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### LESSONS FROM THE SOUTHERN CONE POLICY REFORMS

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ew reform packages have led to as much controversy as those in the Southern Cone countries of Argentina, Chile, and Uruguay. Some observers, notably in the press, have concluded that the reform effort as a whole was a failure. Others, including the present authors (1985a), have suggested that many of the microeconomic reforms were quite successful and that most of the problems were caused by macroeconomic management during the transition to a more open economy. Still others have blamed unfavorable external shocks (Sjaastad 1983). And some maintain that the sequence in which the reforms were implemented was a major cause of failure (Edwards 1985, Frenkel 1983).

The lessons of the Southern Cone experience are of interest not only to the economic historian. They are also of pressing practical importance to policymakers in other developing countries, most of whom are either adopting or contemplating reforms very similar to many of the measures employed in the Southern Cone. This article reviews the lessons. It complements our earlier paper (Corbo and others 1986), in which we drew country-specific conclusions from what our research suggested were the major failures in each country. Here we ask whether the reforms were consistent with what seems to be the emerging consensus on how to implement stabilization and liberalization policies in developing countries. We review conditions before the reforms began and summarize and evaluate the reforms, paying particular attention to how far they deviated from today's consensus. We then interpret the outcome of the reforms and draw policy lessons.

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The Period before the Reform By the early 1970s the three Southern Cone economies were among the most distorted of the middle-income developing countries. Expansionary demand policies combined with fixed or slowly adjusting exchange rates, pervasive price controls (over 90 percent of the basket of goods in the consumer price index was controlled in each country), and restrictive trade regimes; the result was accelerated inflation, bottlenecks in production, slow export growth, and chronic balance of payment difficulties.<sup>1</sup>

For more than three decades, trade policies in all three countries were strongly biased in favor of import-substituting industrialization and against exports. All three countries had experimented with some mild trade liberalization: Argentina in the second half of the 1960s, Chile in 1956–62 and again in the late 1960s, and Uruguay in 1959. In each case, they had restored a very restrictive trade regime with widespread tariff and nontariff barriers.

Fragmentary evidence shows high effective rates of protection to domestic sales in each country: 84 percent in Argentina (1969), 151 percent in Chile (1974), and 384 percent in Uruguay (1968) (see tables 1–3). In all three countries, protection also varied widely across sectors—an indicator of distorted incentives—the piecemeal result of decades of pressure from different interest groups.

The three economies had become steadily less open since the late 1920s. As shown in tables 1–3, the ratio of total trade (exports plus imports) to gross domestic product (GDP) was 25 percent for Uruguay, the smallest of the three countries, in the early 1970s. Chile's ratio was 20 percent, and Argentina's 17 percent. These percentages were well below the norm for countries of similar size and development (see Chenery and Syrquin 1975).

All three countries were also in severe macroeconomic disequilibrium (see table 4). Both Chile (1973) and Argentina (1976) had large fiscal deficits, rapid inflation, and acute shortages of foreign exchange. Public sector deficits averaged 10 percent of GDP in Argentina in 1973–75, 16.1 percent in Chile during 1971–73, and 3.2 percent in Uruguay during 1971–73.<sup>2</sup> Only Uruguay was not in deep crisis by the early 1970s. It still had some foreign exchange reserves. But its per capita incomes had barely grown at all for twenty years.

### Stabilization What Was Done Reforms The Control by

The first task of the reform programs was to restore external balance and to rein in galloping inflation.<sup>3</sup> In each country, governments first adopted an orthodox program that included a large devaluation with a unification of the different exchange rates, and an attempt to restrain monetary growth and public expenditures. In a second phase,

# Table 1. Protection and Trade Openness in Argentina (percent)

A. Protection

Sector	Effective protection to domestic value added, 1969	Industry		Legal tariff, December 1977	Realized protection, February 1977	Effective protection, February 1977
Primary activities	-8.0	Textiles		57.4	41.1	85.3
Processed foods	44.0	Clothing		95.0	79.2	131.6
Beverages and tobacco	95.0	Paper and paper pr	oducts	29.0	30.8	74.9
Construction materials	31.0	Industrial chemical	<b>s</b>	35.2	36.6	60.0
Intermediate products I	146.0	Other chemicals		17.0	0.0	-14.8
Intermediate products II	9.0	Rubber products		45.0	29.6	29.3
Nondurable consumer	50.0	Glass		41.8	12.3	14.6
goods		Other nonmetallic	mineral	11.0	0.0	-1.9
Consumer durables	145.0	products				
Machinery	120.0	Basic ferrous metal		48.2	60.7	84.8
Transport equipment	207.0	products				
		Basic nonferrous m	ietal	44.5	47.0	88.0
Equally weighted	83.9	products				
arithmetic mean		Metal products		45.9	10.0	-11.5
Standard deviation	69.7	Nonelectrical mach	ninery	65.5	19.7	-4.7
Variability coefficient	0.8	Electrical machine	гу .	61.3	55.7	77.6
Range	215.0	Transport equipme	nt	87.2	29.7	3.5
-		Scientific and other		50.0	73.3	92.6
		equipment				
		Weighted average		52.7	37.1	39.1
B. Openness						
Measure	1929	1951–55	1965-70	) 1971–73	1974–79	1980-8
Share of foreign trade in G	DP 36.0	39.4	15.6	17.0	19.2	17.6

Note: Estimates are based on price comparisons; 1977 estimates are for ninety products and probably underestimate protection because of the prevailing high real exchange rate in 1977 (see figure 1).

Source: For 1968: Berlinski and Schydlowsky 1982; for 1977: Nogues 1986.

starting in 1978, they opted for exchange rate stabilization.<sup>4</sup>

Governments expected these "orthodox" measures to be contractionary, but thought that their potential benefits would easily outweigh the temporary costs of recession. Restoring external balance was much more important in Argentina and Chile than in Uruguay. In Chile, the short-run recession was the deepest; the external shock in 1974–75 was the greatest (Corbo and de Melo 1987); and inflation was also reduced the most. In Argentina, where inflation was more rapid, concern about the political consequences of unemployment limited the stabilization effort (Fernandez 1985).

Anti-inflationary measures were considered insufficient to cure balance of payments difficulties, so each country also made a major effort

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### Table 2. Protection and Trade Openness in Chile (percent)

#### A. Protection

			Ef	fective protection	0 <i>n</i>	
Se	ector		1967	1974	1979	
Consumer goods			138.8	189.7	13.2	
Intermediate good	s		172.9	139.6	14.0	
Machinery and tra	ansport equip	ment	265.3	96.0	13.0	
Equally weighted	arithmetic me	an	176.7	151.4	13.61	
Standard deviation	n		279	60.4	1.7	
Variability coeffici	ient		1.57	0.399	0.124	
Range			1,163	216	6	
3. Openness						
Measure	1929	1951–55	1965-70	1971-73	1974–79	1980-82
Share of foreign trade in GDP	66.3	21.7	24.0	20.3	36.1	32.6

Note: Data on protection are simple averages.

Source: For protection data: Corbo and Meller 1981, Aedo and Lagos 1984; for trade and GDP data: International Monetary Fund, International Financial Statistics, various issues.

> to switch spending.<sup>5</sup> They also eliminated multiple exchange rates for commodity trade and, more important, followed their initial devaluations of the exchange rate with a passive crawling peg regime. It was intended to maintain purchasing power parity adjusted by changes in the terms of trade.

### What Should Have Been Done

Countries with rapid inflation will face complications if they try to liberalize their economies at the same time as stabilizing them. On the one hand, the success of stabilization depends on squeezing the economy as a whole; on the other, trade liberalization calls for the contraction of highly protected import-substituting firms and the expansion of export-oriented sectors. If both programs are applied simultaneously, the contractionary pressure on highly protected import-substituting activities might be too strong to withstand.

