Part IV

Counter-Cyclical Efforts at the Regional and International Level

From: New Challenges of Crisis Prevention,
FONDAD, December 2001, www.fondad.org

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FONDAD, December 2001, www.fondad.org

Counter-Cyclical Efforts at the Regional and International Level: A Latin American View

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1 Introduction

I will argue that counter-cyclical policy in an increasingly globalised world needs regional and multilateral measures, for which new institutions should be built.

In a context of globalisation, sound and consistent domestic policies may not be sufficient to ensure macroeconomic stability. To be effective, some counter-cyclical policies may have to be designed and implemented at a level exceeding national boundaries. This calls for international cooperation and the creation of a new institutional setting. Though this issue is very broad, my approach is specific. I adopt a Latin American perspective and, more specifically, a Mercosur perspective. The issue is highly relevant to the region because macroeconomic stability can make a positive and direct contribution to two key goals for Latin American development: acceleration of growth and profitable integration in the world economy.

Latin American countries began to implement structural reforms more than a decade ago. Among these reforms was deregulation of the capital and trade accounts to take advantage of the new opportunities the world economy offered to accelerate growth. This was perceived as the best domestic response to the challenges of globalisation. The results, however, have been mediocre. Table 1 shows GDP and per capita GDP growth rates in the region as a whole and in four representative countries, comparing the 1990s with previous decades.

There are three distinct periods. Two periods of growth (1950-1979 and the 1990s) that are separated by one of stagnation (the lost decade of the 1980s). The recovery of growth in the 1990s is unquestionable. But the performance is far from impressive when assessed on the basis of the performance of the Latin American economies in the 1950s, 1960s and 1970s when the import substitution industrialisation (ISI) policies were the rule rather than the exception. We must take into account, nonetheless, that the point of departure in the 1990s was by no means promising. Most Latin American economies had gone through severe macroeconomic

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Table 1 Latin American GDP Growth Rate
(annual average)

Country or Region	50/59	60/69	70/79	80/89	90/98
Latin America					
Growth Rate	4.9	5.7	5.6	1.7	3.1
Per Capita Growth Rate	2.1	2.8	3.1	-0.4	1.3
Argentina					
Growth Rate	2.4	4.4	3.0	-0.6	5.0
Per Capita Growth Rate	0.6	2.9	1.4	-2.1	3.6
Brazil					
Growth Rate	6.5	6.2	8.6	2.9	1.9
Per Capita Growth Rate	3.3	3.2	6.0	0.8	0.4
Chile					
Growth Rate	3.8	4.5	2.0	3.2	7.3
Per Capita Growth Rate	1.5	2.2	0.3	1.6	5.6
Mexico					
Growth Rate	5.9	7.1	6.5	2.1	3.2
Per Capita Growth Rate	2.9	3.8	3.3	0.0	1.5

Source: Elaborated on the basis of CEPAL (1998 a, b, c, 1999) data.

disequilibria in the 1980s. It is clear that the new economic strategies adopted in Latin America have still not shown their full potential in terms of growth.

This picture of the aggregate evolution of the Latin American economy conceals some important differences. As Table 1 shows, the Chilean and Argentine experiences contrast sharply with Brazil and Mexico. From 1990 to 1998, Chile and Argentina performed better than the Latin American average, while Brazil and Mexico fell behind. It is interesting to note that the situation was just the opposite during the ISI period when the growth rates in Chile and Argentina were lower than in Brazil or Mexico. In the case of Argentina, nonetheless, it seems that the growth rate of the 1990s was unsustainable. The country has been suffering a prolonged recession since the 1998 Russian crisis. These facts suggest that the results of a given development strategy remain uncertain and that the final outcome of specific policies critically depend on historical and idiosyncratic factors.

If the results are not as encouraging as was expected, why are Latin American countries insisting on policies to open their markets for goods, services and capital? And, for that matter, why do multilateral institutions (dominated by developed countries) favour such policies? Both questions have the same simple answer: The deregulation of the capital and trade accounts is promoted because the countries assume that there are *mutual* trade gains to be made. From the Latin American point of view, the potential sources of these gains are clear. They need foreign capital,

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technologies and trade to improve their specialisation pattern and sustain productivity growth. Developed countries, on the other hand, need to find more profitable uses for their ageing population's savings. Returns on investment could be higher in the South where capital is more scarce and there is scope to introduce and exploit mature technologies.

Why, then, are these gains not being fully realised? My hypothesis is that countries cannot exploit these potential opportunities because international markets show significant failures and the institutions for coping with these failures have not yet been developed. In a nutshell: institutional development is lagging behind the forces that drive globalisation.

In the particular case of Mercosur countries, there are two market imperfections that are of paramount importance when assessing the obstacles to integration in the world economy. The first has to do with the asymmetric distribution of bargaining power between developed and developing countries. This generates several market distortions like protectionism (especially regarding agricultural products and other products such as steel), and restrictive policies on the transfer of technology. These distortions negatively affect the capacity of Latin American countries to increase their trade volume and diversify exports. They also have direct consequences on the macrodynamics of their economies. The second imperfection concerns capital markets. One particularly important consequence of this type of imperfection is that it makes international capital flows volatile. Latin America (and Mercosur) countries are important players in emerging markets, especially regarding foreign direct investment and government bond markets.

So the problem of volatility has two sides: on the one hand, Mercosur countries are highly exposed to volatility and, on the other, the stability of emerging capital markets can be severely affected by macroeconomic turbulence in Latin America and Mercosur.

In what follows, I develop my argument in two parts. In Section 2, I present and discuss a set of stylised facts associated with trade and international financial markets in Latin America. The objective is to show how interactions between imperfections in international markets and some structural features of the region generate the kind of macroeconomic dynamic that is typically observed in Latin American countries. The main hypothesis behind this exercise is that international market failures and macroeconomic fluctuations are closely associated. Based on this analysis, I draw some lessons on counter-cyclical policies in the second part (Section 3). I will argue that national, regional and multilateral institutions present different "comparative advantages" in performing counter-cyclical policies and, hence, the division of labour between different institutions should be designed carefully.

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2 Structural Features, Market Failures and Macroeconomic Fluctuations

There are four structural features of the Latin American economies that I would like to highlight. I will briefly present them and examine the consequences for cyclical fluctuations.

Latin American Economies Are Closed

In the postwar period, the Latin American economy has been systematically losing ground in world trade. The share of Latin American countries in world trade fell from 7.5 percent in the early 1960s to around 4 percent in the mid-1990s. This reflects the fact that, on average, the Latin American countries failed to open their economies. But it also suggests that this region may have been particularly affected by the protectionism of the developed countries. Figure 1 shows the evolution of the region's degree of openness as compared to other regions in the world. The Latin American countries demonstrate a low and stagnant degree of openness, as indicated by the share of exports and imports to GDP. The more aggressive liberalisation policies implemented in the last decade have only resulted in a mild increase in the share of international trade.

However, this overall picture conceals important dissimilarities in the evolution of Latin American countries in the last decade. There is a sharp difference in the evolution of Chile and Mexico on the one hand and Argentina and Brazil on the other. Figure 2 shows the evolution of openness in the four countries.

It is clear that Argentina and Brazil have been facing serious impediments to open their economies, while Chile and Mexico managed to achieve a much higher share of international trade in their economies. In the case of Chile, the impact of liberalisation and, particularly, devaluation in the mid-1980s appear as the most relevant causes. In Mexico, it seems that NAFTA played a crucial role, since its coefficient of openness shows a strong upward trend in the 1990s.

Industrial Imports Are Financed by Primary Sector Exports

In the last 30 years, Latin American exports became much more diversified. But still, Latin American countries are financing their net imports of industrial goods with primary products. Table 2 shows the evolution of the trade surplus corresponding to the most important trade items classified on the basis of their technological complexity.[1] It provides us a synthetic view of the evolution of the trade specialisation pattern in Latin American countries over the last decades.

