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Latin America after the Currency Crash in Brazil

Why the Optimists May Be Wrong

by Peter Nunnenkamp

CONTENTS

- The currency crisis in Brazil and its adverse effects on neighboring countries are widely perceived to be short-lived phenomena. However, optimists—stressing favorable growth and investment prospects in Latin America—tend to ignore home-made causes of Brazil's crisis and underrate the risks ensuing for the region as a whole.
- Financial turmoil in Asia and Russia induced several speculative attacks on the Brazilian real. However, domestic policy failure caused the currency collapse: The Real Plan of 1994 was undermined by delaying fiscal consolidation. Thus, crisis was looming since 1997, mainly because soaring public sector deficits eroded the sustainability of the exchange-rate peg to the US dollar.
- After the decision for floating the real, Brazil still faces serious policy dilemmas. Devaluation has not prevented a further rise in interest rates. Mounting debt-service obligations represent a fiscal time bomb. Restructuring short-term debt involves the risk of prolonged financial volatility. It cannot be ruled out that Brazil will impose capital outflow controls, the drawbacks of such a move notwithstanding.
- Brazil's crisis affects neighboring countries in several ways. Contagion transmitted through financial markets has remained limited so far. If financial turbulence continues in Brazil, however, the pressure on exchange rates, interest rates and stock markets is likely to increase in other Latin American countries. Contagion through trade hits Brazil's Mercosur partners in the first place. Mexico, too, may be affected as the devaluation of the real impairs the international price competitiveness of Mexican exporters on third markets. In addition, the crisis may disrupt intra-Latin American investment relations.
- Short-term economic prospects of Latin America would deteriorate if the United States were no longer prepared to absorb rising exports of crisis-ridden emerging markets. Protectionist sentiments may also spread in Latin America, especially if world-market prices of the region's major commodity exports remain depressed. In the light of Latin America's strong reliance on foreign capital, the greatest risk appears to be that external financing of current account deficits will be curtailed.
- The current crisis may have as a result that structural reforms, required for Latin America's successful participation in globalized production, will take second place for the time being. This applies especially to Brazil where fiscal discipline required for short-term stabilization clashes with public investment needs, notably in education. Deregulation of labor markets may be postponed in other Latin American countries, too, in order to contain unemployment in the short run. Yet, Latin American governments should signal their determination to stick to reforms even under conditions of financial turmoil. Privatization and public sector reforms supporting better governance are of critical importance in this respect.

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I. Introduction

Until recently, Latin American experts were stunned, if not annoyed, by some sceptics raising doubts about optimistic assessments of the region's economic situation. Latin America offered a lot of good news indeed. Economic policy reforms gathered momentum and helped restoring the region's attractiveness to foreign capital, notably foreign direct investment (Nunnenkamp 1998b). Financial crises in Asia and Russia notwithstanding, GDP growth in Latin America was estimated to exceed 2 percent in 1998 (IMF 1998b; EIU 1999: 10). Financial market conditions in Latin American countries were considered to be sound (Deutsche Bank Research 1997; Dresdner Bank Lateinamerika 1998). Hence, the risk of contagion affecting Latin America appeared to be limited, even though Brazil had to fight a first speculative attack in October 1997 already.

The optimists were supported by the IMF's Managing Director, Michel Camdessus, in November 1998, when Brazil and the IMF "successfully concluded negotiations on a strong three-year program of economic and financial reform .... (which) will enhance market confidence in the government's economic policies" (IMF 1998a). Brazil was the test case for the IMF's new approach to provide financial assistance timely, in order to prevent currency crises from happening in the first place.

It was widely believed that prophylactic financial support by the IMF would offer to Brazil, and indirectly to Latin America as a whole, enough breathing space to undertake fiscal adjustment and structural reforms and, thereby, to sustain currency stability. Ironically, this breathing space proved to be exhausted even before some fulsome praise of Latin America's bright economic future came out of press (e.g., *Fonds Magazin* 1999).

Some optimists remain unimpressed by the collapse of Brazil's currency, the real, in January 1999. Reportedly, the World Bank's Vice President for Latin America, Javed Burki, considered economic turbulences in Brazil not to be a crisis, but rather an opportunity to stronger growth in Latin America as a whole (*Frankfurter Allgemeine Zeitung*, January 25, 1999). The President of the Interamerican Development Bank, Enrique Iglesias, argued that Brazilian policymakers have done nothing wrong, and stressed favorable growth and investment prospects (*Handelsblatt*, January 28, 1999).

Sceptics, including the present author, do share the view that economic policy reforms in Latin America have improved the region's longer-term prospects of participating successfully in globalization. Short-term prospects are clouded by considerable uncertainty, however. The depth and length of recession in Latin America is open to question. What is clear is that Brazil faces further unpleasant policy dilemmas after the decision for floating the real (Section II). Severe recession in Brazil almost certainly has immediate repercussions on at least some Latin American neighbors (Section III). Short-term prospects may be depressed in large parts of the region, in particular, by a shortage of foreign capital inflows and low commodity prices (Section IV). Even longer-term prospects may be impaired by the current crisis. This is likely to happen if the crisis delays structural reforms needed to overcome the still existing bottlenecks to successful participation in globalization (Section V).

II. Brazil's Policy Dilemma after the Collapse of the Real

Brazil has been the weak link in Latin America since the outbreak of the Asian crisis. In October 1997, Brazil had to fight a first speculative attack on the real (Nunnenkamp 1998a). The country suffered contagion for the second time, when Russia suspended debt-service payments to (foreign and domestic) creditors in August 1998. International reserves of Brazil declined by some 20 percent within a few days, and Brazilian debt was downgraded by Moody's (*The Economist*, September 12, 1998: 59).

The irony is that the real fell only in January 1999, shortly after the IMF had agreed on financial support in the order of US$ 41.5 billion. IMF support to Brazil was explicitly designed to preempt speculative activity against the real (EIU, *Country Report Brazil*, 1998 (4th quarter): 21). Brazil was allowed to draw as much as US$ 37 billion of the total package before the end of 1999. The IMF was confident that the peg of the real to the US dollar was sustainable. IMF support was considered instrumental to strengthen private investor confidence which, in turn, was thought to ensure external financing of current account deficits of about 4 percent of GDP.

In contrast to the IMF's First Deputy Managing Director, Stanley Fischer, various economists and financial market analysts considered the real to be overvalued by 20–40 percent (e.g., Sachs 1999; Dornbusch 1999). Therefore, it is highly controversial to argue, as reportedly done by the President of the Interamerican Development Bank, Enrique Iglesias (*Handelsblatt*, January 28, 1999), that the Brazilian crisis simply reflects contagion and has not been caused by misguided economic policies. The opposite view maintains that "it is all home-made, just as Mexico at the time, with an overvalued exchange rate and a huge budget deficit, vast short-term foreign obligations and an explosive indexed domestic debt" (Dornbusch 1999: 1).

Figure 1 presents the relevant facts. The real appreciated significantly in real terms in 1994. In subsequent years, further real appreciation was avoided as the Plano Real of 1994 succeeded in stopping hyperinflation. Nevertheless, the current account deficit widened. Furthermore, the fight against inflation was undermined by delaying fiscal adjustment. The public sector deficit doubled from 4 percent of GDP in 1996 to 8 percent of GDP in 1998. Only after the collapse of the real, the Brazilian Congress has started passing fiscal austerity measures, e.g., by agreeing to the long-awaited pension reform on January 20, 1999 (*Financial Times*, January 22, 1999).