A second complication is the downward inflexibility of prices. To overcome this phenomenon, trade liberalization has to be accompanied by an initial devaluation of the exchange rate to achieve the desired improvement in the relative prices of exportables. However, the devaluation will also push up import prices, temporarily accelerating inflation.

### Table 3. Protection and Trade Openness in Uruguay

(percent)

### A. Protection

Type of protection	1 1968	1978	1980	1981	1982ª	
Nominal protection						
Domestic sales						
Formal	263	86	40	46	60	
Without reference p	orices —	72		39	_	
Implicit	_	25	36	38	41	
Adjusted <sup>b</sup>	_			1	—	
Export sales	4	16	16	1	22	
Adjusted <sup>b</sup>	_			-18	—	
Redundant protection o	n					
domestic sales <sup>c</sup>		23	6	1	8	
Effective protection						
Domestic sales						
Actual	384	_	_	75		
Adjusted <sup>b</sup>				27	—	
Unweighted				118	_	
Potentiald	_	—	<u></u>	89		
Adjusted <sup>b</sup>				37	_	
Unweighted		—	_	107		
By sales category						
Durables	-			317		
Nondurables			<u> </u>	37	_	
Intermediates		—	—	101	—	
Machinery <sup>e</sup>		-		286		
Coefficient of variation	on —			103		
Export sales						
Actual	37		—	30	_	
Adjusted <sup>b</sup>				-5	_	
Unweighted	_			39		
Potentiald				20		
Adjusted			_	-13	—	
Unweighted		—	—	33	_	
Coefficient of variation	on —			184		
. Openness						
	951-55 19	65–70	1971–73		 74–79	1980

Share of foreign trade in GDP 19.6 27.3 ---Not available.

Note: All rates, unless otherwise noted, are weighted averages; product weights are at world prices.

a. Calculated with 1981 weights.

b. Adjusted for exchange rate deviation from purchasing power parity.

c. Computed as the difference between the formal nominal rate of protection and the landed price (inclusive of customs duties) of corresponding imported goods.

25.1

36.2

d. Potential effective protection computed using formal nominal rates of protection.

e. Includes transport equipment.

Source: For 1968: Bension and Caumont 1981; for 1978-82: Centro de Investigaciones Económicas 1983 and Mezzera and de Melo 1985.

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# Table 4. Macroeconomic Indicators for Chile, Uruguay, and Argentina,by Period, 1941–83

Country			Prereform				<i>Reform</i>		Postreform crisis,	
and indicator	1941-50	1951–60	1961-70	1965-70	1971–73	1974-76	1977-78	1979-81	1982-83	
Chile										
Average annual growth (percent)										
Gross domestic product	4.0	4.4	4.5	4.1	1.3	-1.8	7.8	6.9	-7.4	
Expenditure	4.0	4.5	4.0	5.1	1.3	-8.2	11.9	10.2	-14.4	
Exports <sup>a</sup>	11.6	3.4	9.4	11.8	9.9	23.5	7.9	20.4	-0.1	
Imports <sup>a</sup>	12.3	8.8	6.5	8.1	5.6	22.3	35.2	28.7	-30.2	
Gross fixed investment		41.8	1.7	5.3	-9.8	-7.8	16.7	17.8	-26.6	
Consumer prices		37.6	27.2	23.3	149.7	358.0	79.0	30.2	11.7	
Average level										
Fiscal deficit/GDP			1.6	2.1	16.1	5.1	1.3	-2.1	3.1	
Unemployment (percent)	—			6.0	4.6	14.2	13.6	12.2	22.2	
Real wage $(1969 = 100)$				98.0	98.0	69.0	82.0	100.0	82.0	
Gross investment/GDP	-	10.0	15.4	14.4	12.1	16.0	14.0	16.7	13.3	
Terms of trade $(1968 = 100)$	63.3	73.4	89.4	101.4	92.7	79.0	60.3	56.1	42.5	
Current account/GDP		1.1	2.4	1.4	2.9	2.6	5.6	9.1	7.4	
Uruguay										
Average annual growth (percent)										
Gross domestic product	4	0.04	1.6	2.1	-0.4	4.3	3.2	4.7	-7.2	
Expenditure	4	0.8	1.3	2.9	-0.2	1.9	3.6	5.6	-11.2	
Exports <sup>a</sup>	16.5	-3.7	6.5	3.9	16.8	21.4	10.2	21.8	-2.9	
Imports <sup>a</sup>	16.3	5.7	1.9	3.9	8.7	30.2	14.0	32.1	-30.7	
Gross fixed investment		5.8	-1.5	7.3	-10.8	25.	10.5	6.9	-24.8	
Consumer prices	_	23.2	47.9	49.8	62.7	69.2	51.3	54	33.3	
Average level										
Fiscal deficit/GDP	—	_		1.9	3.2	3.8	1.9	0	6.4 <sup>b</sup>	
Unemployment (percent)		_	_	8.2	8.1	9.7	12.4	8.4	13.7 <sup>b</sup>	

For countries with annual inflation of 25 percent or more, today's emerging consensus would therefore suggest that stabilization should precede liberalization (Fischer 1986a, Sachs 1986). This is because inflation reduces substantially the information content of relative prices, and the main aim of liberalization is to adjust relative prices in accordance with economic costs. Inflation also has other side effects that damage economic performance. These are well documented (Fischer 1986b, Yeager 1981) and are of four main kinds. First, with rapid inflation, changes in the rate do not affect all prices and costs uniformly and at the same time. This makes relative prices very volatile, reducing their information value. Second, in countries with high inflation, interest rates are usually controlled. The result is negative real rates, which lead to credit rationing, distorted investment

### Table 4 (continued)

Country			Prereform				Reform	n	Postreform crisis,
and indicator	1941-50	1951-60	196170	1965-70	1971–73	197476	1977-;	78 1979-81	1982-83
Uruguay (cont.)									
Real wage (1969 = 100)	_			104	102	86	7(	) 64	54 <sup>b</sup>
Gross investment/GDP	_	13.0	12.2	11.3	10.1	13.	15.6	5 16.1	13.5 <sup>b</sup>
Terms of trade $(1968 = 100)$	114.5	115.6	109.5	107.2	134.9	76	90.7	7 89	80.3 <sup>b</sup>
Current account/GDP	_		3.5	0.05	-0.5	3.4	3.2	2 5.4	0.7 <sup>b</sup>
Argentina	1941-50	1951-60	1961-70	1965-73	1973-75	1970	578	1979-80	198283
Average annual growth (percent)									
Gross domestic product	2.5	3.5	4.4	4.2	2.9		0.8	0.9	-3
Expenditure	—	6.5	3.1	4.2	3.3	-	1.6	3.4	-6.1
Exports <sup>a</sup>	13.0	2.2	5.7	11.5	21.3	2	9.9	2.7	-33.5
Imports <sup>a</sup>	20.1	5.6	4.3	9.0	29.6		2.1	55.8	-15.6
Gross fixed investment	_	13.5	30.6	2.6	7.6		1.1	-4.0	-3
Consumer prices	15.3	30.5	21.5	29.9	138.7	22	5.5	100.8	188.5
Average level									
Public sector deficit/GDP	5.9	6.0	4.4	3.7	10.1	1	1.6	10.1	17.8
Unemployment (percent)				5.7	2.4		3.4	2.2	4.7
Real wage $(1969 = 100)$		_		125	154	1	100	118	111
Gross investment/GDP		22.5	18.8	19.1	21.4	2	6.4	22.8	17.2
Terms of trade $(1968 = 100)$	124.6	100.8	103	120.1	133.4		89	86.5	84.0
Current account/GDP	_	1.9	-0.5	0.2	1.5		2.1	1.8	1.8

—Not available.

a. Imports and exports are valued in dollars.

b. Data are for 1982-84

Source: National accounts and Corbo and others 1986, table 1; for public sector deficit/GDP in Argentina: Cavallo and Peña 1983.

decisions, and a shrinking of the formal financial system. Third, because of uncertainty about future inflation, financial transactions tend to be concentrated in short-term instruments, thus reducing the supply of long-term investment finance. Fourth, rapid inflation is also associated with external crisis, as periodic attempts to control inflation through the exchange rate mean that the currency appreciates in real terms. The resulting balance of payments difficulties and capital flight reduce both actual and potential output.