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Figure 1 Openness - Latin America and Other Regions
(exports plus imports as a percentage of GDP, market prices)

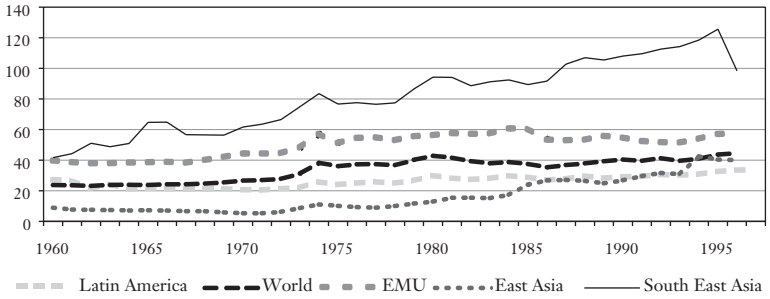
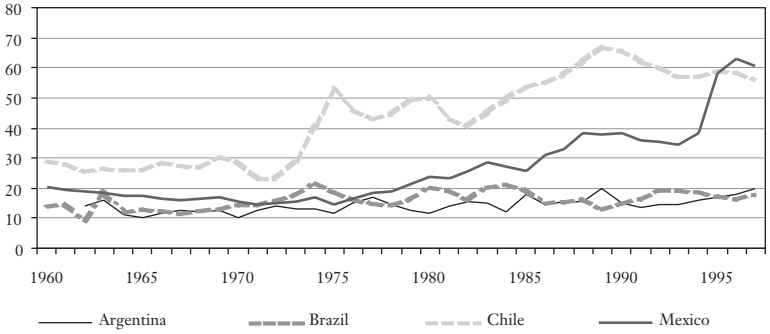


Figure 2 Openness - Argentina, Brazil, Chile, Mexico
(exports plus imports as a percentage of GDP, market prices)



The specialisation pattern is very clear: over the periods under consideration, the region shows a trade deficit in industrial products and a surplus in primary goods. This occurred in spite of the fact that the share of industrial exports in total exports grew from 39 percent in 1965 to 72 percent in 1997. The increase in industrial exports is basically explained by the steady increase in traditional industrial exports and by the increase in exports of scale- and resource-intensive goods. The upward trend in traditional and

1 For a detailed analysis of the Latin American trade specialisation patterns see CEPAL/ECLAC (1997) and Guerrieri (2000). We follow the classification in CEPAL/ECLAC (1997).

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Table 2 Latin America: The Trade Surplus Pattern

	1965	1970	1980	1990	1997
Primary Goods	**4,931**	**5,566**	**23,500**	**36,769**	**46,265**
Agriculture	2,890	3,324	9,077	12,740	19,727
Energy & Mining	2,041	2,243	14,425	24,029	26,538
Industrial goods	**-3,608**	**-5,402**	**-29,543**	**-12,010**	**-70,640**
Traditional	58	656	3,214	7,420	3,006
Scale/Resource Int.	-107	-359	-3,408	4,854	-13,871
Durable	-1,033	-1,359	-7,418	-3,695	-1,412
Technological	-2,527	-4,339	-21,929	-20,588	-58,364
Others	**-22**	**-76**	**-87**	**209**	**-2,970**
Total	**1,301**	**88**	**-6,130**	**24,968**	**-27,345**

Source: Elaborated on the basis of CEPAL (1998,1999).

scale-intensive products was not sufficient to induce a reversal in the sign of the balance of industrial products because of the strong increase in imports of more technologically sophisticated products. It is true, nonetheless, that thanks to the increase in industrial exports over the years, a lower proportion of the deficit in industrial goods is now financed by the primary goods surplus. Notice, on the other hand, that the most important change in the 1990s is the marked increment in the size of the deficit of technologically sophisticated products. The recovery in the investment rate in the more stable macroeconomic setting of the 1990s spills over into greater demand for imported capital goods.

In sum, structural reforms did not revert the pattern of external trade. The Latin American countries still heavily depend on the net exports of primary goods to finance the net imports of industrial products and, particularly, the import of capital goods which are essential for ensuring the accumulation of capital and knowledge in the region. These characteristics of the trade specialisation pattern have important consequences for the macroeconomic dynamics.

Trade Flows Are Highly Volatile

In Table 3 we show the coefficient of variation of the growth rate of exports and imports for Latin America and the four Latin American countries under consideration. To assess the findings, we also list a group of "control" countries. Australia, New Zealand and Canada have been chosen to compare Latin America with high-income countries whose trade structure shows an important share of non-industrial exports. Korea, Italy and

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Table 3 Trade and Volatility, 1964-1997

Country	Coefficient of Variation				Correlation	Share
	Exports	Imports	Primary Exports	Industrial Exports	Primary/ Industrial	Primary/ Total
Argentina	1.90	2.70	2.30	1.50	0.50	77.8
Brazil	1.20	1.60	1.50	1.00	0.50	66.3
Chile	2.10	2.10	2.40	1.60	0.40	91.6
Mexico	1.10	1.70	2.00	1.30	-0.10	63.9
Australia	1.10	1.40	1.30	1.20	0.30	81.2
Canada	0.70	0.90	1.30	0.60	0.40	48.7
New Zealand	1.40	1.70	1.70	0.80	0.60	82.6
Korea	0.70	0.80	1.00	0.70	0.50	15.4
Spain	0.70	1.20	1.00	0.70	0.40	34.5
Italy	0.80	1.30	1.20	0.70	0.70	15.8

Source: Elaborated on the basis of World Bank (1999).

Spain, in turn, have been selected because they are small- or medium-sized industrialised countries whose primary exports are very low.

The coefficient of variation of exports tends to be higher in the four Latin American countries than in the control countries. Although there are no important differences with Australia and New Zealand, the dissimilarities with the more industrialised countries are apparent. This suggests that the structure of trade can be a relevant explanatory factor. Notice that the volatility of primary exports is higher than the volatility of industrial exports in all countries, independently of the degree of industrialisation. Consequently, the higher the share of primary products in total exports, the higher will be the volatility of the income stream generated by exports. Notice, nonetheless, that a higher proportion of primary exports is not necessarily synonymous with higher volatility. If the correlation between the proceeds generated by the industrial and primary sectors is negative, there will be a diversification effect that will reduce the volatility of total exports. This is clearly the case of Mexico, which shows a negative correlation. The general case, however, seems to be that a positive correlation exists between primary and industrial exports. Consequently, countries with a larger share of primary exports present a higher volatility in their export proceeds.

The volatility of imports also tends to be higher in Latin American countries and, in the case of Chile and Argentina, it is significantly so. An interesting fact is that the volatility of imports is higher than the volatility of exports, independent of whether the country is industrialised or not.

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This stochastic feature of imports suggests that, in general, import markets tend to be more affected by cyclical, financial and real (productivity) shocks and that these shocks are stronger or more frequent in the case of Latin American countries.

Capital Markets Show Important Failures

If international credit markets were perfect, developing countries would be able to demand any amount of credit at the ongoing international interest rate. In such a world, countries would be able to redistribute the effects of external shocks across time and states of nature. The authorities could resort to international credit markets to stabilise consumption and to finance investment until all profitable opportunities are exhausted. Likewise, small countries would be able to diversify a good deal of their national risks. The existence of transaction costs, sovereign risk, uncertainty and asymmetric information precludes this possibility.[2] The recent episodes of instability have proven that it is very difficult to construct a portfolio that diversifies developing country risks when the returns of national stocks are unstable and positively correlated to capital market crises in other emerging countries. This spillover effect is frequently caused by the irrational behaviour of investors. The difficulties in fully exploiting the potential of international credit markets to diversify national risks have enormous economic costs for developing countries.