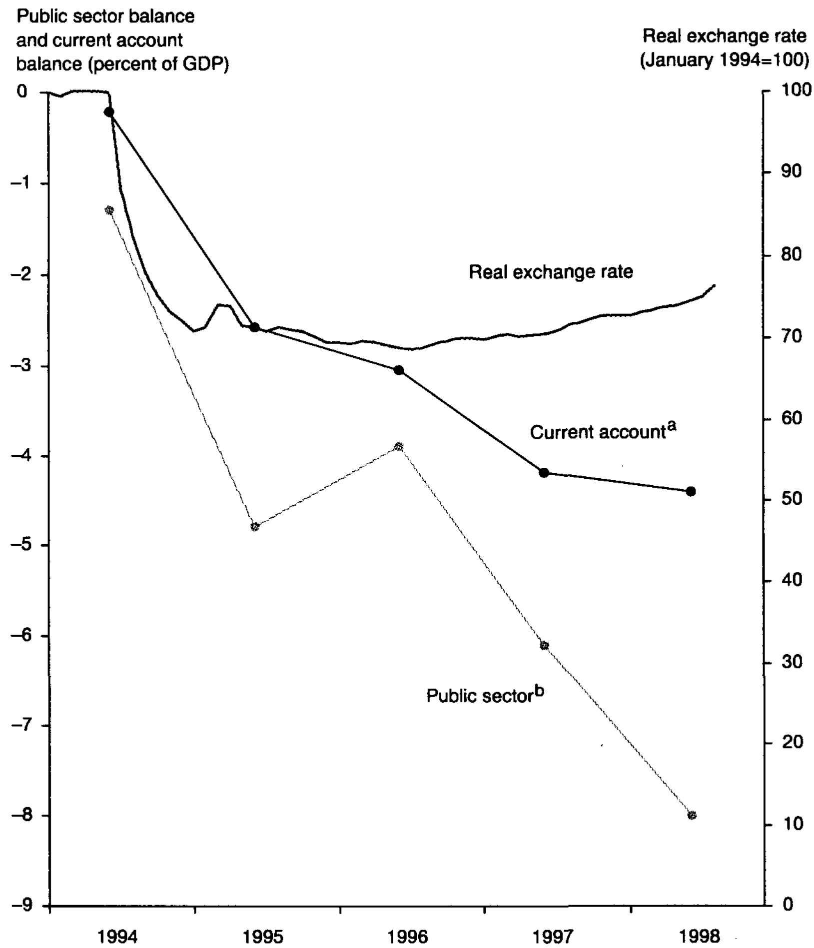
Fiscal adjustment, if it had been enacted in 1998, might still have *prevented* the currency crisis. However, the belated approval by Congress is likely to prove insufficient to *resolve* the crisis. This is because the positive fiscal effects of pension reform and similar measures may easily be outweighed by the "fiscal time bomb" (Sachs 1999) to which the sharp devaluation of the real may be the trigger. On March 5, 1999, the real/US dollar exchange rate stood at 1.98, compared with 1.21 on December 30, 1998. The domestic currency equivalent of servicing Brazil's foreign debt of about US$ 90 billion rises accordingly. The same applies to 60–70 billion reais of domestic public debt that is denominated in US dollar (IRELA 1999).

Fiscal accounts may receive another blow from servicing short-term domestic debt denominated in reais. Almost 70 percent of total domestic public debt of about 320 billion reais is indexed to the overnight interest rate (EIU, *Country Report Brazil*, 1998 (4th quarter): 14). One could have expected that servicing this debt would become easier as the pressure on interest rates was supposed to decline after the devaluation of the real. However, the devaluation did not help in bringing high interest rates down. On the contrary, on January 18, 1999, the Central Bank raised the interest rate by 5 percentage points to 41 percent. Although the rate of inflation was still low at that time (2–3 percent), high and rising interest rates were considered necessary to prevent a return to hyperinflation, which may result from a still deeper fall of the real.

By February 1999, it was no longer disputed that Brazil will suffer deep recession in 1999 (Table 1). Growth forecasts continue to be revised downwards. Taking into account forecasting errors after the outbreak of the Asian crisis, the currently expected GDP decline in Brazil of about 5 percent may not be the final verdict. The real rate of interest may come down to reasonable levels if recent expectations on inflation of about 30–40 percent (*Frankfurter Allgemeine Zeitung*, March 1, 1999) prove to be correct.[1] Yet, private investor confidence is unlikely to be restored unless it becomes clear

1 According to Brazilian sources, inflation shall be restricted to 17 percent under the revised agreement of March 8, 1999, between Brazil and the IMF.

Figure 1 — Brazil: Public Sector Balance, Current Account Balance and Real Exchange Rate, 1994–1998



[a]EIU estimate for 1998. — [b]1994–1996: operational deficit, which discounts the inflation rate; 1997–1998: nominal deficit; EIU estimate for 1998.

Source: IMF (1999b); EIU, *Country Report Brazil* (various issues).

Table 1 — Real GDP Growth in Major Latin American Countries, 1998–2000 (percent)

	1998[a]	1999[b]					2000[b]			
		Kiel Inst.	Goldman Sachs		Merrill Lynch		Kiel Inst.	Goldman Sachs	Merrill Lynch	
		Febr 1999	Jan 1999	Febr 1999	Febr 4, 1999	Febr 18, 1999	Febr 1999	Jan 1999	Febr 4, 1999	Febr 18, 1999
Argentina	4.6	–2.0	3.1	–2	2.1	–2	3.0	4.5	4.3	4.3
Brazil	0.2	–5.0	–2.0	–4/–6	–1.5	–4.6	2.0	2.0	3.8	3.4
Chile	3.5	1.0	—	1.5	1.5	1.5	4.0	—	4.0	4.0
Colombia	≈1[c]	–2.0	—	—	—	—	2.0	—	—	—
Mexico	4.8	2.0	2.5	2.5	3.0	2.3	3.5	3.0	4.0	4.0
Peru	0.5	1.5	—	—	—	2.3	3.5	—	—	4.5
Venezuela	–0.7	–2.0	–1.0	—	—	0.5	0	3.5	—	3.2
Latin America	≈2	–1.7[d]	0.5	0.5	—	—	2.6[d]	3.0	—	—

[a]Estimates based on various sources. — [b]Forecasts. — [c]Estimates as of early 1999 range from 0.2 to more than 2 percent. — [d]Weighted average of seven countries listed.

Source: Estimates and forecasts by the Kiel Institute, Goldman Sachs and Merrill Lynch (via internet).

how the Brazilian government will break out of the vicious circle of rising nominal interest rates, soaring debt-service payments and currency decline.

The *federal* government of Brazil was still committed to IMF targets in early March 1999. Fiscal austerity shall result in a primary surplus in public sector balances of 3–3.5 percent of GDP in 1999–2001 (IMF 1999a). Privatization, particularly in the energy and financial sectors, shall be intensified (IRELA 1999: 3). It is open to question, however, whether *state* governments will play to IMF rules. Note that the governor of Minas Gerais, the country's third wealthiest state, contributed to trigger the crisis by declaring a moratorium on interest payments owed to the federal government. It is also debatable whether fiscal balance can be restored without restructuring short-term domestic debt.

If Brazil is going to restructure domestic debt by "lengthening the maturity at preset, moderate but indexed rates" (Dornbusch 1999: 2), the reaction of private investors is difficult to predict. The risk of further financial volatility appears to be considerable, even though the argument that nobody will lend to Brazil anymore may be "absurd" (ibid.). If financial volatility continues, the Brazilian government might feel that there is no alternative but to renege on earlier economic policy commitments (IRELA 1999).