The recommendation to start with a stabilization program also stems from the fact that successful liberalization depends on credibility and on having a stable and competitive real exchange rate. Both these objectives are difficult to attain when inflation is rapid. Not surprisingly, there are few historical examples in which stabilization and liberalization were achieved simultaneously. Indeed, one of the most extensive studies of trade liberalization has concluded that its failure stemmed mainly from the failure of the accompanying anti-inflationary programs (Krueger 1978, 1981).<sup>6</sup>

For countries with annual inflation rates of, say, 15–25 percent, stabilization still remains a high priority, but liberalization can be introduced at the same time. However, any stabilization program should avoid measures that could jeopardize successful liberalization: the most obvious example is real exchange rate appreciation.<sup>7</sup> Nor should export taxes be used in countries where the antiexport bias of the trade regime needs to be corrected.

In countries with inflation rates below 25 percent a year, macropolicies should be designed to maintain an "appropriate" and stable real exchange rate. For economies operating fixed rate or crawling peg regimes, the initial reduction in tariffs should be accompanied by a devaluation that, although it would not restore the landed prices of imports, would ensure that the relative prices of exports improves (Mussa 1986). The same applies to those countries that have long discriminated against exports.

Besides exchange rate policy, other macroeconomic reforms should also support and ensure confidence in the liberalization effort. Thus, monetary expansion should be compatible with the rules for pegging exchange rates, and fiscal policy should try to ensure that the budget deficit is compatible with the domestic credit expansion resulting from a stable pegging rule (Buiter 1986) and does not crowd out the financing of sectors that are meant to expand. Credit policy should ensure access to credit at competitive rates for the expanding sectors, while denying cheap credit to the previously heavily protected sectors (because its availability could retard their adjustment). And the labor market should be flexible enough to allow for a fall in the consumption wage in previously heavily protected sectors or a reallocation of labor toward the sectors that were previously discriminated against. Otherwise, unemployment will result.

#### Evaluation

The initial thrust of reform in the three countries was certainly in line with the framework suggested above. Yet several years after the contractionary policies had been applied, inflation remained disturbingly rapid.<sup>8</sup>

In Argentina, much of the public sector deficit continued to be monetized until late 1978. In Chile, although the public sector deficit was transformed into a surplus by 1978, the reduction of inflation was bound to take time, because retroactive indexation (Fischer 1984) was widespread (Corbo 1985a, 1985b). Uruguay's inflation, although initially much lower than that of the other two countries, proved intractable because many nontradables were affected by spillover demand from Argentina (Hanson and de Melo 1985).

Persistent inflation prompted a major shift in tactics in all three countries. In a second phase of stabilization policy, the intended path of the exchange rate was preannounced, so as to control the evolution in the price of tradables as well as overall inflationary expectations. This policy corresponded to an "active" crawling peg and was clearly a departure from orthodoxy.<sup>9</sup> In practice, the schedule of devaluations, known as the *tablita*, proved to be less than the difference between domestic and world inflation.

Proponents of the new approach thought that purchasing power parity (especially in Chile) and interest parity (in Argentina and Uruguay) would come fairly rapidly as the result of competition in free commodity and capital markets. In Argentina and Uruguay, the antiinflationary policy took precedence over other economic objectives with the adoption of the tablita in December 1978. In Chile, too, bringing down inflation became a main concern when the tablita was adopted in February 1978. All three countries, but especially Argentina and Uruguay, sometimes used tariff reductions to impose price discipline rather than to rationalize the trade regime (see tables 5–7).

At the time, the exchange rate approach to stabilization was a seductive novelty. Several other countries—including Brazil, Israel, Peru, Portugal, Sri Lanka, and Turkey—flirted with it, hoping, like the Southern Cone countries, to avoid the recessionary costs known to accompany orthodox stabilization. But the others were more pragmatic than the Southern Cone countries, quickly abandoning the exchange rate strategy when tradable sectors became seriously uncompetitive.

Each of the three countries departed from our suggested framework inasmuch as they began to liberalize before inflation had fallen below 50 percent a year. This departure could conceivably be defended on the grounds that, with distortions so widespread, there were substantial gains to be had from liberalization. However, the danger of an inappropriate mix of policies was quite high. In particular, the three countries ignored one of the key ingredients of successful liberalizations—the maintenance of an appropriate and stable (but not necessarily constant) real exchange rate. In each country, the large real appreciation of the exchange rate after 1978 weakened the extent and credibility of the liberalization effort (see figure 1 on p. 126).

### What Was Done

With different timing and intensity, all three countries removed price controls, liberalized interest rates, reduced restrictions on trade Liberalization Reforms

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Year	Stabilization	Liberalization
1976	Exchange rate policy: (April) stabilization of exchange	Domestic product markets: (April) prices gradually liberalized.
	rates from multiple rate system to dual rate (commercial and financial) system with fixed but periodically adjustable parities.	Labor markets: arrangements made for periodic adjustment of nominal wages.
	(December) convergence of financial and commercial exchange rates.	<i>Domestic financial markets:</i> (May) preliminary attempt to correct negative real interest rates for borrowing through new tax on loans.
		<i>External financial flows:</i> (July) liberalization of rules for negotiating foreign exchange loans.
		<i>Commercial policy:</i> (April) progressive removal of prior peso deposit requirements and of quotas on imports.
1977	<i>Monetary policy</i> : (March) imposition of 120-day price control period to reduce inflation.	<i>Domestic financial markets:</i> (January) repeal earlier law that had nationalized bank deposits.
		<i>Commercial policy:</i> further relaxation of quotas on imports as foreign exchange reserves increase.
1978	Exchange rate policy: (December) preannouncement of peso/U.S. dollar exchange rates through end of August	<i>Domestic financial markets:</i> (October) authorization of use of gold coins in bureaus of exchange.
	1979.	<i>External financial flows:</i> progressive removal of restrictions on foreign exchange transactions of less than US\$5,000 (June) to less than US\$20,000 (September).
		Commercial policy: (December) elimination of prior peso deposit requirement for financing foreign trade; program announced for reduction of tariffs to 16 percent average and elimination of export taxes by 1986.

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 Table 5. Stabilization and Liberalization Measures in Argentina, 1976–82

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1979	Exchange rate policy: (January) preannouncement of peso/U.S. dollar exchange rates through end of	<i>Domestic product markets:</i> prices progressively decontrolled until 1982.
	December 1979. (October) preannouncement of peso/U.S. dollar	Labor markets: wages progressively decontrolled until 1982.
	exchange rate for January 1980 and of formula for determining future month-by-month rates.	Domestic financial markets: introduction of fractional reserve requirements for financial institutions; extension of central bank guarantee of deposits to all authorized institutions.
		<i>Commercial policy:</i> (June) 1978 tariff reduction program accelerated.
1980	Exchange rate policy: (September) announcement of 1 percent devaluation for October 1980 and following months. (December) announcement of peso/U.S. dollar buy/sell rates for December 1980 to March 1981.	Domestic financial markets: (April) guarantee on deposits raised.
1982	Monetary policy: (July) imposition of 100 percent reserve requirements for bank deposits and regulated	<i>Labor markets:</i> (July–August) attempt to obtain voluntary wage-price agreement.
	credit allowances. <i>Exchange rate policy:</i> (July) reintroduction of dual	Domestic financial markets: (May-June) guarantee on deposits
	exchange rate system.	lowered. <i>External financial flows:</i> (September) authorization to sell foreign exchange obtained on commercial (85 percent) and financial (15 percent) markets.