Developing countries have adapted their policies to the fact that they live in a world in which individual countries may face upward sloping credit curves, credit rationing and incomplete insurance markets. The fluctuations of key macroeconomic variables reflect these constraints and the consequences of adaptive policies. Table 4 present indicators associated with macroeconomic volatility.

There are many facts that deserve examination. First, the most striking difference regarding the coefficients of variation between Latin America and the "control" countries is observed in the case of consumption. If we take industrialised countries like Korea, Spain, Australia, Canada and Italy as our standard to measure consumption volatility, the four Latin American countries show a very high volatility of consumption. Important failures in capital markets seem to obstruct consumption smoothing in Latin America. Economic theory states that, in a setting of complete markets, a country that exports commodities whose prices fluctuate heavily,

2 On the "puzzles" that this situation generates, see Obstfeld and Rogoff (2000) and Heliwell (2000).

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Table 4 Volatility and Correlation with US, 1964-1997

Country	Coefficient of Variation			US Growth Correlation	
	Investment Growth	Consumption Growth	GDP Growth	Consumption	GDP
Argentina	7.10	2.40	1.80	-0.29	0.5
Brazil	2.40	0.90	0.90	0.12	0.2
Chile	2.60	2.30	1.10	0.22	0.3
Mexico	3.50	1.00	0.90	0.01	0.1
Australia	2.20	0.50	0.60	0.54	0.2
Canada	1.50	0.70	1.40	0.35	0.5
New Zealand	2.80	1.30	1.30	0.14	0.3
Korea	0.90	0.40	0.40	-0.01	0.2
Spain	2.60	0.70	0.80	0.24	0.3
Italy	4.70	0.70	0.70	0.30	0.3

Source: Elaborated on the basis of World Bank (1999).

can use financial, insurance and derivative markets to stabilise both its national income and consumption (Obstfeld, 1995). If a country could indeed diversify consumption risk, the correlation between national and world consumption would be strong (Basu and Taylor, 1999). However, as Table 4 shows, the correlation between national and world consumption growth (proxied by consumption in the United States) is systematically lower than the correlation between national economic growth and world economic growth. In some instances, the consumption correlation is in fact negative, as in the case of Argentina. One can hypothesise, then, that market incompleteness impedes developing countries from allocating risks efficiently.

Investment volatility tends to be higher in the Latin American countries, as the cases of Mexico and Argentina demonstrate. However, the differences with the control countries are much less marked than in the case of consumption. It seems that beyond financial market imperfections, the size of productivity and demand shocks affecting investment is large in all countries. The only significant exception is Korea, which shows a very small volatility of investment in a period in which the country was growing very fast.

The volatility of the growth process is also high in Latin America and, if compared with the control countries, even very high. Nonetheless, Australia and Canada, two natural resource-rich countries, show a coefficient of variation similar to that of the Latin American countries. But unlike Latin American countries, they show an important ability to manage

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risks. So, while the coefficient of variation of GDP growth is similar, the volatility of both consumption and imports is much lower in Australia and Canada. In this regard, one feature that deserves attention is that while in all the control countries the volatility of consumption is lower or, at least, equal to the volatility of GDP, the opposite occurs in Latin America. We believe that this is an additional indication of the difficulties and the welfare costs induced by market failures in financial markets.

Macroeconomic Fluctuations and the (Typical) IMF Response

The combination of these four stylised facts (lack of openness, high variance of export proceeds, dependence on primary surpluses, and imperfect access to international capital markets) seriously affects the short-run macroeconomic dynamics. Imagine a country that has been improving its ability to export "non-traditional" products and that has increased intra-industrial trade, but with its capacity to generate surplus still concentrated in a few primary products. Suppose this country faces a strong fall in the prices of some important "surplus generating" products. This would create a mounting trade deficit. If the country's risks were fully diversified, it would receive compensatory financial revenues, which would make up for the fall in the export proceeds. This would maintain the level of the national income even though the country should be prepared to see a fall in GDP. If market incompleteness precludes the possibility of hedging risks, the country could still resort to international capital markets to finance the temporary current account deficit.

But, in highly incomplete markets, things will be different. Every time a negative shock hits the economy, the lack of diversification of the country's idiosyncratic risk implies, *ceteris paribus*, that the economy will receive the full impact during the shock. As a consequence, there will be a deterioration in the country's financial indicators and, thus, foreign credit will become very expensive. If the increase in financial fragility is sufficiently strong the country may even be rationed out. Under these conditions, the economy will face a tight liquidity constraint in the short run, and the authorities will be obliged to launch a stabilisation package to adjust domestic absorption. In brief, a given level of volatility of export proceeds will have different macroeconomic effects under different degrees of market incompleteness. And, from the point of view of volatility, it is clear that the worst combination is a setting that combines a large variance of export revenues and the absence of key financial and insurance markets.

The Latin American countries and the IMF have developed a highly effective, although costly, technology to adjust the current account. A

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privileged tool of this technology is nominal devaluation. This instrument was perceived as particularly useful because, on the one hand, the upward correction of the real exchange rate induces contractionary effects via the savings rate and the credit channel and, on the other, makes tradable production more profitable. In addition to the correction of the exchange rate, the typical adjustment package usually includes monetary and fiscal restraints. The overall effect of these measures is a deepening of cyclical fluctuations. That is, they tend to be pro-cyclical. The most important counter-cyclical role in these packages is played by the external support that is typically associated with them.

The counter-cyclical effects of greater foreign exchange availability work through two main channels: the lessening of the liquidity constraint and the strengthening of solvency via the downward pressure on interest rates. These effects are reinforced if currency depreciation and a lower output generates a (temporary) trade surplus. This latter positive side-effect of recession and depreciation, however, may be counterbalanced by the private sector portfolio decisions. The uncertainty created by a falling output and depreciating currency creates strong incentives to buy foreign exchange, aggravating the short-run liquidity constraints.

In fact, this latter effect is what makes IMF lending to countries under stress so important. Under high financial stress it becomes the only institution that can act counter-cyclically. It is because of this kind of dynamic that counter-cyclical policies should include the key contribution of regional and multilateral arrangements to be effective.

Three characteristics of Latin American countries make this strategy costlier. The first is the low degree of openness. The second is that the price-elasticity of the export supply of primary exports tends to be too low in the short run. The third is that there are not that many industrial sectors "about to become" competitive, that is, competitive enough to rapidly generate a surplus after an appropriate correction in the real exchange rate takes place. This means that the number of "surplus sectors" will not increase in the short run unless a strong contraction in imports and, hence, in output and investment is induced. In this way, the volatility of exports tends to revert into import volatility. Of course, there are other external shocks that could call for a restraint of imports and could generate a similar adjustment pattern. Paramount among them are the changes in international capital markets, for example, abrupt increases in interest rates.

The stop-and-go pattern that these interactions between the structural features and market failures create is deleterious to growth. In Fanelli (2000), I presented a growth regression for Latin American countries in which the coefficients corresponding to both liquidity constraints and income volatility are highly significant. This suggests that reducing

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macroeconomic fluctuations and improving the functioning of capital markets would be highly beneficial to growth.

3 Lessons: The Goals of Counter-Cyclical Policies and the Latin American Agenda

As was stated before, the two main goals for Latin America today are to accelerate growth and to integrate successfully in the world economy. Since macroeconomic stability is key to both objectives, efficient counter-cyclical policies may make a valuable contribution. The particular characteristics of the macroeconomic setting in Latin America must be considered in the design and implementation of counter-cyclical policies.

The first important characteristic is the higher macroeconomic volatility. We have seen that it is closely associated with the existing structural imbalances. This calls for a broader definition of counter-cyclical policies.