The government may then choose between two alternatives. The first option, suggested by Dornbusch (1999), is to adopt a currency board. This radical approach of fixing the exchange rate and giving up monetary autonomy may restore macroeconomic stability, as the experience of Argentina shows. For this approach to be credible and sustainable, however, more rather than less fiscal adjustment would be required. At present, it is hard to imagine that this solution is politically feasible in Brazil. Furthermore, under conditions of erratic exchange rate movements, it is difficult to fix the exchange rate at an appropriate level. Finally, Brazil may lack the resources to adopt a currency board (Krugman 1999). According to recent estimates, international reserves of Brazil dwindled from US$ 70 billion in mid-1998 to about US$ 26 billion at end-February 1999 (excluding IMF resources received; *Frankfurter Allgemeine Zeitung*, March 3, 1999).

The second option, suggested by Krugman (1999), is a temporary imposition of exchange controls. Stopping capital outflows administratively is supposed to offer better chances to reduce interest rates. But Latin American experience with capital outflow controls is not encouraging. In the past, capital flight tended to persist as controls were circumvented in various ways. More importantly still, foreign direct investment (FDI) inflows into Brazil would be discouraged if investors were uncertain about future prospects to repatriate profits and capital. Forgone FDI inflows would contribute to further weakening of the real. The same effect would result from the IMF not releasing subsequent tranches of the financial support package if the Brazilian government were to impose capital controls.

These drawbacks notwithstanding, it cannot be ruled out that the Brazilian government will return to traditional muddling-through attitudes and will resort to heterodox measures under conditions of prolonged financial turmoil. Hence, economic forecasts are subject to a considerable margin of error. This does not only apply to Brazil, but also to neighboring countries which have close economic ties with the dominant player in the region.

III. Contagion in Latin America

Brazil's economic situation is exceptional in important respects. Other Latin American countries contrast sharply with Brazil as concerns public sector balances (Table 2). Fiscal accounts appear to be under control in Argentina, Chile, Mexico and Peru. Short-term interest rates are below 10 percent in real terms in these countries, compared with about 40 percent in Brazil (Table 3). Several Latin American countries have in common, however, that they have to finance large current account deficits. External financing of large current account deficits is no longer guaranteed if the Brazilian crisis

Table 2 — Public Sector Balance, Current Account Balance and Real Exchange Rate of Major Latin American Countries, 1998

	Public sector balance[a]	Current account balance[a]	Real exchange rate[b]
Argentina	−1.1	−4.2	104.5 (Sept.)
Brazil	≈ −8	−4.4	76.4 (August)
Chile	0.6	−6.5	89.0 (Sept.)
Colombia	≈ −4	−6.5	69.1 (June)
Mexico	−1.2	−3.6	136.0 (Sept.) [79.6][c]
Peru	−0.2	−5.8	99.8 (Sept.)
Venezuela	−4.8	−2.0	67.4 (Sept.)
Average[d]	≈ −4	−4.4	—

[a]Percent of GDP; estimates based on various sources. — [b]National currencies vis-à-vis US dollar; January 1994 = 100. — [c]In brackets: January 1995 = 100. — [d]Weighted with GDP of 1996.

Source: IMF (199b); estimates by the Kiel Institute.

spreads to neighboring countries (see also Section IV below).

According to recent forecasts, not only Brazil faces recession in 1999. Forecasts for Argentina have been revised downwards by 4–5 percentage points since early 1999 (Table 1). Taken together, Brazil and Argentina account for almost half of Latin America's GDP. Consequently, continued — though reduced — GDP growth in Chile, Mexico and Peru cannot prevent GDP decline in 1999 in Latin America as a whole.[2]

Recent growth forecasts for 1999 suggest that the Brazilian crisis will not affect GDP growth in Mexico, and will have only modest effects on growth in Chile (for which growth forecasts as of late 1998 were in the range of 2–3 percent). Moreover, the Brazilian crisis so far has not led to major revisions of growth forecasts for 2000. All major Latin American countries are widely expected to resume GDP growth of around 3 percent in 2000. The assumption that recession will be overcome shortly may prove to be overly optimistic if financial turbulence continues in Brazil. In other words, forecasts for 2000 are highly tentative.

The dominant player Brazil affects its Latin American neighbors in several ways. The most obvious way of contagion is through trade. Intra-regional trade links have become stronger

Table 3 — Short-term Interest Rates and Inflation Rates in Major Latin American Countries (percent)

	Interest rate as of March 10, 1999	Inflation rate, 1998[a]
Argentina	7.2	0.8
Brazil	45.0	±0[b]
Chile	8.2[c]	4.5
Colombia	27.0	≈19
Mexico	26.7	18.6
Venezuela	34.5	≈31

[a]Recent estimates of consumer price inflation from various sources. — [b]Estimates range from 4 to −2 percent. — [c]Inflation-adjusted rates.

Source: *The Economist*, Emerging-Market Indicators, March 13, 1999.

since 1985 (Table 4). A rising share of Latin America's exports (21 percent in 1997) is destined for regional neighbors. Exports shipped to the EU declined in relative importance, whereas North America increased its share in Latin American exports from 42 (1985) to 51 percent (1997). Regional shifts in the structure of Latin America's imports were less pronounced. Yet, Latin America replaced the EU as the second source of imports in 1997.

The trade structure differs significantly across Latin American countries (Table 5):

- Intra-regional trade links are strongest for Brazil's smaller Mercosur partners Paraguay and Uruguay. For example, about 70 percent of Paraguay's exports stay within the region, with Brazil alone accounting for almost 40 percent of Paraguay's total exports.

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2 Note that the forecast by Goldman Sachs of GDP growth of 0.5 percent in Latin America in 1999 (Table 1) is no longer plausible, taking into account the downward revisions made for Argentina and Brazil.

Table 4 — Latin America's Trade Structure, 1985–1997 (percent of total exports and imports)

Major trading partners	Exports			Imports		
	1985	1991	1997	1985	1991	1997
United States and Canada	41.5	45.8	50.5	38.9	47.3	45.3
Japan	5.2	5.1	3.2	5.9	5.4	6.4
European Union	23.8	21.1	13.9	19.8	19.5	16.4
Developing countries in						
– Asia	4.1	4.8	4.8	1.9	3.8	8.4
– Europe	1.6	1.2	1.3	0.7	0.8	1.1
– Latin America	12.9	16.7	20.8	18.1	16.5	17.5
Rest of world	10.9	5.3	5.5	14.7	6.7	4.9
Memo item:						
World (US$ billion)	97.9	141.8	290.6	72.5	149.0	354.2

Source: IMF, *Direction of Trade Statistics Yearbook* (various issues).

Table 5 — Trade Structure of Selected Latin American Countries, 1997 (percent of total trade)

	Trading partners:						*Memo* item:
	United States and Canada	EU	Japan	Developing countries in Asia	Latin America	Brazil	trade in percent of GNP[a]
Argentina							
exports	8.3	15.7	2.2	11.0	49.3	30.5	10.9
imports	21.5	27.4	3.7	10.0	31.0	22.5	12.4
Bolivia							
exports	19.9	23.2	0.3	0.2	46.4	2.7	20.9
imports	25.2	14.7	12.3	2.4	43.1	11.4	31.2
Brazil							
exports	18.5	27.0	5.7	8.5	28.1	—	8.3
imports	25.7	26.6	5.9	9.0	21.9	—	11.8
Chile							
exports	16.7	24.4	15.7	18.2	20.5	5.6	26.8
imports	25.2	20.9	5.6	10.6	28.2	6.6	31.5
Colombia							
exports	41.0	23.6	3.0	0.8	26.4	1.1	19.1
imports	38.3	18.5	6.2	5.6	25.6	3.3	25.4
Ecuador							
exports	39.8	18.8	4.0	7.0	21.6	0.5	33.0
imports	33.7	17.4	6.1	6.1	31.4	3.7	32.9
Mexico							
exports	87.6	3.6	1.0	1.0	6.0	0.6	35.8
imports	76.6	9.0	3.9	6.2	2.4	0.8	36.5
Paraguay							
exports	3.2	14.6	7.0	3.7	70.9	39.1	45.5
imports	19.3	10.3	4.5	11.8	53.0	34.2	28.9
Peru							
exports	25.2	24.2	7.1	15.5	17.7	3.8	13.9
imports	34.5	21.4	4.1	6.6	30.4	4.1	20.4
Uruguay							
exports	7.0	18.9	1.1	9.0	56.0	34.4	23.7
imports	12.4	19.3	2.6	7.7	50.3	21.6	25.7
Venezuela							
exports	53.9	6.9	1.2	0.5	34.7	4.1	40.8
imports	49.2	18.1	4.5	3.6	21.5	5.2	27.6

[a]1996.