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### Table 6. Stabilization and Liberalization Measures in Chile, 1973–82

Year	Stabilization	Liberalization	
1973–74	<i>Fiscal policy:</i> start of sale of publicly owned firms (500 sold by 1979).	<i>Domestic product markets:</i> (October 1973) many product prices deregulated.	
	<i>Exchange rate policy:</i> (October 1973) multiple exchange rate reduced to three-rate system; 300 percent devaluation and establishment of crawling peg.	Domestic financial markets: (May 1974) interest rates freed for capital market transactions by Financieras. (October 1974) interest rates freed for commercial banks; 1974 maximum debt-capital ratio set at 20.	
		<i>External financial flows:</i> regulations governing inflows of external funds into Chilean banks liberalized.	
		<i>Commercial policy:</i> (late 1973 through 1974) new government removes quotas and reduces average tariff from 105 percent to 69 percent; maximum tariff rate cut from 750 percent to 140 percent.	
1975	<i>Monetary policy:</i> restrictive monetary policy to cope with 1975 balance of payments crisis.	<i>Taxation:</i> (early) extension of value-added tax coverage; one-year surcharge on personal income tax; and 10 percent	
	Fiscal policy: (early) reduction of deficit from 30.5 percent of GDP to 2.6 percent in one year; program involved an across-the-board cut of at least 19 percent in government spending on goods and services, sale of government assets, and improved tax collection.	consumption tax on luxury goods.	
	<i>Exchange rate policy:</i> introduction of unified exchange rate.		
1976		<i>Commercial policy:</i> new tariff structure proposed with rates of 25, 30, and 35 percent for primary, semimanufactured, and manufactured goods.	
1977	<i>Exchange rate policy:</i> devaluation amounts linked to consumer price index; inflation reduced to 3–4 percent a month.	<i>External financial flows:</i> (September) commercial banks authorized to intermediate capital inflows up to monthly ceiling of inflows of 5 percent of each bank's capital and reserves.	
		Commercial policy: following Chile's withdrawal from the Andean Pact, effective tariffs of 10–35 percent proposed for implementation by mid-1977.	

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1978	<i>Exchange rate policy:</i> tablita introduced with devaluation rate above monthly change in consumer prices to compensate for tariff cuts and lower rates thereafter.	
1979		<i>Labor markets:</i> labor union activity generally diminished since 1973; collective bargaining now authorized at plant level only; wage floor set at previous wage indexed for consumer price increases.
		<i>External financial flows:</i> global limits on external borrowing eliminated; controls now only overall 20:1 ratio of borrowing to capital and reserves and 5 percent limit on monthly inflows.
		Commercial policy: uniform tariff of 10 percent set (except for cars with engines larger than 850 cubic centimeters).
1980	<i>Exchange rate policy:</i> nominal rate fixed at mid-1977 level.	<i>External financial flows:</i> (April) limit on monthly inflows eliminated; only 20:1 overall borrowing ceiling and applicable reserve requirements retained.
1981		<i>Labor markets:</i> legislation enacted allowing workers to negotiate fringe benefits and employers to fire workers without giving cause; minimum coverage wage limited to workers age 21–65.
1982	Exchange rate policy: (June) fixed rate abandoned; 18 percent devaluation. (August) initially "clean" but later "dirty" float. (September) new rate based on highest dirty float rate, with monthly devaluation in line with change in consumer prices.	<i>Labor markets:</i> (June) wage indexation suspended. (December) legislation enacted to correct distorting effect of wage floor.

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Year	Stabilization	Liberalization
1974	<i>Exchange rate policy:</i> exchange rates for capital transactions freely determined; passive crawling peg for goods transactions.	Domestic product markets: (July) liberalization of domestic prices of nonessential goods begins (94 percent of consumer prices hitherto controlled).
		<i>Taxation:</i> (July) removal of personal income and inheritance taxes; corporate profits tax (25 percent rate) established with remission for exporters' reinvested profits.
		Domestic financial markets: (September) gradual lifting of interest ceiling on peso loans.
		<i>External financial flows:</i> (September) liberalization of capital market and regulations on foreign exchange holdings and transactions; de facto convertibility of the peso through unrestricted purchase or sale of assets denominated in foreign currency.
		<i>Commercial policy:</i> (July) removal of export taxes on beef and wool; removal of some administrative and financial restrictions on imports.
1975	Monetary policy: (May) establishment of system of alloting credit; central bank to pay interest on reserves	<i>Domestic product markets:</i> (July–December) liberalization of 13 percent of consumer goods prices.
	required by law.	<i>External financial flows:</i> (May) authorization of repatriation of earnings, profits, and capital by foreigners.
		Commercial policy: (January) removal of remaining quotas.
1976		Domestic product markets: (February) liberalization of prices of nonconsumer goods, except monopolies. (later) liberalization of another 25 percent of consumer prices.
	e se en	<i>Domestic financial markets:</i> (March–September) domestic interest rates effectively freed; interest ceiling of 62 percent a year.
		<i>External financial flows:</i> (midyear) authorization of foreign currency trading through other than commercial banks.

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### Table 7. Stabilization and Liberalization Measures in Uruguay, 1974–82

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1977		Domestic financial markets: (midyear) relaxation of banking law limiting number of financial intermediaries. (November) commercial banks permitted to pay interest on cash amounts.
1978	<i>Exchange rate policy:</i> (October) effective 90-day predetermination of exchange rate by forward sale of three-month treasury bills redeemable in U.S. dollars; official unification of formerly dual foreign exchange market.	Domestic product markets: (July) replacement of official price-fixing agency by new agency to promote competition and price flexibility. (August) liberalization of another 13 percent of consumer goods prices.
		<i>Domestic financial markets:</i> (October) introduction of nil marginal reserve requirement and 20 percent unified legal reserve requirement.
		<i>Commercial policy:</i> (December) initiation of tariff reduction program to achieve a uniform 30 percent tariff by 1985.
1979	<i>Exchange rate policy:</i> (October) capital and commercial market foreign exchange is unified.	Domestic product markets: (March) reduction of list of goods and services with administratively fixed prices.
		<i>Taxation:</i> (November) social security taxes reduced; banking tax and tax concessions to exporters abolished; 18 percent value added tax imposed.
		Domestic financial markets: (May) elimination of 8.4 percent banking tax and legal reserve requirements.
		Commercial policy: (early) removal of interest subsidies for exports. (February) acceleration of tariff reductions. (September) further tariff cuts. (November) elimination of remission of profits tax for exports and of subsidized credit to exporters.
1980		<i>Domestic product markets:</i> (June) official fixing of car prices because of lack of foreign competition; only 29 percent of consumer goods prices and 14 percent of agricultural prices still fixed.
1982	<i>Exchange rate policy:</i> (June) imposition of 10 percent import surcharge and 10 percent increase in reintegros.	