If we assume that any policy measure to smooth macroeconomic fluctuations is, by definition, counter-cyclical, it may be useful to distinguish between *short-run* and *structural* counter-cyclical policies. Short-run policies smooth fluctuations, taking the economic structure and the macroeconomic regime as given. Structural policies transform the structure and/or the macroeconomic regime to reduce the size and frequency of cyclical movements. The distinction is a natural consequence of our previous arguments which stressed the role of market failures, institutional flaws, and some features (degree of openness, trade diversification etc.) as sources of macroeconomic instability. This distinction implies that a programme of structural reforms may include counter-cyclical policies, such as measures to complete the market structure and increase its efficiency (to remedy instability-generating market failures); initiatives to restructure institutions and to ensure enforcement of law and regulations, and so on. Note that this view is akin to the optimum currency area approach (Mundell, 1961). It considers structural features to assess the convenience of a specific exchange rate regime and the scope and effectiveness of macroeconomic policies.

A second key characteristic that counter-cyclical policies must take into account is that macroeconomic regimes in Latin America are weak and unstable. We use the concept of "macroeconomic regime" to refer to the institutions and practices that define the set of macroeconomic policies which are feasible under specific circumstances. One important cause of the instability of macroeconomic regimes is the lack of institutional development. At the national level, Latin American countries have always faced strong difficulties in developing "stability friendly" institutions. At

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the regional level, there has been a certain lack of political will to create mechanisms for macroeconomic coordination (Mercosur's present situation is a good example); and the institutions of the new international financial architecture are still in swaddling clothes. Likewise, social, political and multilateral practices put severe constraints on the enforcement of regulations and legal norms.

A third characteristic is that Latin America (and Mercosur particularly) is urgently in need of stabilising mechanisms designed to operate at the regional and multilateral levels. To be sure, this does not deny that the quality of domestic policies and institutions matters a lot in the current situation. International initiatives should complement rather than replace consistent national policies. But, this said, note that national efforts may not be sufficient to ensure sustainable growth in the post-Bretton Woods world, characterised by broad swings in real exchange rates; significant deregulation of trade and financial transactions; and, the greater importance of capital flows, which can be highly volatile. Increased volatility and interdependence have given rise to difficult policy challenges because they simultaneously increased the demand for volatility-reducing policies and severely restrained the domestic authorities' autonomy. One expression of this was the appearance of the "trilemma" (Frankel, 1999), that is, the necessity to choose between autonomous monetary policy, exchange rate stability, and free capital mobility. The depth of the recent crises in Asia and the current imbalances in countries like Argentina suggest that emerging economies are facing particularly severe constraints on their ability to implement effective counter-cyclical policies.

These challenges call for creative policy responses. I believe that part of the answer is *to think globally*, that is, to complement domestic counter-cyclical efforts with the development of new policy instruments in the regional and multilateral ambits. Obviously, this demands efficient coordination of the different decision-making levels. But the potential benefits of facing the challenge in terms of institution building are worth the effort.

What goals should Latin American countries pursue in negotiating the regional and multilateral "counter-cyclical" agenda? From our analysis it follows that they need arrangements that can help to:

- minimise the volatility of national income;
- ameliorate international capital market imperfections;
- minimise the variance of foreign exchange proceeds;
- develop international institutions to support more stable macroeconomic regimes.

To think globally also implies identifying the competitive advantages of multilateral organisations vis-à-vis regional and national institutions to

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undertake specific counter-cyclical policies. I think the natural division of labour should be the following.

Multilateral organisations (particularly the IMF) and organisations dominated by developed countries like the G-7 should contribute to develop mechanisms to manage the consequences of "systematic" or "global" risks, that is, risks that originate from global coordination failures and spillover effects inherent to the operation of the world economy. These organisations have comparative advantages in helping developing countries to:

- smooth volatility of financial flows and eventually alleviate credit rationing;
- manage disequilibria induced by misalignments in key macroeconomic variables in developed countries (e.g. real exchange rate variations, sudden changes in fiscal or monetary policies that change financial conditions).

Regarding the first point, the rationale to develop multilateral counter-cyclical mechanisms is that volatile capital flows represent a negative externality which requires international coordination. Its consequences must be borne by all those who benefit from international credit markets. Specifically, Latin American countries should demand mechanisms that help them stabilise their foreign exchange revenues, particularly when they face exogenous changes in the overall situation in emerging markets or the international interest rates. This would help to avoid the stop-and-go macroeconomic dynamic generated by the fluctuations in exports or capital inflows. Mechanisms of this kind must be part of the new international financial architecture. The IMF should continue to lend to countries in financial distress. Automatic credit lines should be available to eligible countries, that is, countries with a macroeconomic regime that minimises the probability of financial distress due to moral hazard or misguided fiscal policies. A detailed discussion of these mechanisms, of course, goes beyond my presentation but many interesting proposals have been discussed within the framework of the new international financial architecture (see, for example, Ocampo 2000).

Real exchange rate misalignments mentioned in the second point are relevant to aggregate fluctuations because they may "exogenously" affect Latin American countries' competitiveness. We have seen that the evolution of trade and of foreign credit conditions are highly correlated in Latin America and that the changes in the latter may hamper stability. When negotiating trade liberalisation, Latin American countries should clarify that opening the economy has great benefits, but also entails financial and macroeconomic risks. One of such risks is a significant misalignment in the real exchange rates of developed countries. In this sense, a closer coordina-

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tion of the international trade and financial liberalisation process would have in itself a beneficial effect on macroeconomic stability. Likewise, more linkages should be created between the negotiations under the umbrella of the WTO and the discussions in the G-7 and the IMF on monetary and financial issues. That these linkages need to be considered was apparent in the recent negotiations between Argentina and the IMF. It was stated that, beyond financial support, advancements are necessary in the "4+1" negotiations between Mercosur and the US to ensure the "sustainability" of the Argentine economy. It is auspicious that trade and solvency are seen to be closely associated.

I believe that the possibilities for smoothing fluctuations operating at the regional level have not been sufficiently exploited. Even if there was little progress regarding the new international architecture, it would be possible to implement counter-cyclical initiatives at the region level. Three points deserve attention as possible goals of regional initiatives:

- to improve macroeconomic regimes;
- to exploit opportunities to ameliorate the consequences of financial market failures;
- to reduce the pressure of the external constraint on macroeconomic stability.

If regional agreements are going to contribute to the improvement of macroeconomic regimes, they should create tighter constraints on bad practices and facilitate institution building. The two larger Mercosur countries are facing difficulties in strengthening their macroeconomic regimes and, thus, there can be important mutual gains if a deeper coordination between their macroeconomic policies results in better macroeconomic practices. At present, Argentina has a currency board. This means that, in facing the trilemma, the country renounced monetary autonomy. The regime is very rigid and the country needs more flexible long-run alternatives. In the case of Brazil, after 1999, the country renounced exchange rate stability. But the limits on the autonomy of monetary policy proved to be very narrow. In this context, stronger macroeconomic commitments set at the regional level could strengthen the credibility of macroeconomic policies.

In my view, however, the best signal would be a formal agreement of Mercosur countries that a monetary union will be aimed at in the long run and that the process of implementation will begin immediately. The main purpose would be to show domestic agents and the rest of the world what the region's future macroeconomic regime will be. In another paper (Fanelli, 2001), I detailed the characteristics of the transitional process between the present situation and the monetary union and how the process can be set in motion. The main advantage of such an agreement is that it

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would create incentives to improve the macroeconomic regime. Specifically, it would help enforce the agreements on the convergence of fundamental macroeconomic variables and the harmonisation of fiscal institutions and prudential regulations.

A monetary union in Mercosur is compatible with various "permanent" exchange rate regimes for the region. Williamson's BBC (basket, band, and crawl) proposal is appealing. In any case, I am sure that Mercosur's trade structure calls for a basket peg rather than a dollar peg. Whether a crawl is necessary will depend on the rate of inflation at which the convergence between Argentina and Brazil occurs. The recourse to a band, on the other hand, will depend on the characteristics of the international setting. For example, if the new architecture offers good mechanisms to offset the volatility of capital flows, a band may not be necessary (I examined this in Fanelli, 2001).