Source: IMF, *Direction of Trade Statistics Yearbook* (1998); World Bank (1998a).

- Argentina's exports, too, are largely directed to its Mercosur partner Brazil. This may explain at least partly why GDP growth forecasts have been revised downwards for Argentina (Table 1).
- Bolivia may hardly be affected through trade with Brazil in a direct way. Indirect effects may turn out to be significant, however, since about 45 percent of Bolivia's trade is with Latin American neighbors.
- By contrast, Latin America plays a marginal role in Mexico's overall trade. The same applies to all other trading partners, except North America. This explains why Mexico is expected to be the fastest growing country in 1999 among the countries listed in Table 1. North America is also a more important trading partner than Latin America for Colombia, Ecuador, Peru and Venezuela.
- Chile and Peru are likely to be affected most among Latin American countries by depressed prospects of exporting to Japan and Asian developing countries.

The hypothetical *direct* GDP effect of changing trade relations with Brazil after the collapse of the real can be assessed by taking into account (i) Brazil's share in total trade of Latin American partner countries, and (ii) the share of total trade in partner countries' GDP. Calculations reported in Figure 2 are based on the — arbitrary — assumption that Brazil will expand its exports by 10 percent, and reduce its imports by 10 percent. Paraguay would suffer the strongest GDP decline by far, followed by Uruguay. Direct GDP effects would remain modest (0.6 percent) in Argentina, and would be still lower in all countries outside Mercosur, including the associated member Chile. Argentina's strong trade links with Brazil notwithstanding, direct GDP effects are limited by the fairly low share of total trade in Argentina's GDP (Table 5).

Trade effects resulting from the Brazilian crisis may be seriously understated in Figure 2, however. Previous financial crises in Mexico and Asia suggest that actual changes in Brazilian exports and imports may far exceed the assumed 10 percent change:

- The devaluation of the Mexican peso in December 1994 induced a reduction in Mexico's imports by about 9 percent in 1995 (IMF, *Direction of Trade Statistics Yearbook* (various issues)). At the same time, Mexico's exports expanded by more than 30 percent.
- Crisis-ridden Asian countries did not succeed to raise their exports in 1998. Nevertheless, trade effects were significant as imports of Indonesia, Korea and Thailand decreased by about one-third in 1998 (Reisen 1999: Table 7).

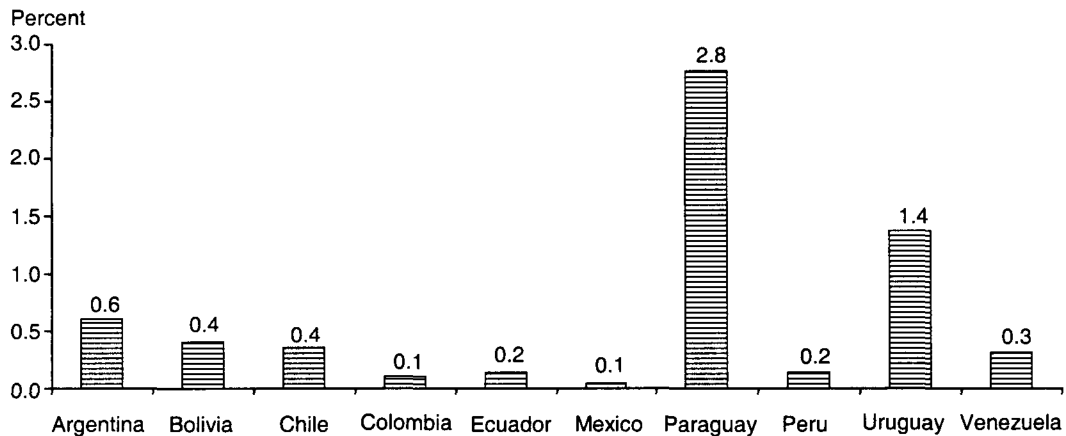
Most recent developments indicate that Argentina, in particular, may suffer more serious trade effects than given in Figure 2 (IRELA 1999: 5). Reportedly, Argentina's automobile exports, which are largely destined for Brazil, fell by about 30 percent in January 1999. Argentina's imports of consumer goods and primary products from Brazil soared, in some cases by more than 200 percent, in the last two weeks of January 1999.[3]

Figure 2 does not capture any *indirect* trade effects which the devaluation of the real may have on third markets. Brazil's international price competitiveness has improved relative to Latin American competitors. The significance of price effects depends on the degree of substitutability between the exports of Brazil and the exports of other Latin American countries. For example, Brazilian exports of automobiles (including automotive parts and components) to Europe and the United States may expand at the expense of Mexico's exports of automobiles. Colombia is likely to suffer indirect trade effects as world demand for coffee will shift from Colombia to Brazil. In the case of Argentina, the constitutional commitment to maintain the US dollar parity in the convertibility system rules out the option of restoring price competitiveness vis-à-vis Brazil by devaluating the Argentine peso (IRELA 1999: 5). Hence, indirect trade effects are likely to be significant,

---

3 The correctness and representativeness of these figures is questionable, however. Apparently, they have been released by Argentine sources in order to mount an attack on Brazil's export subsidies. I owe this point to Rolf Schinke.

Figure 2 — Selected Latin American Countries: Hypothetical Reduction in GDP due to Export Expansion plus Import Compression in Brazil[a]



[a]Direct GDP effects, assuming that Brazil's exports increase by 10 percent and Brazil's imports decrease by 10 percent.

Source: Table 5.

even though they are almost impossible to be quantified and may take time to develop.

Furthermore, contagion is not limited to trade effects. Investment relations within Latin America represent a second transmission mechanism. Intra-Latin American investment has become increasingly important in recent years (IDB-IRELA 1996: 59 ff.; UNCTAD 1997b: 74; UNCTAD 1998: 252). For example, about 12 percent of FDI stocks in Argentina (1992) and Bolivia (1994) were held by investors from other Latin American countries (IDB-IRELA 1996: Tables 40 ff.). FDI inflows into Argentina originating from within the region accounted for almost one-fifth of total FDI inflows into Argentina in 1992–1995 (UN-CEPAL 1997: 120).

While comprehensive data on intra-Latin American FDI are still lacking, UN-CEPAL (1998) has collected available information on FDI flows in 1997 (Table 6). Accordingly, investors from Argentina, Chile and Mexico invested considerably within the region. Brazil recorded minor FDI outflows to Latin American countries in 1997, but Brazil ranked second to Chile in terms of outward FDI within Latin America as of early 1997 (UNCTAD 1997b: 74). Brazil's FDI in Latin America appears to be concentrated in Argentina, particularly in the automobile and autoparts industries as well as in the financial industry of Argentina (UNCTAD 1998: 252). FDI flows from Brazil to Argentina may be affected in the first place by Brazil's economic problems.

The crisis may have ambiguous effects on FDI flows from Latin American neighbors to Brazil. On the one hand, the devaluation of the real improves Brazil's attractiveness for export-oriented FDI.[4] On the other hand, deep recession in Brazil tends to discourage FDI oriented towards local markets. The depressing effect on FDI in Brazil is likely to dominate if continued financial volatility causes Argentine and Chilean investors to postpone further engagements in Brazil. Moreover, investors from Argentina may be constrained financially with their home country moving into recession as well.