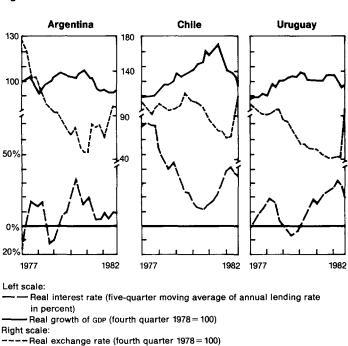
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and capital flows, and partly deregulated their labor markets (see tables 5–7). The sequence varied from country to country, although financial market deregulation proceeded rapidly in all three. Uruguay removed all controls on capital flows and on many prices early on,



but was slower to liberalize foreign trade. It went furthest in reforming its fiscal system, eliminating income tax, and moving to a value added tax. Chile did most to abolish price controls and reduce trade barriers, but it maintained controls on short-term capital flows for a long period. It also retained some important labor market regulations. Argentina eliminated price controls and removed most restrictions on medium-term (more than one year) capital flows. It also got rid of many import quotas (with some important exceptions) before making some reductions in tariffs. Uruguay virtually eliminated price controls by the end of 1979, but did little to reduce protection.

Contrary to popular belief, only Chile liberalized its trade substantially. Effective rates of protection remained high in Argentina and Uruguay; pressure from foreign competition was felt only at the height of the overvaluation of real exchange rates. For example, in Uruguay redundant protection was not eliminated until 1981 (see table 7 and figure 1). At that time the bias against export sales was still 35 percent.<sup>10</sup>

As far as the reform of domestic financial markets was concerned, nonprice allocation of credit and strongly negative real interest rates had long been widespread in all three countries. Each began by progressively eliminating ceilings on interest rates and then reduced restrictions on financial intermediaries. Argentina went from 100 percent reserve requirements and directed credit programs to a decentralized fractional reserve system. The Chilean reforms began by allowing nonbank intermediaries to operate without interest rate controls. Then, over several years, interest rate ceilings for commercial banks were removed, and state-owned commercial banks were returned to the private sector. In Uruguay, starting in 1974, the government legalized dollar deposits and dismantled its directed credit programs; in 1977, it lifted controls on entry to the banking system.

Figure 1

As for international capital flows, Uruguay legalized unrestricted movements of private capital as early as 1974 and reached full convertibility by early 1977. Argentina eliminated most controls on capital movements between 1977 and 1979. Chile progressively deregulated flows of medium-term capital, eliminating global limits on borrowing in 1979 and restrictions on monthly inflows in April 1980. But restrictions on short-term capital inflows were not dismantled until late 1981.

Labor markets were changed little in the three countries. They continued to be controlled through penalties or prohibitions on labor dismissals, together with legislated wages and wage indexation. However, the weakening of trade union power in the early stages of the reforms amounted to some deregulation.

### What Should Have Been Done

There is broad agreement on the general principles that define the contents of any liberalization package, but room for much disagreement on the sequencing, speed, and extent of liberalization. In highly regulated economies with widespread price controls, the right approach would be to lift price controls so as to improve resource allocation, while simultaneously deregulating domestic labor and capital markets. Financial markets should be deregulated (subject to appropriate rules for banking supervision) so as to improve the allocation of credit and thus of investment. Similarly, labor market restrictions should be lifted so as to facilitate the contraction of inefficient businesses and the expansion of new, efficient ones.

As for trade policies, quotas should first be replaced with equivalent tariffs. Then the range of tariff rates and their average level should be reduced, with the aim of achieving a low, uniform tariff. As a rule, there should be no discrimination between exporting and import-competing activities (Little and others 1970, Corden 1974, Balassa 1976).<sup>11</sup>

The implementation of reforms is more complicated, because is raises questions of dynamics (about which little is known). The literature covers two sets of issues: the speed of reforms and their sequencing.

Speed of reforms. In considering whether policies should be changed gradually or at a stroke, it is essential to remember that liberalization is not an end in itself, but a means to achieving a more efficient use of resources. Because resource allocation depends on expected prices, the credibility of the reforms is very important. They therefore need realistic timetables—and what is realistic may differ from one policy area to another and from country to country. Any reform package that ignores the pace at which individuals and organi-

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zations can adjust—a variable that is partly determined by political circumstances—runs the risk of failure and undermines the credibility of future reforms. Indeed, the theory of rational expectations demonstrates that coherence and credibility are important in determining the likely effect of reforms on, for example, investment and labor hiring and thus on the program's success or failure (Calvo 1986a, 1986b).

Credibility can be enhanced by including policies that are intended to speed up adjustment. In regard to foreign trade, for example, the pace of liberalization must depend on how quickly resources can be expected to be reallocated to the sectors that have hitherto been discriminated against; otherwise substantial unemployment would result. The initial conditions in each country are an important factor: for example, the smaller the investment-GNP ratio, the slower should trade be liberalized. Similarly, the more competitive and flexible the labor market, the faster can trade liberalization proceed.<sup>12</sup>

Financial deregulation can also be problematical if initial conditions are overlooked. For example, if a large proportion of the assets of financial institutions are held at rates below the market and lending rates are substantially negative in real terms, then deregulation of interest rates will create difficulties for existing institutions. In particular, if deposit and lending rates are deregulated simultaneously and new banks are allowed into the financial system, existing banks will be forced to pay market rates. They may then suffer substantial capital losses, jeopardizing the banking system's solvency. This implies the need for a transition phase, in which lending rates are deregulated, with deposit rates following gradually.

The liberalization of capital flows provides another example of the importance of taking initial conditions into account. The vital question is whether domestic interest rates are higher or lower than those prevailing abroad (when expressed in the same currency), since the difference between the two will determine whether there are net capital inflows or outflows. Large capital inflows will push up the real exchange rate, which in turn will jeopardize the success of trade liberalization (Bruno 1983, Corbo 1983, de Melo 1987).

Whatever the initial conditions, a substantial reform program implemented briskly and to an agreed timetable offers major advantages. First, the required reallocation of resources will not occur unless the reforms provide strong and clear signals. Second, an unduly slow pace of reforms will delay the emergence of export activities and of interest groups whose support for the reforms could help counter the antagonism of those who have been benefiting from the protective regime (Papageorgiou and others 1986).

Sequencing of Reforms. Here, too, economic theory offers little guidance about the optimal sequence for removing distortions when many markets are initially regulated. Given that the goal of liberaliza-

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tion is to improve resource allocation, however, some broad principles can be derived. The first stage is to deregulate domestic markets to ensure that resources are reallocated. The second stage involves liberalizing foreign economic relations. It is usually argued that the current account of the balance of payments should be liberalized first, then the capital account. Much has been written on this issue (see McKinnon 1982, Frenkel 1982 and 1983, Krueger 1984, Edwards 1985).

Two arguments have been advanced for liberalizing domestic markets and the current account before the capital account. First, because asset prices are determined by the present value of income streams, income streams generated by distorted prices will result in assets being traded at distorted prices (Krueger 1984). Second, since asset markets typically adjust much faster than commodity markets, liberalization of the capital account could result in large capital flows-with unwanted consequences for the real exchange rate. By the same argument, the current and capital accounts must, by definition, be brought into line with each other, and thus the speeds at which they adjust must be harmonized. It is much easier to achieve this by slowing down capital flows than by accelerating the liberalization of the current account (Frenkel 1983, Edwards 1985). This point could be extended by arguing that, within the current account, imports respond faster than exports: thus, opening up the capital account first could jeopardize the trade liberalization by producing a sharp increase in imports much in advance of the export expansion.

### Evaluation

The Southern Cone countries did not conform to the emerging consensus on the sequencing of liberalization. Argentina and especially Uruguay deregulated capital flows early on. The Uruguayan experience is interesting, since none of the perverse side-effects (such as real exchange rate appreciation) occurred so long as the exchange rate was not used to bring down inflation. Indeed, the contractionary effects associated with orthodox stabilization were avoided because of capital repatriation and domestic financial deregulation (de Melo 1987). These two factors, combined with a stable real exchange rate, were the keys to faster growth in 1974–78—though other factors, including higher savings and investment rates, also helped.

Chile, in contrast, followed the recommended sequence of liberalizing the current account first and the capital account later. However, a combination of retroactive indexation of wages and interest rates and substantial capital inflows produced a large real appreciation of the exchange rate, which put the trade liberalization in jeopardy.