A deeper commitment to macroeconomic issues may also facilitate the development of counter-cyclical mechanisms at the regional level. A profitable alternative is to create mechanisms to compensate for the lack of markets for risk management. Pooled funds can be created to exploit negative covariances in the region and save highly valuable foreign exchange. As a consequence of the absence of markets to diversify independent risks, each country is obliged to create its own cushion against external shocks. This can take the form of excessive reserves or the formation of commodity funds (funds to compensate fluctuations in oil, copper, or coffee proceeds). If shocks to different products are idiosyncratic, a mutual gain of trade can be realised by pooling individual funds into a single one. It seems much easier to afford the transaction costs of these initiatives in the framework of existing regional agreements. The *Fondo Latinoamericano de Reservas* is a good example. Besides, it could be possible to coordinate the utilisation of these funds with actions at the multilateral level. Regional funds would hedge independent risks while the IMF, for example, would take care of global ("systemic") risks.

Finally, I believe that regional agreements can make a sizable contribution to macroeconomic stability if they improve trade specialisation patterns and increase the volume of trade. We have seen that the strong dependence on the trade surplus on primary products is a prime source of volatility via its effects on the capacity to import and to meet financial obligations. In the case of Mercosur, the results in the ten years following the *Tratado de Asunción* have been encouraging. There was a significant increment in the trade volume and intra-industrial trade has increased at a higher pace.

In sum, given that in the present international scenario there is not too much room for autonomy, we must learn to pursue our best interests in an

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increasingly interdependent world. This means that national policies must be designed with an eye both on the region and on the global setting. Two points are worth noting. First, domestic institutions must be consistent with regional and multilateral developments. If a new international financial architecture is built, the domestic financial architecture must be consequently adapted. Second, to improve the quality of our integration with the world economy the emphasis should not be on market *liberalisation*, but on market *creation*. Our present market structure is too weak. We need to complete and build markets. In a sense, we have been opening empty jails. Structural counter-cyclical policies that create the conditions for the development of markets for risk management (which are currently missing) can be of paramount importance in this regard.

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The Pro-Cyclical Effects of the New Basel Accord

Stephany Griffith-Jones and Stephen Spratt

1 Introduction

The 1988 Basel Capital Adequacy Accord was a milestone in the approach to bank regulation and has been adopted by more than 100 countries. Agreement was reached between the member countries of the Basel Committee on Banking Supervision that internationally active banks would hold as capital at least 8 percent of their risk-weighted assets to cover the credit risk.

In recent years criticisms from many quarters have been levelled at the functioning of the 1988 Basel Accord, with critics arguing that the regulatory requirements are crude and do not correspond to actual levels of risk. The consequences have been distortions and biases in the practices of the banking industry. The Bank for International Settlements (BIS) now proposes a new Basel Capital Accord, to be implemented in 2004, which is based on three mutually reinforcing pillars: minimum capital requirements, supervisory review process, and effective use of market discipline.

The new framework retains both the existing definition of capital and the minimum requirement of 8 percent of capital to risk-weighted assets. The major changes proposed are in the measurement of credit risk. We will discuss two approaches to the measurement of credit risk that are envisaged: (a) the Standardised Approach (a modified version of the existing approach); and (b) the Internal Ratings Based Approach.

The focus of our concern is the likely net impact on developing and transition countries of the new Basel Accord if implemented in its current form. Whilst containing many positive elements, we argue that the net effect of the new Basel Capital Accord is likely to be negative. In Section 2 we outline the major proposals contained in the new standardised approach and discuss the most significant potential effects. In Section 3 we examine the proposed internal ratings based approach and discuss its implications in some detail. The final section concludes with an assessment of the likely net effect of the new Basel Accord and some policy proposals.

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2 The Standardised Approach

Risk-weighed assets will continue to be calculated as the product of the amount of exposure and supervisory determined risk-weights. Weights will still be determined by category of borrower: sovereign, bank or corporate.

The major changes from the 1988 Accord are:

- The OECD/non-OECD distinction to be abandoned;
- Creditworthiness to be determined by external credit assessment institutions;
- "Sovereign floor" to be abandoned. That is, banks and corporates may be assigned a higher rating than their sovereign;
- The range of "risk-buckets" is to be increased to reflect the greater differentiation of risk in claims.

Table 1 below gives a contrast between the capital requirements under the 1988 Accord and those contained in the new proposals under the Standardised approach for sovereigns, banks and corporates.

Table 1 The Standardised Approach and the Existing Accord
(percentages)

Type of Borrower		AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	Below B-	Unrated
Sovereign								
1988 Accord	OECD	0	0	0	0	0	0	0
	Non-OECD	100	100	100	100	100	100	100
New Proposals		0	20	50	100	100	150	100
Banks								
1988 Accord	OECD	20	20	20	20	20	20	20
	Non-OECD	100	100	100	100	100	100	100
	Short-Term†	*(20)*	*(20)*	*(20)*	*(20)*	*(20)*	*(20)*	*(20)*
New Proposals	Option 1*	20	50	100	100	100	150	100
	Option 2**	20	50	50	100	100	150	50
	Short-Term††	*(20)*	*(20)*	*(20)*	*(50)*	*(50)*	*(150)*	*(20)*
Corporate								
1988 Accord		100	100	100	100	100	100	100
New Proposals		20	50	100	100	150	150	100

Notes:

† Under the existing Accord, loans to non-OECD banks carry a 20% risk weight for maturities of less than one year, and 100% for loans of greater maturity.

†† Under the new proposals, short-term claims are defined as having an original maturity of three months or less.

* Under the first option, all banks in a given country will be assigned a weight one category less favourable than the sovereign's. A cap of 100% will be imposed except for banks in countries rated less than B- (in this instance a cap of 150% will operate).

** Under the second option, the risk weights assigned to banks will be based on the assessment of external credit assessment institutions of the bank in question.

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As well as the greater differentiation between "risk buckets", the new Basel Accord differs from the 1988 Accord in its treatment of short-term claims. Under the existing system all claims on banks incorporated in the OECD are assigned a 20 percent risk-weight. For banks in countries outside the OECD, the risk-weight is also 20 percent for claims of less than one year, but 100 percent for claims of greater duration. According to many observers, this long/short-term distinction for non-OECD borrowers provided an incentive for banks to make short-term loans – this is supported by some evidence that the maturity of loans increases for new OECD entrants (see Reisen, 2000). Clearly short-term external debt was a major factor in the East Asian and other crises; indeed, recent research (see Rodrik and Velasco, 1999) has established econometrically that short-term debt to foreign exchange reserves was the single most important factor explaining currency crises.

The Basel Committee decided, after consultation, to lower the threshold for the preferential treatment of short-term debt from six months (as proposed in the 1999 consultative paper) to three months. This decision reflects the fact that the upper maturity bound in the short-term interbank market is three months. Therefore, under the new proposals, incentives towards short-term lending remain for banks rated between A+ and B-, but the incentive towards short-term lending is less than in the existing Accord, and can thus be seen as a step in the right direction. However, as has been pointed out by Deutsche Bank, the jump in risk weights from 20 to 50 percent between double-A and single-A bands may significantly overstate the increased probability of default, thereby creating a bias against long-term lending to banks rated below double-A. One possible solution to this problem would be to increase the number of "risk buckets" so as to avoid providing significant regulatory biases towards particular types of lending.

Implications

The removal of the OECD/non-OECD distinction is likely to have negative consequences for low rated OECD countries, They will find that the conditions attached to loans more closely reflect their actual rating, rather than the fact of their OECD membership. Conversely, highly rated non-OECD countries (such as Chile) should benefit from more favourable terms. Overall, the elimination of the OECD/non-OECD distinction is a positive development, as it is widely accepted that it had become too blunt a mechanism, which had led to distorted incentives.