If recessionary tendencies were spreading in Latin America, intra-regional FDI relations would likely be disrupted on a broader scale. The effects of such a development on Brazil tend to be small compared with other Latin

4 Obviously, this does not only apply to FDI from Latin American sources. The devaluation of the real may also induce foreign investors from the United States and Europe to redirect export-oriented FDI towards Brazil. This will impair the chances of Argentina, in particular, to attract export-oriented FDI. Nevertheless, total FDI flows to Brazil are expected to decline in 1999 (see Section IV below).

Table 6 — Intra-regional FDI Flows in Latin America, 1997 (US$ million)

Countries/region of origin	Major host countries:					Sum of seven Latin American countries
	Argentina	Bolivia	Brazil	Colombia	Venezuela	
Argentina	—	265	590	...	936	1,979
Brazil	380	...	—	...	115	495
Chile	221	...	1,337	1,315	154	3,156
Mexico	232	...	20	...	1,802	2,222
Latin America	941	265	1,947	1,586	3,293	8,365
Memo items:						
FDI inflows from world						
- US$ million, 1997[a]	6,327	500	16,330	2,447	4,893	...
- percent of gross fixed capital formation, 1996	9.7	39.8	7.5	22.2	17.6	...

[a]Estimates.

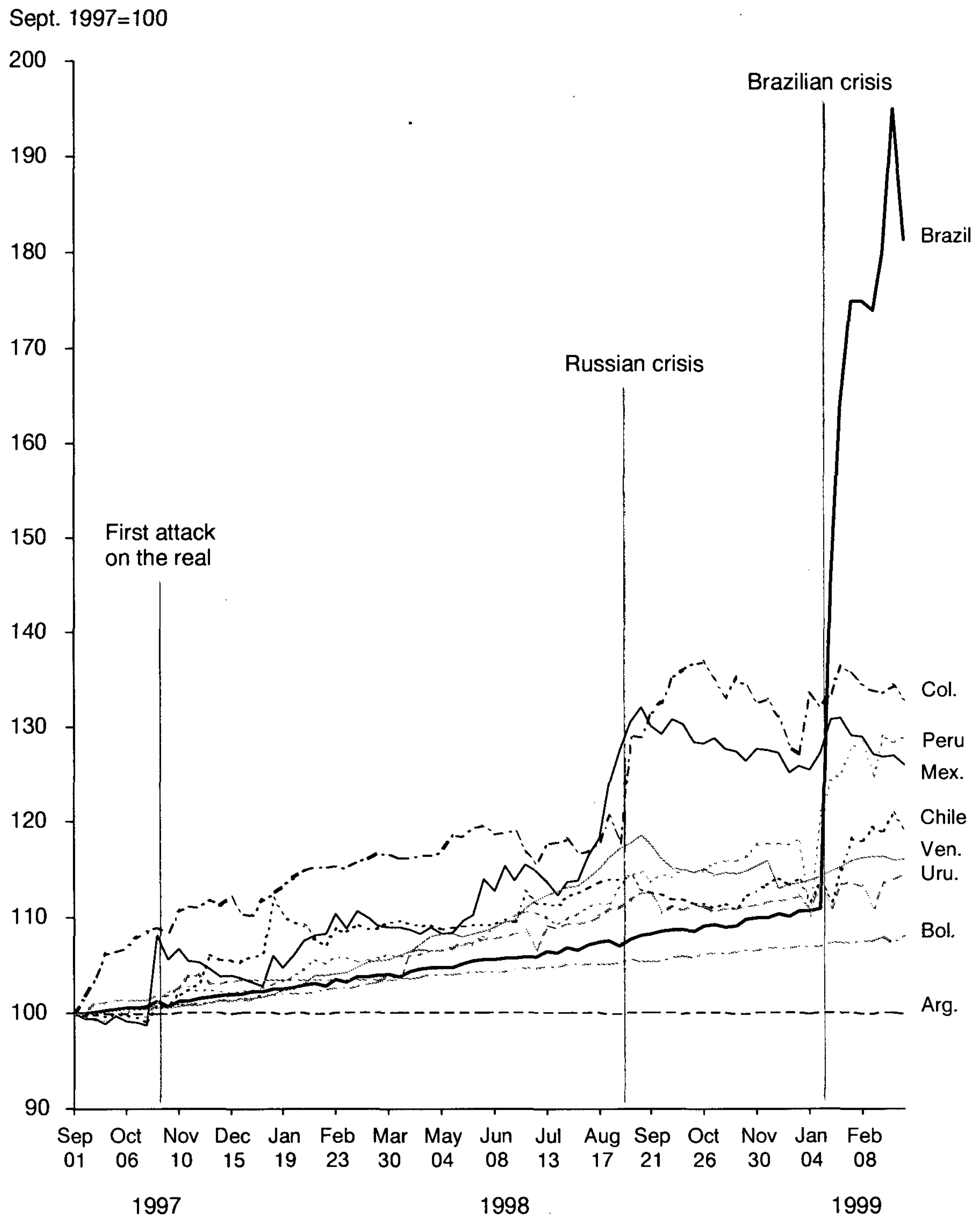
Source: UN-CEPAL (1998); UNCTAD (1998).

American host countries. In Brazil, intra-regional FDI contributed only modestly to total FDI inflows (12 percent) and, as is typical for a large country, total FDI represented a relatively small share in gross fixed capital formation (Table 6). Elsewhere, intra-regional FDI accounted for a large share in total FDI inflows, notably in Bolivia, Colombia and Venezuela. Moreover, gross fixed capital formation in these host countries depends heavily on FDI inflows. For example, gross fixed capital formation in Bolivia may decline by about 20 percent if Argentina were no longer to invest in this country.

The Asian crisis suggests that contagion transmitted through international financial markets represents the most serious threat Latin America is facing after the collapse of the real. Yet, the evidence available indicates that financial contagion has remained limited in Latin America so far:

- Recent exchange rate developments reveal that the collapse of the real has not affected exchange rates in other major Latin American countries (Figure 3). Most importantly, Argentina's currency board has been maintained and the Mexican peso continued to fluctuate just mildly. The decision of Ecuador in mid-February 1999 to float the sucre seems to be taken mainly because of the difficult economic situation of Ecuador itself (depressed oil prices, "El Niño"-effects), rather than because of contagion from Brazil.
- Risk premia, as reflected in short-term interest-rate spreads over US interest rates, may indicate whether private investors consider Latin American countries to represent separate risks or rather a common risk group. Data on interest-rate spreads presented by Merrill Lynch (1999) support the notion of separate risks if average interest-rate spreads since early 1997 are compared across countries. For example, interest-rate spreads rarely exceeded 600 basis points in Argentina, whereas they ranged from 1,500 to 4,500 basis points in Brazil.
- To assess the significance of financial contagion, *changes* in interest-rate spreads seem to be more relevant than average levels. Considering the period 1997–1999, interest-rate spreads in Brazil peaked for the first time in fall 1997 (Merrill Lynch 1999). The same happened in Argentina, whereas interest-rate spreads remained more or less unchanged throughout 1997 in Chile, Mexico, Peru and Venezuela. Contagion was more pronounced in late summer 1998, when interest-rate spreads peaked in all major Latin American countries.
- Financial contagion in late summer 1998 notwithstanding, correlation analysis (covering the period from August 1997 to March 1999) reveals that short-term interest rates in major Latin American countries were mostly unrelated to short-term interest rates in Brazil

Figure 3 — Exchange Rate Developments in Selected Latin American Countries, 1997–1999 (national currency vis-à-vis US dollar)



Source: DATASTREAM.