In all three countries, the most far-reaching reform was the deregulation of financial markets. This is not surprising: one might reasonably expect much less resistance from threatened interest groups to financial liberalization than, say, a lowering of trade barriers or a freeing of labor markets. Eventually all three countries also decontrolled short-term flows of external capital—something rarely done in developing countries—but only Uruguay went all the way in this. In foreign trade, only Chile virtually eliminated protection.

As tables 5–7 show, deregulation was usually gradual. The exceptions were the removal of controls on capital flows in Uruguay and to a smaller extent in Argentina, and the sale of public enterprises in Chile. The reform process cannot be criticized for abruptness; indeed, trade liberalization in Argentina and Uruguay was, if anything, too little, too late, and too slow.

### Outcomes

The results of the reforms can be evaluated in three periods. The first corresponds to the management of the macroeconomic crisis and the reduction of some microeconomic distortions (1974–78 in Chile and Uruguay; 1976–78 in Argentina). The second starts with the use of the exchange rate to bring down inflation, often referred to as the tablita period, and ends with the sudden reduction in foreign finance in August 1982. The third is the post-August 1982 period.

### The First Period: Stabilization with Some Liberalization

During the first period, all three countries were gradually adopting anti-inflation policies and liberalizing markets. In Chile, as progress was being made in reducing the fiscal deficit and in controlling inflation, the terms of trade fell sharply. This resulted in a loss of real income of close to 5 percent of GDP. The decline in the terms of trade plus the big reduction in the fiscal deficit produced a severe recession: GDP fell by 12.9 percent in 1975. It then grew at an average rate of 8.3 percent a year in 1975-78. The urban unemployment rate, which had reached 15.0 percent in 1975 and 16.3 percent in 1976, was reduced to 13.3 percent in 1978. The inflation rate, which had averaged 358 percent a year in 1974-76, fell to an annual average of 79 percent in 1977-78. In spite of the sharp deterioration in terms of trade, exports grew in current dollars at an average of 23.5 percent a year in 1974-76 and 7.9 percent a year in 1977-78. The fiscal deficit was only 5.1 percent of GDP in 1974-76 and 1.3 percent of GDP in 1977-78. Real wages, which had dropped by 29.6 percent between 1971-73 and 1974-76, rose by 18.8 percent between 1974-76 and 1977-78 (table 4). The tariff rate inclusive of the real exchange rate peaked in 1975 and then declined, but was almost constant between 1977 and 1978.

The most unexpected results were the slowness of disinflation (despite a big reduction in the public sector deficit) and the high real interest rates that followed financial deregulation. The real interest rate on peso loans was 127.2 percent in 1975, 65.2 percent in 1976, 58.0 percent in 1977, and 43.8 percent in 1978 (Corbo 1985a). Different explanations have been offered for these high rates: the fiscal and monetary squeeze; restrictions on capital inflows; the high cost of financial intermediation arising from reserve requirements; the reduction in inflation which, though slow, may nevertheless have been unexpected; and distress borrowing by firms that had been heavily protected (Edwards 1986, Ramos 1984, and Zahler 1985). These explanations have not been corroborated, however, and they leave unanswered the issue of how to evaluate credit risk when loans carry such high real interest rates (an issue discussed later).

Argentina's terms of trade loss was smaller than Chile's and Uruguay's at the beginning of the reforms. But its GDP growth was even slower than in the prereform period, although exports grew at an average of 29.9 percent a year in 1976–78, and the current account had a surplus equivalent to 2.1 percent of GDP. The average unemployment rate increased from 2.4 percent in 1973–75 to 3.4 percent in 1974–76 and would have been higher if the military government had not deliberately kept it low to prevent political unrest. Real wages fell by 33.3 percent between 1973–75 and 1976–78. The inflation rate, which had reached 443.2 percent in 1976, was reduced to 176.1 percent in 1977 and 175.5 percent in 1978 (Fernandez 1985). This slow pace of disinflation is not surprising, given that the public sector deficit increased from 10.1 percent of GDP in 1973–75 to 11.6 percent in 1976–78.

The freeing of Argentina's domestic interest rates and most commodity prices in the middle of 1977 also resulted in positive real interest rates between the last quarter of 1977 (when they reached an annual rate of 10 percent) and the last quarter of 1978 (when they again turned negative until the end of phase 1 [Fernandez 1985, table 2]). Not surprisingly, these rates were lower than Chile's, since capital inflows were not restricted.

In Uruguay, output grew right from the start of the reforms. This achievement was all the more remarkable because of the huge fall in the terms of trade during the reform years (table 8) in comparison with 1965–70 and the especially favorable period of 1971–73 (see table 4). Several factors accounted for this turnaround. First, the real exchange rate became less volatile after the passive crawling peg was introduced in 1972. Second, the antiexport bias of high tariffs was partially offset by the abolition of taxes on traditional exports and the introduction of incentives for nontraditional exports. On average, exports grew by 21 percent a year during 1974–76. Their growth was helped by the accompanying reduction in costs (for example, the fall in real wages) and by expenditure-switching policies.

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The removal of quotas on imports of critical goods, together with increased public investment, dramatically boosted total investment (see table 4). Between 1974 and 1978, public investment rose by nearly 400 percent in real terms, while private investment doubled. As a result, GDP growth—which averaged barely 1 percent a year in 1955–73—rose to an annual average of nearly 4 percent between 1974 and 1978.

One other factor contributed to this dramatic change: a rise in capital inflows. Capital repatriation by Uruguayans and growing deposits by Argentines averted a severe drop in real liquidity (de Melo 1987). The inflows allowed Uruguay to prepay debt incurred under a stabilization plan of the International Monetary Fund. The cumulative totals of "net errors and omissions" in the balance of payments—a crude proxy for capital flight—went from an outflow of Us\$250 million for 1970–74 to an inflow of Us\$51 million for 1975–81.

The fiscal deficit, which averaged 3.8 percent of GDP during 1974–76, was brought down to 1.9 percent during 1977–78. Nevertheless, inflation (which had peaked at 97 percent in 1973) proved stubborn and averaged 51 percent a year over 1977–78. As in Argentina, the gradual lifting of ceilings on domestic interest rates raised average real borrowing interest rates. They went from a negative 30 percent in 1973 to a positive 3.6 percent in 1978 (Hanson and de Melo 1985, table 3).

## The Second Period: Stabilization through Preannouncement of the Exchange Rate

At the start of this second phase, Argentina's public sector deficit was still almost 10 percent of GDP; Chile still had a wage indexation mechanism that was bound to result in a real appreciation of the exchange rate; and Uruguay's fiscal deficit increased substantially in 1981. The anti-inflationary programs in all three countries were flawed.

In this second period, domestic demand grew faster than output in the three countries (table 4). The gap was filled by foreign finance, and exchange rates rose in real terms (figure 1). The international depreciation of the dollar and the demand pressures on nontradables limited the effectiveness of anti-inflationary policies. In Chile, the annual inflation rate was reduced from 50 percent in 1978 to 20 percent in 1981 and to zero in early 1982, but the accumulated real appreciation of the peso was large. Argentina's inflation rate only fell from 175 percent in 1978 to 101 percent in 1980. Uruguay's rate actually rose, from 44.5 percent in 1978 to 66.8 percent in 1979; this was partly due to the deregulation of domestic beef prices in August 1978 and to demand pressures resulting from heavy spending by Argentine tourists. Inflation subsequently fell to 63.5 percent in 1980 and 34.0 percent in 1981.

