard to energy, the general policy recommendation is to strengthen efforts directed at four objectives: (i) increasing energy security; (ii) promoting energy conservation and efficient use; (iii) diversifying the energy matrix; and (iv) fostering social equity in energy access and consumption. In order to achieve these objectives, Governments will need to implement second-generation reforms suited to the new international environment of surging worldwide demand for hydrocarbons and a new international agenda for tackling global climate change.

This means that the countries must go beyond the measures that they implemented in the 1990s and must move ahead in such areas as: (i) the correction of existing price distortions, which hinder the sustainable management of growing demand (generalized, non-targeted subsidies for natural gas and petrol, as well as other sorts of price distortions that are widespread in the region); (ii) the removal of barriers to increasing the proportion of renewable sources in the regional energy supply; (iii) the design of

<sup>&</sup>lt;sup>4</sup> Antigua and Barbuda, Bahamas, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Suriname.

new investment and technology policies to speed change, the penetration and diffusion of technologies, and more energy-efficient production and consumption patterns; and (iv) the implementation of urban infrastructure and land-use planning policies to deal with the rapid growth in the demand for individual means of transportation in the region, which is associated with increased consumption of liquid fossil fuels and their derivatives (creating a different distribution of modes of transportation, or modal split, that will reduce fuel consumption and pollution).

# Concluding remarks

The Latin American and Caribbean region finds itself in a new international environment characterized by mounting commodity price levels and volatility. The implications of these increases for each country depend on the nature of its relative position in the international economy, and particularly on whether it is a net importer or exporter of food and hydrocarbons. Some challenges are shared by the entire region, such as the need to prevent an upsurge of domestic inflation in response to world inflation. In other cases, the challenges to be faced differ widely, ranging from the threat of Dutch disease for net exporters to worsening standards of living for the most vulnerable social groups in net food importing countries. More restrictive macroeconomic policies may help to hold down inflation, but they are less likely to protect countries against external inflationary shocks. Such policies may also exacerbate the problem of exchange-rate appreciation. An appropriate response to this situation should therefore combine short-term measures with efforts to restructure production in ways that will avoid an overspecialization in commodities while building up new technological capabilities. This would strengthen the region's response capacity, make it less structurally vulnerable to price volatility in certain markets, and reduce the short-term recessionary effects of anti-inflationary policies.



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