Table 7 — Correlations between Short-Term Interest Rates in Brazil and in Other Latin American Countries, August 1997–March 1999

	Argentina	Chile[a]	Colombia	Mexico	Venezuela
Brazil	0.12	0.09	0.002	0.44*	0.03

[a]August 1997–December 1998. — *significant at the 10 percent level.

Source: *The Economist*, Emerging-Market Indicators (various issues).

(Table 7). Most surprisingly perhaps, the rise in Brazilian interest rates since January 1999 has not induced rising interest rates in other major Latin American countries (Figure 4).

- By contrast, stock market developments were strongly correlated between major Latin American countries since September 1997 (Figure 5).[5] In early 1999, however, stock market developments have diverged. Floating the real resulted in an increase in Brazilian share prices (in terms of reais) by about 50 percent from January 11 to March 8, 1999. During the same period, share prices increased in Chile and Mexico, but declined in Colombia, Venezuela and — though only marginally — in Argentina.[6]

All in all, the Brazilian crisis is likely to affect other Latin American countries in various ways. Some of Brazil's neighbors will suffer significant trade effects. Intra-regional investment relations may be disrupted, particularly if recession spreads to other countries. The rather weak evidence on financial contagion until March 1999 may be attributed to Brazil's exceptional economic situation, especially its fiscal problems that are much more serious than elsewhere in the region (refer to Table 2 above). However, the financial indicators presented in this section must be interpreted with considerable caution. The limited evidence available so far may prove unreliable for assessing future risks, especially if financial turbulence continues in Brazil.

IV. Critical Factors Shaping Short-Term Prospects

As shown before, most analysts expect Latin America to recover in 2000 (Table 1). It depends on various factors whether this optimistic outlook will prove correct. *First* of all, it is crucial that Brazil succeeds in containing recession. This will only be achieved if real rates of interest come down to reasonable levels, and if the servicing of (domestic and foreign) debt does not undermine the stability of the domestic financial system (as has happened in Asian countries):

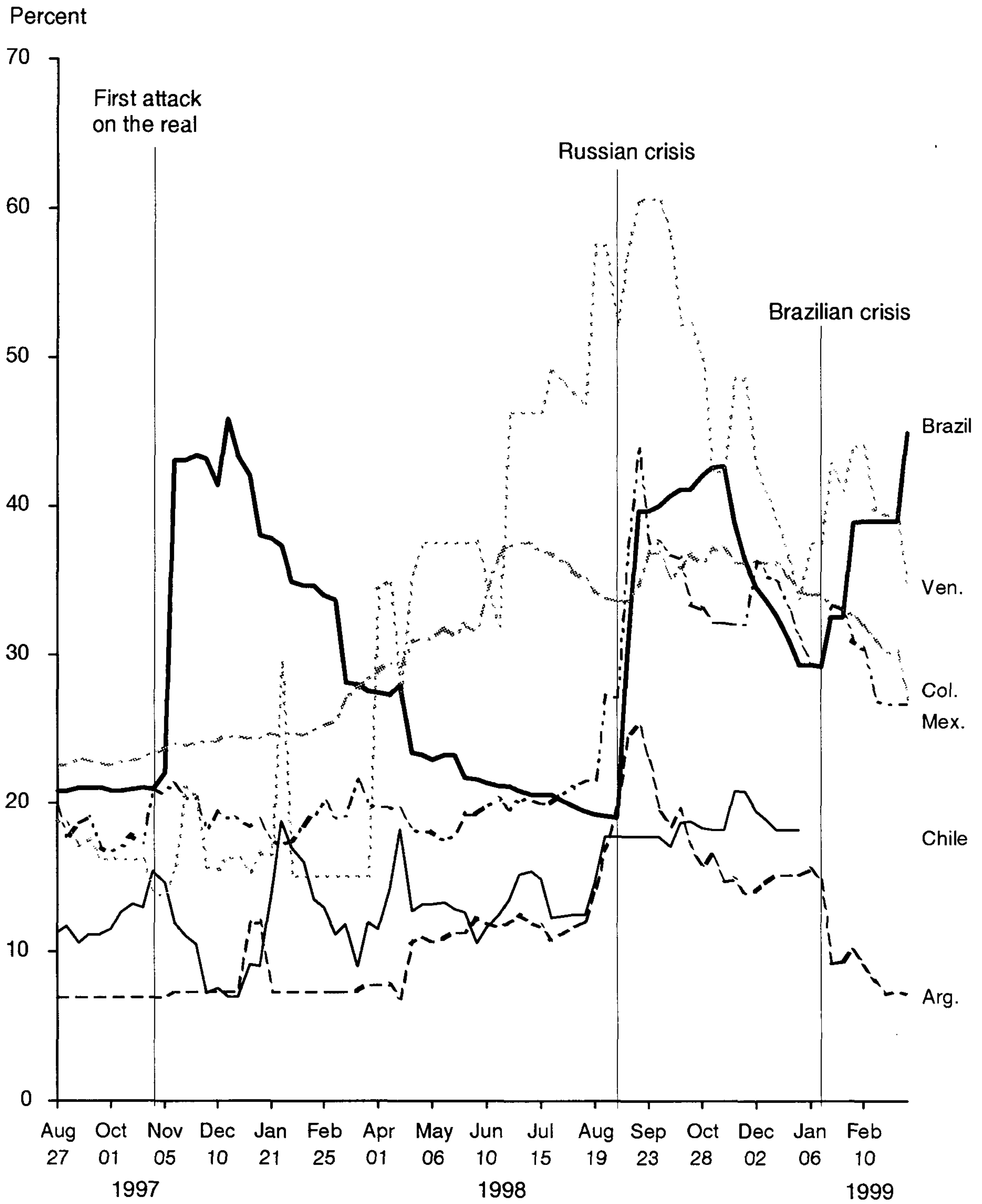
- It cannot be taken for granted that investment in Brazil will receive a push from lower interest rates in the short run. Earlier hopes that floating the real would result in an immediate fall in interest rates were frustrated. By definition, rising inflation in 1999 will lower the real rate of interest. However, the Central Bank may need to raise the nominal rate of interest further if fears about a return to hyperinflation fuel capital flight. As a matter of fact, the Central Bank decided on March 4, 1999, to raise the interbank rate for daily transactions from 39 to 45 percent.
- The soundness and efficiency of the Brazilian banking system was hardly disputed until late 1998 (Dresdner Bank Lateinamerika 1998: 17 ff.).[7] Recently, however, financial

5 Comparing stock market developments in Brazil with stock market developments in other Latin American countries results in correlation coefficients ranging from 0.68 (Brazil/Colombia) to 0.87 and 0.89 (Brazil/Argentina and Brazil/Mexico, respectively). Note that Figure 5 portrays stock market developments in national currencies.

6 In US$ terms, share prices have declined slightly in Brazil since early 1999 (*The Economist*, March 13, 1999: 136). Yet, stock market developments in Latin America have diverged in US$ terms as well, with Mexico reporting the steepest increase (21 percent) and Venezuela reporting the steepest decrease (22 percent).