In all three countries, increased imports and loss of export competitiveness combined to raise the current account deficit. In Chile, the deficit rose from 5.6 percent of GDP in 1977–78 to 9.1 percent in 1979–81; Argentina moved from a current account surplus equal to 2.1 percent of GDP in 1976–78 to a deficit of 1.8 percent in 1979–80; and in Uruguay the deficit increased from 3.2 percent of GDP in 1977–78 to 5.4 percent in 1979–81 (table 4). Because all three economies were booming, the average unemployment rate was reduced from 14.2 percent to 13.6 percent in Chile, from 12.4 percent to 8.4 percent in Uruguay and from 3.4 percent to 2.2 percent in Argentina.

At least two factors contributed significantly to the increase in domestic demand and the resulting current account deficits. First, particularly in Argentina and Uruguay, the real appreciation of exchange rates led to extra spending on imported durables while their prices were low (Dornbusch 1985). Second, the rise in asset values in all three countries during the boom phase produced a wealth effect on spending (Barandiaran 1984, Corbo 1983, Dornbusch 1985, Fernandez 1985, Hanson and de Melo 1985, and Harberger 1983).

As exchange rates continued to rise in real terms, so doubts grew about the sustainability of the tablita. These doubts were reflected in growing interest rate spreads despite the shrinking (Chile) or absence (Argentina and Uruguay) of impediments to short-term capital flows. Real interest rates rose sharply, adding to the difficulties of the tradable goods sectors. Toward the end of phase 2, companies were doing more and more borrowing to stave off bankruptcy and awaiting a bailout after devaluation (Diaz-Alejandro 1985, Tybout 1987).

### The Third Period: Crisis

The inconsistency in the three countries' economic policies became apparent in late 1980 in Argentina and in early 1982 in Chile and Uruguay. In Argentina, with an externally financed public sector deficit of over 10 percent of GDP and no prospect of fiscal reform, doubts about the sustainability of the exchange rate regime began as early as the first half of 1980. They were increased by the collapse in April 1980 of the BIR (Banco de Intercambio Regional), which prompted a 25 percent increase in the money supply in a single month. When President-elect Viola refused to make a commitment about future exchange rate policy, private capital outflows accelerated. The 10 percent devaluation in February 1981 was too little and too late and only exacerbated the crisis.

In Chile, despite a fiscal surplus in 1979–81 equal to 2.1 percent of GDP, the current account deficit reached 14.6 percent of GDP in 1981.

The exchange rate rose by 29.8 percent in real terms between the second quarter of 1979 (when the rate was fixed) to the last quarter of 1981 (Corbo 1985a). Doubts about the sustainability of the exchange rate started to set in, with inflows of private capital decreasing from US\$1.6 billion in the second half of 1981 to only US\$900 million in the first half of 1982. The monetary contraction that followed resulted in high interest rates and a sharp recession.

In Uruguay, the fiscal deficit (which had fallened continuously through 1980) started to increase in 1981 with an underfunded social security reform. Meanwhile, the real exchange rate rose by 27.4 percent between 1978 and 1981—and even more relative to Argentina, after the latter's stabilization attempt collapsed (Hanson and de Melo 1985). As doubts grew about the sustainability of the tablita, so outflows of private capital started to increase in 1981 (de Melo 1987). Thus capital flight started in Argentina and Uruguay (and to a lesser extent in Chile) *before* their economies were hit by the adverse external developments of the early 1980s.

The debt crisis that began in August 1982 and the interruption of voluntary capital flows had severe consequences for all three countries. Chile's private sector was too dependent on foreign financing; the same was true of Argentina's public sector; Uruguay was somewhere in the middle. The debt crisis closed the option of using public borrowing to finance outflows of private capital, but the private sector had in fact already started to adjust. The August 1982 crisis therefore implied a faster cut in domestic demand and a faster real depreciation of the exchange rate. The stickiness of nontradable prices and wages made the recession even worse. Chile abandoned its exchange rate regime in June 1982; Uruguay did so in November 1982.

How important were the external shocks? The interest rate shock, which began to be felt after U.S. interest rates starting rising at the end of 1979, affected not only the cost of new borrowing but also the interest on existing debt. This latter effect was particularly strong in the three Southern Cone countries during 1982–83, because much of their debt carried variable interest rates. As shown in table 8, the combination of declining terms of trade and increasing interest costs amounted to 12.2 percent of GDP in Chile and 6.7 percent of GDP in Argentina. However, external shocks were insignificant during 1979–81—which was when the unsustainability of the stabilization programs based on exchange rates became apparent.

The results in table 8 were confirmed by simulation of an econometric model estimated with annual data for 1962–83 (Corbo and de Melo 1987). In Chile, where external shocks were heaviest before the crisis, the simulations suggest that, if the average interest rate of 1974–79 and the terms of trade of 1980 had prevailed during 1981–83, GDP growth would have been only 2.1 percent a year and external

# Table 8. External Shocks in Argentina, Chile,and Uruguay

(percent of GDP)

Country and period	Terms of trade (1)	Interest rate (2)	Total (1) + (2)
Argentina			· · · · · · · · · · · · · · · · · · ·
1976-78	-2.9		-2.9
1979-80	-0.3	2.8	2.5
1981-82	-0.3	-6.4	-6.7
Chile			
1974-78	-5.7		-5.7
1979-81	-1.9	0.2	-1.7
1982-83	-4.8	-7.4	-12.2
Uruguay			
1974-78	-7.6		-7.6
1979-81	-0.4	0.9	0.5
1982-83	1.9	-2.9	-1.0

-Not available.

Note: The real income effect of changes in terms of trade is computed from import and export unit value indexes weighted by the import share of GDP. The interest rate effect is calculated as

$$\frac{i - \hat{P}_T}{1 + \hat{P}_T}$$
;  $\hat{P}_T = (\hat{P}_X + \hat{P}_M) 0.5$ 

where  $\hat{P}_X$  and  $\hat{P}_M$  are percentage changes in the export and import price indexes, and *i* is computed from the World Bank, World Debt Tables 1986 as the ratio of interest payments to disbursed debt and expressed in terms of GDP by multiplying it by the debt-GNP ratio.  $\hat{P}_M$  is measured by the export unit value of industrial countries from the International Monetary Fund, International Financial Statistics. The same methodology is used in Sachs (1985). Changes are computed with respect to the previous period.

Source: Corbo and de Melo 1987.

debt at end-1982 would have still been 87 percent of its actual value. In a further simulation in which a more normal expenditure path was assumed, average GDP growth in 1981–83 would have been 2.7 percent, and end-1982 external debt would have been only 67 percent of its actual size. This more favorable outcome comes from smaller external borrowings and lower real wages which would have benefited employment, especially in nontradables. Simulation results for Argentina and Uruguay were even less significant than for Chile.

The first lesson relates to the microeconomic efficiency effects of the reforms. These are difficult to detect, because the reforms did not last long. This was especially true of Argentina, where deregulation was mostly confined to the financial system.

Lessons

Of the other two countries, Uruguay offers the clearest evidence. During 1955–73, GDP grew at 1.0 percent a year; during 1974–83, it grew at 2.4 percent. In the second period, too, private savings and investment rose relative to their earlier trend. Controlling for factors affecting private savings and investment, it is clear that the upward shift could be attributed not mainly to financial reforms, but to the reform package as a whole.<sup>13</sup>

In Chile, GDP growth was sustained in spite of slow growth in investment and employment, suggesting that increases in productivity and in capacity utilization were major contributors. Estimates of the growth in total factor productivity (TFP) for manufacturing show a sharp increase in the reform period: during 1960–70, TFP had declined by an annual average of 0.6 percent; during 1977–81 it grew by 2.5 percent (Mierau 1986). Further calculations from a simulation model for 1977–81—which took account of increases in capacity utilization during 1977–79—suggest that productivity gains induced by reform raised GDP in 1981 by 19 percent over what would have been achieved had the TFP growth rates for 1965–74 still prevailed (Condon and others 1985).