The alterations to the current treatment of maturity should remove some, but not all, of the incentives towards short-term lending to banks

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rated below AA-, and thereby raise the aggregate maturity of such lending. Also, the removal of the sovereign floor will benefit highly rated banks and corporates in less highly rated countries. Overall, therefore, the proposals should, as envisaged, more closely align capital requirements with actual risk. This should be to the benefit of highly rated sovereigns, banks and corporates, regardless of OECD membership.

One aspect of the standardised approach that may prove important in determining the overall impact is the proposed use of external credit assessment institutions. The Basel Committee proposes that the ratings of private sector agencies could be supplemented with those produced by national, public export credit agencies (ECAs). This is a reflection of comments on an earlier consultative paper.[1] Many commentators have highlighted the fact that private sector ratings agencies' performance in financial crises is often rather poor. Recent research has also supported the view that private sovereign ratings are inherently pro-cyclical (Reisen, 2000). As ratings agencies have difficulty acquiring an information advantage in relation to sovereigns, they tend to lag rather than lead the markets, thus reinforcing the boom-bust cycle (this is less of a problem with corporate ratings where the agencies may have access to private information). Also, ratings for low rated borrowers have been shown to have a low degree of durability (IMF, 1999). Taking account of such views, the Basel Committee proposes to supplement the use of private agencies for sovereign ratings with national export credit agencies.

One of the primary functions of ECAs is to insure the country risk attached to the provision of export credit to foreign buyers. In 1999 the OECD produced a methodology for the guidance of national ECAs. This details the method for setting benchmarks for minimum export insurance premiums for country risk, and is based on an econometric model of three groups of quantitative indicators: payment experience of a country; financial indicators such as debt-GDP and reserves-imports ratios; and indicators such as inflation and economic growth. The new Basel Accord proposes that supervisors may recognise the country risk scores assigned to sovereigns by ECAs that subscribe to the OECD's methodology (OECD, 1999).

One major advantage of this proposal, in the view of the Basel Committee, is that ECA scores are available for a larger number of sovereigns than are private ratings. This could favour developing countries not rated by private rating agencies, but rated by ECAs, provided the latter

1 For a discussion of the earlier consultative paper, see presentation by C. Miles of the UK's Financial Services Authority and the ensuing debate in the IDS Private Sector Discussion Group (http://www.ids.ac.uk/ids/global/finance/pdfs/psdg1.pdf).

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rate them accurately; unfortunately, there are some concerns about the quality and independence of the ratings of several ECAs. It has been suggested that the ratings given by some ECAs may be unduly influenced by the needs of their country's exporters and not therefore entirely objective. The insistence by the Basel Committee that recognised ECAs subscribe to the OECD methodology would seem to be an attempt to ensure some degree of consistency and avoid "helpful" ECAs being "cherry picked". However, despite the fact that the methodology is largely quantitative, there remains a subjective, qualitative element; this implies that it is by no means certain that different national ECAs would produce the same ratings.

The proposed use of ECA ratings to supplement private agencies' assessments of sovereign risk is an attempt to address concerns over the use of private ratings agencies. However, this concern, at least in part, resulted from the inability of private rating agencies to spot the warning signs of looming crisis and adjust their ratings accordingly. However, the UK government's Export Credits Guarantee Department (ECGD) has been criticised for exactly the same problem in a recent report (KPMG, 1999). Thus, it may be that the "pro-cyclical" criticism levelled at the private ratings agencies can also be levelled at ECAs.

In their report on the ECGD, KPMG recommended that it should move further in the direction of best private sector practice. This recommendation has been enthusiastically accepted by the UK Department of Trade and Industry (DTI, 2000). As one of the more sophisticated ECAs, the ECGD may represent something of a vanguard in its enthusiasm to move towards a more "cutting-edge" private sector approach. Indeed, the Department's explicit aim is to encourage other ECAs to follow its lead: "ECGD should continue to press multilaterally for ECAs to adopt risk management systems and policies based on best commercial practice" (DTI, 2000, p. 8).

Objections have been raised to the use of private agencies because of the potentially pro-cyclical implications and the same criticism can be levelled at national export credit agencies. However, the principle of objective, external credit ratings is surely a sensible one. Given that international financial stability can be viewed as a public good, there is a strong argument for having at least some public element involved in credit rating. This could best be done by an appropriate international public institution playing some role in ratings. Such a body could take a view that has a longer-term focus and "sees through" (see Turner, 2000) the economic cycle and thus exert a stabilising influence. Of the major international financial institutions, the BIS has the best track record in terms of spotting potential crises as well as having financial stability as its main objective, and would be well placed to fulfil this role.

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Despite some problematic areas it would seem that many of the criticisms made by developing countries of the existing Accord have been addressed in the standardised approach. The removal of the OECD distinction should be widely welcomed, as should the reduction of the incentives towards short-term lending. Also, the fact that adherence to financial codes and standards is not to be mandatory is a positive development.

3 The Internal Ratings Based Approach

Whilst many of the changes proposed under the standardised approach are to be welcomed, it is the potentially negative impact of widespread adoption of internal ratings based (IRB) approaches that is most troubling. This is all the more so because it is likely that banks operating under the IRB approach will come to dominate the industry. The Basel Committee had assumed that, at least initially, the great majority of banks would operate under the standardised approach, with only the most sophisticated of international banks employing the IRB approach. However, it is also assumed that, over time, increasing numbers of banks will move to the IRB approach and, to advance this process, incentives are embedded in the new Basel Accord to the adoption of IRB. Also, although a greater number of banks are expected to use the standardised approach, the major internationally active banks, that provide the bulk of lending to developing and transition economies and are actively purchasing banks in those countries, are more likely to be in a position to adopt the IRB approach. In fact, following recent consultations, the Basel Committee has concluded that a greater number of major banks than they had initially thought will be in a position to adopt IRB when the Accord is implemented. These developments are likely to have both domestic and international implications for developing and transition countries.

Domestic Implications

Developing country banks are liable to face increased competitive pressure from internationally active banks who have adopted the IRB approach and have further enhanced their existing competitive advantages through the use of more finely-tuned, and therefore lower, capital requirements. Both Deutsche Bank and Moody's have argued that this is likely to lead to smaller banks being at a disadvantage, with further industry-wide consolidation being the ultimate result (Deutsche Bank Global Research, 2001 and Moody's Investors Research, 2001). In developing and transition countries, this may imply an acceleration of trends towards foreign banks controlling

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domestic banking industries. This is not only a problem for banks in the developing world. In the US, for example, it is estimated that only 20 of the country's 9000 banks are likely to be in a position to adopt an IRB approach – thus consolidation may be seen both in the developed and developing worlds.

International Implications

Reduced Lending to the Developing World

As has been pointed out, most of the banks lending to emerging countries – the large international banks – would move quickly to adopt the IRB approach. The outcome of these changes is likely to be a significant reduction of bank lending to the developing world, and a sharp increase in the cost of international borrowing for much of the developing world. This is because the incentive, under the existing Accord, to the holding of lower quality loans will be eliminated in the IRB approach. Therefore, it seems very probable that adoption of the IRB approach will produce an increase in the quantity of loans to borrowers rated above BBB, and a fall in loans to borrowers rated below BBB. Given that the majority of such low rated borrowers are in the developing world, one effect of the new Basel Accord will be a reduction in overall levels of lending to emerging markets from internationally active banks.