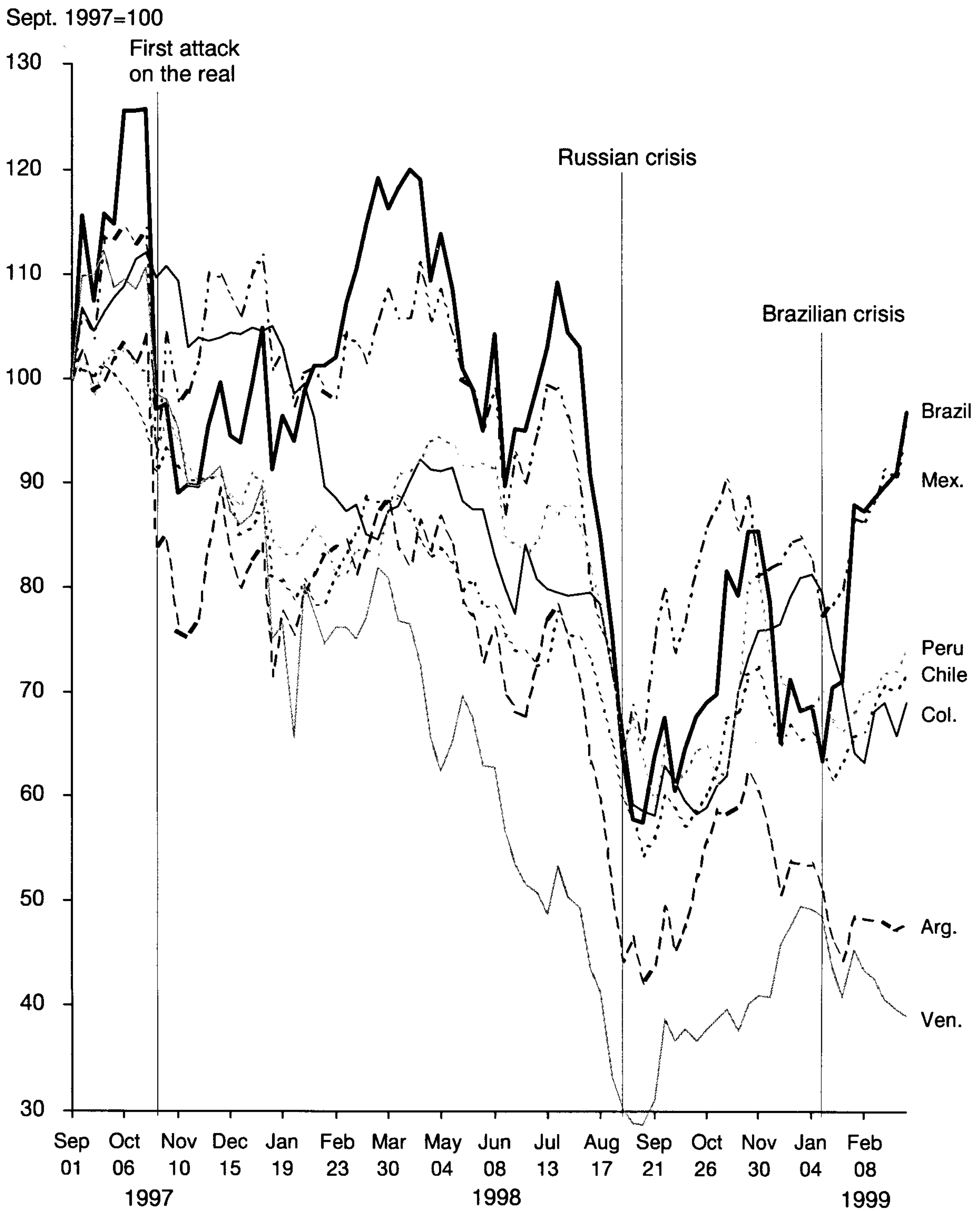
7 Reportedly, nonperforming credit accounted for about 8 percent of total bank loans; loan-loss reserves were fairly high (11 percent of total bank loans).

Figure 4 — Short-Term Interest Rates in Selected Latin American Countries, 1997–1999



Source: *The Economist*, Emerging-Market Indicators (various issues).

Figure 5 — Stock Market Developments in Selected Latin American Countries, 1997–1999 (national currencies)



Source: DATASTREAM.

market analysts expressed concerns that Brazilian banks have hedged their foreign currency obligations only partly (*Frankfurter Allgemeine Zeitung*, February 16, 1999). Mounting debt-service obligations and deep recession are likely to increase the share of non-performing loans. A further weakening of the real is expected to cause problems even for basically sound banks.

Second, for several Latin American countries (notably for Mexico), the United States is a critically important actor (Table 5). The expected slowdown of economic growth in the United States to about 2 percent in 2000 (forecast by the Kiel Institute) renders it rather unlikely that US demand for Latin American exports will pull the region out of recession. A still greater risk is that the US administration will give in to various protectionist pressure groups. Sentiments may spread that the United States can no longer bear the adjustment burden resulting from higher exports of crisis-ridden emerging markets, including those in Latin America.

Third, the collapse of the real may give rise to trade conflicts within Latin America. The Mercosur faces a litmus test. Bilateral trade disputes between the major Mercosur partners Argentina and Brazil would not come as a surprise, taking into account earlier conflicts, for example, relating to automotive trade. Uruguay anticipates serious balance of payments troubles resulting from the devaluation of the real, which improves Brazil's price competitiveness vis-à-vis its trading partners (IRELA 1999: 6). Uruguay has threatened to unilaterally suspend the Mercosur tariff regime if Brazil will not put an end to its export subsidies. It is open to question whether Brazil will agree to compensatory measures that are most likely to be sought by its Mercosur partners if the real remains depressed.

Fourth, the combination of low international commodity prices and the still high dependency on commodity exports of several Latin American countries hinders quick economic recovery. Commodity prices are of particular relevance for the export prospects of oil-exporting countries (notably Venezuela and Ecuador) and major suppliers of ores and metals (Bolivia, Chile and Peru) (Table 8).[8] Copper prices will remain depressed in 1999 and are unlikely to recover in 2000 (EIU 1998a: 8). Particularly Chile and Peru are affected negatively. Likewise, revenues from oil exports are not expected to recover in the foreseeable future. Even Mexico, for which oil exports have lost tremendously in relative importance, encounters adjustment problems because of depressed oil prices (EIU 1999). The Mexican government decided in early 1999 to raise tariffs on imported intermediates (by 3–10 percentage points) from countries that do not have preferential trading arrangements with Mexico, in order to compensate for declining oil revenues (*Frankfurter Allgemeine Zeitung*, March 4, 1999). This indicates that unfavorable prospects related to commodity exports represent another threat to an open trading environment in Latin America.

Table 8 — Share of Selected Product Categories in Total Exports of Latin American Countries, 1995 (percent)

	Fuels	Ores and metals	Manufactured goods
Argentina	10.4	1.6	33.9
Bolivia	14.6	35.4	18.6
Brazil	0.9	10.3	53.5
Chile	0.3	48.2	13.5
Colombia	24.8	0.6	38.7
Ecuador	35.9	0.3	7.8
Mexico	10.3	2.9	77.7
Paraguay	0.1	0.1	14.1
Peru	5.4	45.6	14.8
Uruguay	0.9	0.7	38.8
Venezuela	77.4	5.3	14.3

Source: UNCTAD (1997a).

Fifth, and maybe most importantly, external financing of large current account deficits is no longer guaranteed. The reliance of Latin America on foreign capital is fairly strong. In contrast to developing countries in East Asia,

[8] In Colombia, too, export earnings in 1999 will suffer from low world market prices of oil and coffee (EIU 1998b: 8). By contrast, Brazil imports oil and, hence, benefits from low oil prices. Moreover, low international prices of iron ore and coffee have a minor impact on Brazil. Iron ore and coffee accounted for 9 and 4 percent of total Brazilian exports in 1996, respectively (EIU, *Country Report Brazil*, 1997 (4th quarter): 5).

the share of gross domestic savings in GDP has been low and declining in various Latin American countries (Nunnenkamp 1998a: Table 1). For example, the savings ratio was below 20 percent in 1996 in Argentina, Brazil, Colombia and Peru (World Bank 1998b). Strong reliance on foreign capital is also revealed by high shares of FDI inflows in gross fixed capital formation. In 1996, this share amounted to almost 13 percent in Latin America as a whole, compared with 7.4 percent in developing Asia (UNCTAD 1998: Annex table B.5).