Evidence of productivity gains also comes from interviews with entrepreneurs in each country. Several noted that productivity had risen faster than they were expecting—the result of consolidation of product lines, manpower economies, and improvements in product quality to meet foreign competition (Corbo and de Melo 1985b).

Given that the reforms ultimately faced severe problems, how much did external shocks contribute to their failure? Not much evidently our second lesson. The previous section showed that even in Chile, which was most damaged by external shocks, their contribution cannot account for the slowdown in growth during 1981–83.

The third lesson relates to the need for policies to be consistent. In particular, the macroeconomic framework must be supportive of liberalization. Argentina never reduced its public sector deficit below 8 percent of GDP, and meanwhile pursued mutually inconsistent exchange rate and fiscal policies. This was especially true of the tablita phase, when the deficit fed the growing expectations of devaluation during 1980-which were in turn reflected in rising interest rates. The collapse of Argentina's exchange rate regime has been throughly studied (Cumby and van Wijnbergen 1984 and Connollay 1985). Inconsistency of macropolicies was at its peak when the three countries were pursuing their exchange rate-based stabilization programs. These programs in due course reduced inflation temporarily, but meanwhile they set a financial trap for all three economies in the form of a powerful boom-squeeze-bust sequence that led to the abandonment of exchange rate policy. Furthermore, the anti-inflation measures were slow to work through commodity and financial markets, meanwhile

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creating unsustainably large capital movements and rising real exchange rates.

The fourth lesson is that each country would have benefited from closer scrutiny of its banks. There is a crucial distinction between wholesale liberalization of financial markets and properly monitored deregulation. A clear understanding of this distinction could at least have mitigated several unfortunate developments:

- In Chile, banks allowed the debt of affiliated firms to rise even though these firms were doing badly and should have been forced to liquidate. Hence less credit was available for more profitable independent firms (Galvez and Tybout 1985).
- Bankers suddenly placed in a free market environment failed to recognize that the increase in interest rates tended to redirect their loans away from low-risk, low-return activities, resulting in "adverse selection" (Stiglitz and Weiss 1981). Better bank monitoring might have resulted in less upward pressure on lending rates.
- De facto deposit insurance provided incentives for undue risktaking.<sup>14</sup> Banks with poor portfolios were able to attract new funds by raising deposit rates, thereby forcing less-risky banks to match these rates.

The fifth lesson is that in Chile where a combination of external shocks and inappropriate macroeconomic management resulted in large debts and then a slump in 1982–83, the reforms were resilient enough to be maintained. Today, Chile is in a sustained recovery in spite of a large overhang of debt.

This article assesses the design of stabilization and liberalization programs in the Southern Cone countries of Argentina, Chile, and Uruguay. With the exception of Chile, the reforms were not as widespread as some believed. Little trade liberalization took place in Argentina and Uruguay, although some of the antiexport bias was reduced by eliminating taxes on traditional exports. In all three countries, labor markets remained fairly highly regulated, though it was easier to dismiss labor. In general, liberalization was gradual: even Chile's trade liberalization spanned five years.

The article also shows that the collapse of the three economies in the early 1980s cannot be ascribed mainly to terms of trade and interest rate shocks. The main causes of failure were poorly designed programs and poor implementation. These errors included restrictive wage legislation (Chile) or political instability combined with a preoccupation with keeping unemployment as low as possible (Argentina). Monetary policy to deal with growing fiscal deficits was inconsistent with the accompanying exchange rate policy (Argentina throughout its reform period and Uruguay toward the end of its reforms). Financial deregulation was not matched by appropriate supervision of the financial institutions.

The article suggests several policy lessons for countries attempting to resume growth and restore external balance through a combination of liberalization and stabilization policies. First, it finds evidence that reductions in distortions produced efficiency gains in Chile and Uruguay even though Uruguay's reforms were short-lived. Second, the article shows that policy inconsistencies undermined the credibility of the later stages of reform in all three countries, eventually producing a crisis. Third, it presents data Abstract

that call into question the use of exchange rate-based stabilization, because of the slow convergence of domestic prices and interest rates to international levels, which in turn can produce unsustainably large capital movements. Fourth, the article stresses the need for caution in financial deregulation.

### Notes

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1. The introduction of crawling peg exchange rate regimes in the mid 1960s in Chile and later in Uruguay (1972) and Argentina did reduce the more extreme fluctuations in the real exchange rate, but imbalances persisted.

2. Annual inflation rates approached 1,000 percent in Chile (September 1973), 2,300 percent in Argentina (March 1976), and 100 percent in Uruguay. The fiscal deficits were substantial well before the collapse of the civilian governments (table 4). In Argentina and Chile inefficient public enterprises contributed to high public sector deficits.

3. Much has been written in the last three years on this topic. Our purpose here is to summarize the main reforms. This section draws mostly on Corbo and others (1986) and Corbo and de Melo (1985a). Other references are Calvo (1986a), Edwards (1985), Harberger (1982), Rodriguez (1982), and Sjaastad (1983).

4. Chile's substantial and chronic fiscal deficit was eliminated by drastic across-theboard expenditure cuts (amounting to 15 percent in 1975 alone), followed by a tax reform. In Uruguay the fiscal deficit was reduced yearly until 1980. Much credit should be given to the rationalization of taxation, including the introduction of a value added tax, which improved fiscal performance compared with the poor record of the prereform period (see Harberger and Wisecarver 1977). In Argentina, on the other hand, the fiscal deficit was never controlled (Cavallo and Peña 1983).

5. In Chile, the switching was achieved through a large real devaluation and reduction of barriers to imports. In Argentina, switching efforts included a combination of real devaluation, reduction of taxes on exports, and some reduction of import barriers. In Uruguay, expenditure switching was combined with a real devaluation, reduction of barriers to imports, and introduction of subsidies for nontraditional exports.

6. Other recent analyses of stabilization and liberalization policies (Killick 1984 and Lin 1985) have shown that simultaneous application of the two is unlikely to be sustainable and successful.

7. The view that real exchange rate appreciation to bring down inflation should be avoided owes much to Southern Cone experience with this policy, as will be discussed later.

8. Chile's rate of inflation was around 50 percent in late 1977, Argentina's was 166 percent in late 1978, and Uruguay's was roughly 50 percent in late 1978.

9. How stabilization based on exchange rate was supposed to work is described in Rodriguez (1983). Comparisons of the two approaches is provided in Dornbusch (1982).

10. For further discussion see Nogues (1986) and Petrei and de Melo (1985) on Argentina and Mezzera and de Melo (1985) on Uruguay.

11. For infant industries a timetable of reduction in protection over, say, a five-year period should be followed. See Balassa (1976) and Bell and others (1984). And, for countries with export earnings derived from natural resource-based products, it is appropriate and accepted to tax windfall gains during commodity booms and to offer rebates to producers during troughs. See Davis (1983).

12. Lessons from interviews with managers of manufacturing firm in the Southern Cone countries are summarized in Corbo and de Melo (1985b). They found that major efficiency gains were achieved in a short period for some firms but that others delayed adjustment because of skepticism about the reforms and, in some instances, because of high costs for severance payments.

13. Controlling for other factors, de Melo and Tybout (1986) showed that savings and investment rose during the reform period. However, they could not attribute this rise to reforms only in financial markets and suggested that fiscal reforms also played an important role.

14. For reference, the first major bank failures in each country occurred on the following dates: Argentina (BIR), March 1980; Chile (Banco Osorno), 1977; Uruguay (Banco Panamericano), 1979. In all cases depositors incurred no financial losses. The "moral hazard" effect is further elaborated in Diaz Alejandro (1985) and Tybout (1987).

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