Recent research, which uses a methodology developed by Deutsche Bank, estimates the likely impact (Helmut Reisen, 2001). We can see from Table 2 that adoption of the IRB approach as currently proposed could result in speculative grade borrowers (BBB- or lower) being effectively excluded from international bank lending. Table 2 also gives some estimates of the likely impact of the new Basel Accord on sovereigns. The estimates show that the proposed changes would be neutral or broadly positive for sovereigns rated triple-B or higher. However, for sovereigns rated below that, the situation would become very problematic. The median sovereign rating for non-OECD countries in 2001 was BB, with 31 of the 53 rated non-OECD countries being rated below BBB. For example, under the current Accord, for double-B rated sovereigns such as Brazil and India, the capital requirement for each $100 lent is $8. Under the standardised approach in the new proposal this would be unchanged, but under the IRB approach the capital required for the same $100 would rise to $30.3 and spreads would have to increase by more than a thousand basic points (bp). This would mean adding around 10 percent to the annual cost of borrowing for countries rated double-B. Even more dramatically, for countries such as Argentina and Pakistan, rated at single-B, spreads would

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have to increase by 3709 bp (that is, the cost of borrowing would grow by 37 percent annually) under the IRB approach to produce an equivalent level of risk-adjusted return as under the existing Accord.

Table 2 Sovereign Borrowers

	Risk Weight	Capital required per $100	Breakeven Spread Change bp.*	Examples of Countries in Category
		Double-A (OECD)		
Current	0	0	-	Belgium, Bermuda,
Standardised	0	0	-	Canada, Italy, Portugal
IRB approach	7	0.6	3	
		Triple-B (non-OECD)		
Current	100	8.0	-	China, Egypt, Korea,
Standardised	50	4.0	-50.00	Latvia, Malaysia,
IRB approach	40	3.2	-60.00	Tunisia
		Double-B (non-OECD)		
Current	100	8.0	-	Brazil, Colombia, Costa
Standardised	100	8.0	-	Rica, India, Kazakhstan,
IRB approach	379	30.3	1115	Morocco
		Single-B (non-OECD)		
Current	100	8.0	-	Argentina, Jamaica,
Standardised	100	8.0	-	Mongolia, Pakistan,
IRB approach	630	50.4	3709	Paraguay, Venezuela

Note:
* Indicates the spread movement required to produce the risk-adjusted return achieved under the current Accord.

Sources:
Reisen (2001) and Standard and Poor's Sovereign ratings, June 6, 2001.

The actual impact upon spreads could be lower than predicted above. The main reason is that non-bank investors form a significant part of the investor base and they are indifferent to risk-weights. However, even if these predictions overestimate the impact, they still point towards a significant deterioration in the terms under which sovereigns rated below triple-B are able to access international bank lending. The consequence is therefore likely to be a sharp reduction in bank lending to the developing world.

The implications of this are clear: large parts of the developing world will no longer be able to access international bank lending on terms likely to be acceptable. The impact will be felt most severely in the lowest rated countries – the very countries in most need of such access.

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As pointed out by Helmut Reisen, this effect is linked to the fact that the Basel Committee proposes a strongly exponential, rather than a linear, rise of risk weighting along the spectrum of probability of default. Thus, once ratings fall below BBB the capital requirements increase sharply, implying that for the lowest rated borrowers the cost of loans from banks operating an IRB approach is likely to be prohibitively high.

Pro-Cyclical Elements and Counter-Cyclical Measures

Greater use of banks' internal risk management systems also seems likely to be inherently pro-cyclical and therefore likely to amplify the economic cycle, thus increasing both the frequency and scale of crises. As developing countries suffer disproportionately from financial crises – given the relatively small size of their economies vis-à-vis international capital flows, and the thinness of their markets – this is a cause for great concern.

It is accepted that the existing Accord contains pro-cyclical elements and the fear is that greater risk sensitivity will increase this tendency. The drive for risk-weights to more accurately reflect the probability of default is inherently pro-cyclical. During an upturn, average probability of default will fall and thus incentives to lend will increase. Conversely, during a downturn, average probability of default will increase (due to more difficult economic circumstances) and, in consequence, a credit crunch may develop with all but the most highly rated borrowers having difficulty attracting funds.

The Basel Committee has recognised this concern, but argues that the benefits outweigh the costs. However, the trade-offs in terms of costs and benefits are viewed in terms of their impact on the major banks. The developing world will most probably feel the costs disproportionately (reduced lending coupled with increased scale of crises) while simultaneously attracting few, if any, of the benefits. Also, it may be that the Committee is more broadly underestimating the likely impact upon the business cycle and thus the financial system's propensity for crises; these systemic considerations have significant implications for the developed and developing worlds alike.

Early theorists, such as Irving Fisher (1933), emphasised crises as integral parts of the business cycle, often operating as a "trigger" whereby an upswing becomes a downturn. More recently researchers have also seen the business cycle as connected with financial crises and argued for reforms to introduce counter-cyclical elements into the regulatory framework.[2] It is argued that the pro-cyclical aspects of regulation contribute towards

2 See Ocampo's chapter in this volume and Griffith-Jones and Ocampo (2000).

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fuelling the "boom" that often precedes a crisis. Consequently, the introduction of counter-cyclical components would work to better manage the boom and so help to avoid costly financial and currency crises. A number of possible counter-cyclical measures have recently begun to be proposed to address these concerns:

1. Capital requirements could vary throughout the business cycle so that, for example, during a boom a higher capital ratio could be required. This would allow banks a cushion so that they could sustain lending in times of recession when capital asset ratios would be lower. Because of different problems with this approach, however, forward-looking provisioning, described in 2 below, seems a better option.
2. Regulators could encourage – or better, require – higher general provisions to be made for possible loan losses to cover normal cyclical risks. In other words, forward-looking provisions would reflect expected losses during a boom, in the expectation that when the downturn or bust comes, measured losses will increase. This approach seems to be the one that commands most support, and even a certain degree of consensus.[3] The mechanism would allow for provisions built up in good times to be used in bad times without affecting reported capital. The simplest way to ensure this would be to maintain higher general provisioning, applied to all loans. Another more complex – but perhaps more precise – approach would be to have especially large provisions during periods of large increases in lending, as often such rapid increases are followed by a slowing down of the economy or by a recession, when losses may increase. To ensure that such rules really are applied, it seems desirable that: (a) they are mandatory and (b) certain rules of thumb are designed ex ante by regulators. The latter is very important to avoid the pressures that typically arise in times of boom, against any tightening.
3. Regulators could place a cap on the value of assets that can be used as collateral. This would protect against inflated asset prices that occur during a boom being used as collateral when, during a downturn, these prices may sharply fall. In this situation, rules could be introduced to average asset price values over the previous five years, for example.
4. Another counter-cyclical mechanism would be to limit lending for property, construction and personal consumption, as these tend to increase substantially in booms. Indeed, research has suggested that this may be a significant factor in booms (McKinnon and Pill, 1997).

Measures 3 and 4 would be particularly relevant for domestic bank

[3] See Turner (2000) and Arrow (2001). See also comments by John Williamson and others in this volume, as well as discussions of the IDS May 2001 Private Sector Discussion Group and discussions at the Centre for Financial Innovation on Financial Architecture in London, May 31, 2001.

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lending, whereas measure 2 would be relevant for both international and national lending.

Important practical questions remain about the specific modalities of introducing counter-cyclical mechanisms into the regulatory framework. Therefore, further study is required: for example, on appropriate levels of forward-looking general provisioning (that provides enough cushion, but does not excessively increase cost of lending); on tax treatment of such provisioning; and on defining trigger levels for increased provisioning when lending increases too much, should such an approach be chosen. However, the principle of "leaning against the wind" is sensible in a world where financial crises are connected with the business cycle and where pro-cyclical tendencies accentuate the scale and frequency of crises, both in private lending and in standard regulatory practice.