According to projections of the Institute of International Finance, foreign capital flows to Latin America may dry up in 1999 (*Frankfurter Allgemeine Zeitung*, January 28, 1999). Moreover, foreign investors are expected to demand high risk premia when engaging in Latin America. This applies especially to Brazil, where risk premia declined only slightly (to 13 percent for Brazilian C-bonds) after the devaluation of the real. Brazil is also expected to experience a substantial decline in FDI inflows in 1999.

The effect of each of these risk factors on Latin America's short-term economic prospects cannot be quantified precisely. It should be clear, however, that recession would be deepened and economic recovery would be retarded if several adverse developments were to occur at the same time.

V. Will the Structural Reform Agenda Remain Unfinished?

In late 1997, IRELA (1997) presented an assessment of macroeconomic stabilization and structural reform efforts in Latin America. It was shown that reforms since the late 1980s have had positive results in various respects (see also Nunnenkamp 1998b). At the same time, several bottlenecks remained which, if untackled, were likely to compromize Latin America's longer-term prospects to participate successfully in globalized production and marketing:

- The labor market "is virtually untouched by reform" (IRELA 1997: 4). Labor market legislation in most Latin American countries dampens job creation in the formal sector, since it distorts the price of labor relative to capital.
- Latin America, notably Brazil, is lagging behind Asian competitors in terms of human capital formation. More and better qualified labor is needed in order to attract world-market oriented FDI, which depends on complementary factors of production in host countries.
- Survey results point to deficiencies with regard to business-related services and infrastructure (e.g., transportation, distribution and communication systems) (WEF various issues).
- Competitive disadvantages of Latin America are also spotted in the area of public decision making (transparency, corruption and bureaucratic interference with private business) (see also Brunetti, Kisunko and Weder 1998).

These issues should still figure high on the policy agenda. The hazard is that longer-term challenges may take second place as long as Latin American policymakers are preoccupied with crisis management. Delays in structural reforms are most likely in areas involving immediate financial trade-offs. Fiscal discipline required for short-term stabilization clashes with public investment required for overcoming structural bottlenecks.

For the time being, this conflict may hinder human capital formation in the first place. Prolonged financial turbulence will probably have as a result that public investment in education and health care is curtailed and postponed. Likewise, the chances to stimulate private investment by lowering business taxes appear to be remote. As a consequence, the adjustment of production and export structures to Latin America's comparative advantage may be retarded.

The impetus to structural reforms is easier to maintain in areas which are part of internationally supported adjustment programs. For

example, Brazil is committed under the IMF program to speed up privatization, particularly in the energy sector and in financial services. This may save public resources and, at the same time, help improve the availability and efficiency of business-related services. However, private sector involvement in services and infrastructure may prove insufficient to compensate for reduced public investment, which is likely to result from fiscal consolidation.

Against this backdrop, it is all the more important to tackle without delay those issues that do not involve direct financial trade-offs. This is not to ignore the difficulties of pushing forward labor market reforms and sustaining openness to foreign trade during recession. Deregulation of labor markets may add to unemployment in the short run, and give rise to social tension as long as "there is virtually no protection for the unemployed" (IRELA 1997: 9). Latin American governments may also be tempted to reverse trade opening in order to contain unemployment in the short run. Hence, it is not only for immediate financial constraints that structural reforms may take second place until recession is overcome in Latin America.

Yet, Latin American governments may send clear signals to domestic and foreign investors, indicating their determination to stay on course even under conditions of financial turmoil. Public sector reforms leading to better governance are of critical importance in this respect. Brazil, for example, "should immediately put the remaining privatizations on the table and get them done, without corruption" (Dornbusch 1999: 2). Dornbusch may be overly optimistic and overstates his case when arguing that privatization is half the story of reform, and retreating from arbitrary rule making and interference with business life is the other half. However, privatization and good governance would definitely alleviate fiscal constraints and help restore private investor confidence in Brazil and in the region as a whole.

References

Brunetti, A., G. Kisunko, and B. Weder (1998). Credibility of Rules and Economic Growth: Evidence from a Worldwide Survey of the Private Sector. *World Bank Economic Review* 12 (3): 353–384.

Deutsche Bank Research (1997). Lateinamerika und die asiatische Finanzkrise. Aktuelle Themen 67. Frankfurt a.M.

Dornbusch, R. (1999). Brazil Beyond Tropical Illusions. Massachusetts Institute of Technology, Cambridge, Mass. Mimeo.

Dresdner Bank Lateinamerika (1998). Der Bankensektor in Lateinamerika. In Dresdner Bank Lateinamerika, Kurzbericht über Lateinamerika. Hamburg.

EIU (Economist Intelligence Unit) (1998a). *Country Report Chile.* 4th Quarter. London.

— (1998b). *Country Report Colombia.* 4th Quarter. London.

— (1999). *Country Report Mexico.* 1st Quarter. London.

— (various issues). *Country Report Brazil.* London.

Fonds Magazin (1999). Lateinamerika: Schwenk zu mehr Solidität. (February): 12–13.

IDB-IRELA (Interamerican Development Bank and Institute for European-Latin American Relations) (1996). *Foreign Direct Investment in Latin America in the 1990s.* Madrid: IRELA.

IMF (1998a). Camdessus Welcomes Conclusion of Talks on Brazil's Program. News Brief 98/43. Washington, D.C.

— (1998b). *World Economic Outlook and International Capital Markets: Interim Assessment.* December, Washington, D.C.: IMF.

IMF (1999a). Camdessus Recommends Approval of Brazil's Revised Program. News Brief 99/10. Washington, D.C.

— (1999b). *International Financial Statistics*. CD-ROM, Washington, D.C.

— (various issues). *Direction of Trade Statistics Yearbook*. Washington, D.C.: IMF.

IRELA (Institute for European-Latin American Relations) (1997). Structural Reform in Latin America: The Unfinished Agenda. Dossier 62. Madrid.

— (1999). *The Brazilian Crisis and Financial Volatility: Causes and Prospects*. Madrid: IRELA.

Krugman, P. (1999). Alas, Brazil. Internet version, http://web.mit.edu/krugman/www/brazil.html

Merrill Lynch (1999). *Currency & Bond Market Trends*. February 18.

Nunnenkamp, P. (1998a). Dealing with the Asian Crisis: IMF Conditionality and Implications in Asia and Beyond. *Intereconomics* 33 (2): 64–72.

— (1998b). Lateinamerika nach der "verlorenen Dekade": Eine Zwischenbilanz der Reformen. Kiel Discussion Papers 324. Institute of World Economics, Kiel.

Reisen, H. (1999). *After the Great Asian Slump: Towards a Coherent Approach to Global Capital Flows*. Policy Brief 16, OECD Development Centre. Paris: OECD.

Sachs, J. (1999). Self-inflicted Wounds. *Financial Times*, January 22.

The Economist (various issues). Emerging-Market Indicators. London.

UN-CEPAL (United Nations, Comisión Económica para América Latina y el Caribe) (1997). *La Inversión Extranjera en América Latina y el Caribe. Informe 1997*. Santiago de Chile.

— (1998). *La Inversión Extranjera en América Latina y el Caribe. Informe 1998*. Santiago de Chile.

UNCTAD (1997a). *Handbook of International Trade and Development Statistics*. New York: United Nations.

— (1997b). *World Investment Report: Transnational Corporations, Market Structure and Competition Policy*. New York: United Nations.

— (1998). *World Investment Report: Trends and Determinants*. New York: United Nations.

WEF (World Economic Forum) (various issues). *The Global Competitiveness Report*. Geneva.

World Bank (1998a). *Global Development Finance*. Washington, D.C.: World Bank.

— (1998b). *World Development Indicators*. CD-ROM, Washington, D.C.