A more specific critique of the characteristics of bank risk management systems has come from Avinash Persaud of State Street Bank (Persaud, 2000). He argues that, whilst many believe that more market sensitive risk management and stronger prudential standards are insufficient as a response to the increase in scale and frequency of crises in recent decades, few doubt the validity of these measures on their own terms. He suggests that reasons exist to doubt the wisdom of this widely accepted view. For Persaud, the rationale behind these measures is that they will better equip markets to reward "good" behaviour and punish "bad" behaviour. However, he argues, evidence exists to suggest that, whilst in the long run markets are discerning in this sense, in the short-run they seem unable to distinguish between good and bad; i.e. market participants' herd and contagion is a common occurrence.

Persaud goes on to argue that, in a herding environment, tighter market-sensitive risk management systems may serve to increase instability, rather than to reduce it as assumed in the new Basel Accord; thus greater use of such systems might result in an increase, and not a reduction, in the incidence of crisis. The trend among market participants, reflected in the New Basel proposals, is to move away from discretionary judgements about risk towards a more quantitative, market-sensitive approach. Increasingly banks manage market risk by setting a daily earnings at risk limit (DEAR). This mechanism addresses the question, "how much can I lose with a 1 percent probability over the next day?" The answer is arrived at by taking the bank's portfolio of positions and estimating the future distribution of daily returns based on past measures of market correlation and volatility. Therefore, increasing volatility and/or correlation will cause the potential loss to rise, and *vice versa*. When DEAR exceeds the limit set, the bank moves to reduce exposure, often by switching into less volatile and less correlated assets.

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A not unlikely scenario is then envisaged, says Persaud: "Imagine that over time a herd of banks has acquired stocks in two risky assets that have few fundamental connections, say, Korean property and UK technology stocks. Imagine too that some bad news causes volatility in UK technology stocks and the banks most heavily invested there find that their DEAR limits are hit. As these banks try to reduce their DEAR by selling the same stocks (Korean property and UK technology) at the same time, there are dramatic declines in prices, rises in volatility in both markets, and rises in the correlation between Korean and UK markets. Rising volatility and correlation trigger the DEAR limits of banks less heavily invested in other markets. As they join the selling milieu, volatility, correlation and contagion rise."

Persaud concludes that: "The paradox is that if one or two banks followed a DEAR limit and others did not, those banks would have an effective risk management system that at the margin would support the financial system. But if every bank were to follow the same approach, given that these banks follow each other into and out of markets, the DEAR limit would contribute to systemic risk. It is ironic, therefore, that the Basel Committee on Banking Supervision is supporting the rapid adoption of these systems across all banks and encouraging investors to follow suit."

It is also ironic and particularly problematic that the new Basel Capital Accord's IRB proposals (which would imply less and more costly as well as more pro-cyclical lending to developing countries), have emerged at the same time as developing countries are being urged to make greater use of private capital flows to replace aid flows, which are in historical decline.

4 Concluding Remarks and Recommendations

This final section will conclude and make some specific suggestions that might help reduce the likely negative effects of the new Basel Accord for developing and transition countries.

From a developing country perspective it may well be that the proposals in the new Basel Accord to move towards an IRB approach will have the greatest lasting impact. The fact that banks who are in a position to adopt this approach will be at a competitive advantage, and that these banks are likely to be the ones in the strongest competitive position anyway, implies two possible scenarios. First, that the large banks that are able to adopt an IRB approach early reinforce and strengthen their market positions and either drive competitors out of business or are able to take them over. The second scenario is that large numbers of banks are able to move to an IRB framework early enough to prevent the first scenario occurring. Either

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way, the result will be a banking industry dominated by banks employing IRB approaches. This is likely to lead to a reduction in lending to developing countries from the major international banks, as the incentive to hold poor quality loans will be sharply reduced. The consequences of a reduction in lending to those poorer countries most in need of funds could be severe. An additional potential impact comes from the systemic impact of widespread adoption of IRB approaches, which could increase procyclicality of lending to developing countries, and thus increase likelihood of crises.

Whilst the proposals contained in the standardised approach are *broadly* to be welcomed, in that they address many (though not all) of the concerns expressed in developing countries about the existing Accord, the introduction of IRB approaches has very problematic implications. It is likely that the widespread adoption of IRB approaches by the major international banks will ensure that the impact of the standardised approach cannot be assessed independently. If, as it seems highly likely, the negative impacts of the IRB approaches outweigh the positive impacts of the standardised approach from a developing country perspective, then the new Basel Accord will merely serve to give with one hand only to take (more) with the other. The systemic implications of greater risk sensitivity in lending patterns are likely to impact upon developed and developing countries alike – although more so on the latter given the smaller size of their economies vis-à-vis international capital flows.

The proposals in the new Basel Accord – particularly those related to the IRB approach – would seem to be driven largely by the wishes of the major international banks. However, it is not clear that what is good for these banks is necessarily good for the stability of the international financial system in general nor the developing world in particular.

As an alternative, the improvements contained within the standardised approach could be developed to further reduce, if not eliminate, incentives towards short-term lending. The number of risk buckets could be expanded to reduce regulatory biases towards lending to certain categories of borrower. In addition, counter-cyclical mechanisms could be introduced into the regulatory framework with the intention of (a) smoothing capital flows, and (b) smoothing the impact of volatile flows on the domestic financial system and therefore on the real economy. One aspect of the standardised approach that has attracted much attention is the proposal to use external credit rating institutions to assign ratings. Objections have been raised to the use of private agencies because of the potentially procyclical implications and, as we saw, the same criticism can be levelled at national export credit agencies. However, the principle of objective, external credit ratings is surely a sensible one. Given that international financial

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stability can be viewed as a public good, there is a strong argument for having a public element involved in credit rating. Of the major international financial institutions, the BIS has the best track record in terms of spotting potential crises as well as having financial stability as its main objective, and would be well placed to fulfil this role.

Our recommendations can be summarised as follows:

- Particularly from the perspective of developing countries – but also taking systemic concerns into account – there may be a case for postponing introduction of the IRB approach, until its impact is more thoroughly researched and discussed. If that is not possible, there is a strong case for at least slowing the pace of introduction of the new Basel Accord (e.g. to 2008).
- One particular area of concern is the proposal to adopt an exponential rise in risk weighting along the spectrum of higher probability of default, rather than a linear rise. The impact of this proposal, as described above, would be to increase sharply the costs of borrowing for low rated sovereigns, banks and corporates to the extent that they would be effectively cut off from international bank lending. We therefore propose that, if the IRB approach is to be implemented, the probability of default should grow on a linear and not exponential scale so as to mitigate this effect.
- We also suggest an evaluation of mechanisms to slow down the effect of changes in credit rating on regulatory risk weights (see Turner, 2000). This would be particularly relevant to the IRB approach, but also of interest for the standardised approach. The impact on capital charges of changing risk weights, due either to external ratings or to internal models, could be smoothed if the change was phased in gradually and the phase-in period was long in relation to the cycle. This could significantly reduce pro-cyclicality; however, it could perhaps weaken too much the link between risk and capital, which the new Basel Accord is trying to achieve. An alternative way of doing this is to use moving averages of historical ratings, over two years for example.
- The introduction of a counter-cyclical element to compensate for the inherent pro-cyclicality of the IRB approach needs to be carefully evaluated. As discussed above, the most promising approach, especially for international bank lending, would seem the introduction of higher general provisions against losses.
- We propose a further development of the standardised approach to address remaining issues of concern:
  1. reduce further or eliminate remaining incentives towards short-term lending;
  2. expand number of risk buckets so as to avoid the regulatory

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distortions associated with jumps between buckets;

3. introduce a public element into external ratings to avoid the pro-cyclical problems associated with private sector ratings agencies and ECAs;
4. introduce a counter-cyclical element into the regulatory framework.

The complexity of modern financial markets has led some (including perhaps the Basel Committee) to conclude that effective external regulation is neither feasible nor desirable. This is one of the factors behind the moves towards an IRB approach, with greater emphasis on market discipline. However, it could also be argued that this very complexity increases the need for external regulation, so as to ensure the public good of financial stability.

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