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E C L A C

ECONOMIC COMMISSION
FOR LATIN AMERICA AND
THE CARIBBEAN



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C E P A L

REVIEW

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OSCAR ALTIMIR
Director of the Review



UNITED NATIONS

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The following symbols are used in tables in the Review:

(...)	Three dots indicate that data are not available or are not separately reported.
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(—)	A dash indicates that the amount is nil or negligible.
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	A blank space in a table means that the item in question is not applicable.
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(-)	A minus sign indicates a deficit or decrease, unless otherwise specified.
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(.)	A point is used to indicate decimals.
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(/)	A slash indicates a crop year or fiscal year, e.g., 1998/1999.
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(-)	Use of a hyphen between years, e.g., 1998-1999, indicates reference to the complete number of calendar years involved, including the beginning and end years.
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Why is there so much *economic insecurity* in Latin America?

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The view that pervasive economic insecurity threatens political support for the ongoing market-oriented reforms has become one of the most common refrains in current discussions on Latin American affairs. Dealing with economic insecurity would thus appear to be a key part of the unfinished agenda of Latin America's reforms. The author argues that economic insecurity in Latin America is multifaceted and has many sources that feed on each other. Some of the insecurity arises from the decline in employment protection and increased volatility of household outcomes. Some of it is the result of erratic capital flows and the systemic instability generated by a divorce between the instruments of stabilization and the real economy. Finally, an important component is the weakness of the institutions of voice and representation. Programmes aimed at social protection *per se* can be of partial help only. They will have to be complemented by applying macroeconomic policies, especially with regard to capital flows and the exchange rate, that are more conducive to the stability of the real economy and by loosening the control of financial markets over the instruments of macroeconomic policy. They will also require access to representative institutions –trade unions, political parties, and legislatures– with greater responsiveness and legitimacy than those that exist at present. But perhaps what Latin America needs most is a vision of how social cohesion can be maintained in the face of large inequalities and volatile outcomes, both of which are being aggravated by the growing reliance on market forces. The region will have to develop a vision that finds a way to ease the tension between market forces and the yearning for economic security.

I

Introduction

During the 1990s per capita income in Latin America and the Caribbean grew at an annual average rate of around 2%, after having fallen at a rate of almost 1% during the 1980s. The performance of the 1990s remains below the pace of economic expansion to which the region was accustomed prior to the debt crisis of 1982. But it does give hope that the continent might be leaving the “lost decade” of the 1980s firmly behind. Nonetheless, the region remains in the grip of a disconcerting level of economic insecurity. The view that pervasive economic insecurity threatens political support for the ongoing market-oriented reforms has become one of the most common refrains in current discussions on Latin American affairs.

The problem is evident in recent surveys undertaken in the region. A large cross-national survey of 14

Latin American countries recently found that 61% of the respondents thought their parents had lived better than they do. Moreover, less than half of the respondents (46%) thought that their children would end up having better lives than themselves, with that percentage varying from as little as 30% in Mexico to 61% in Chile (see table 1).

The same survey identified a strong demand for social insurance in the region. Almost three-quarters of the respondents favoured increased spending on unemployment insurance, and more than 80% expressed a desire for more spending on pensions. Moreover, these demands cut across social groups. The preference for greater spending on pensions and unemployment insurance varied very little with the respondents' level of income, education and type of

TABLE 1

Latin America (14 countries): Answers to a survey on expected changes in standard of living, 1999
(In percentages, unless otherwise indicated)

	Total		Countries													
	Number	%	Argentina	Bolivia	Brazil	Colombia	Costa Rica	Chile	Ecuador	Guatemala	Mexico	Panama	Paraguay	Peru	Uruguay	Venezuela
	14 839	100	1 200	794	1 000	1 200	1 000	1 200	1 200	1 000	1 200	1 000	600	1 045	1 200	1 200
Taking everything into consideration, would you say that your parents lived better, the same or worse than you live today?																
Better	9 081	61.2	63	51	64	78	56	45	67	57	43	52	75	80	59	70
The same	3 261	22	22	31	9	14	26	32	20	31	35	24	14	12	18	19
Worse	2 139	14.4	12	16	25	8	14	22	10	11	20	21	6	6	20	10
No answer	358	2.4	3	3	2	1	5	1	2	1	3	3	5	2	3	2
With regard to your children, do you think they will live better, the same or worse than you live today?																
Better	6 843	46.1	43	56	58	36	52	61	34	51	30	48	48	37	46	53
The same	3 071	20.7	22	20	12	21	25	22	21	23	23	20	26	19	22	17
Worse	3 261	2	20	13	21	38	11	11	29	17	41	21	13	26	19	19
No answer	1 664	11.2	16	11	9	6	12	7	16	8	6	12	13	19	13	12

Source: Mirror on the Americas Poll (1999), Wall Street Journal Interactive Edition.

□ This paper was originally prepared for and funded by the World Bank. I am grateful to Guillermo Perry for asking me to do this paper, and to Jorge Domínguez, Nora Lustig, Norman Hicks, Bill Maloney, Guillermo Perry, Martín Rama, Guilherme Sedlacek, Luis Servén and Mariano Tommasi for very useful comments on an ear-

lier draft. Vladimir Kliouev provided expert research assistance. None of these individuals, however, and least of all the World Bank, should be considered as having any responsibility for the views expressed herein.

TABLE 2

Latin America (14 countries): Answers to a survey on aspects connected with social security, by socioeconomic category^a
(In percentages, unless otherwise indicated)

	Total sample		Age			Employment						Education				Income		
	No.	%	18-29	30-49	50+	Self-employed	Gov-ernment	Priv-ate sector	Unem-ployed	Reti-red	House-wife	No schooling	Prim-ary	Sec-ondary	Univ-ersity	Low	Middle	High
Unemployment insurance																		
No answer	551	3.7	3	4	4	4	5	3	3	4	4	3	4	3	4	4	4	3
Spend more	10 088	73.4	74	73	73	74	69	74	80	74	73	74	74	75	71	72	73	74
Spend less	2 543	17.1	18	18	16	17	19	17	13	16	17	19	16	16	19	19	17	17
Don't know	857	5.8	5	5	7	5	7	6	3	6	7	5	7	5	6	4	6	6
Pensions																		
No answer	172	1.2	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1
Spend more	12 426	83.7	83	83	86	83	84	84	88	88	84	82	83	85	83	83	85	83
Spend less	1 861	12.5	13	13	10	13	12	13	9	9	12	15	13	12	14	14	11	13
Don't know	380	2.6	3	3	3	3	2	2	1	2	3	2	3	2	2	2	2	3
Defence and armed forces																		
No answer	623	4.2	4	5	5	4	6	3	3	5	4	3	4	4	5	5	5	3
Spend more	4 810	32.4	33	31	34	34	28	29	36	33	35	32	37	33	27	32	31	34
Spend less	8 359	56.3	58	57	53	56	59	60	56	54	52	60	50	57	62	58	56	57
Don't know	1 047	7.1	5	7	9	6	7	7	5	8	9	5	8	7	7	6	8	7

Source: Mirror on the Americas Poll (1999), Wall Street Journal Interactive Edition.

^a The text of the question was: "Do you believe that in your country it would be better to spend more or less on each of the following items?"

employment (table 2). Predictably, the demand for social insurance tends to be larger in countries where greater pessimism prevails regarding the future. But there are interesting exceptions. In Mexico, demands for greater spending on social insurance are muted despite a high level of pessimism about the next generation's prospects. In Chile, meanwhile, where expectations are reasonably upbeat, the percentage of respondents who favour greater spending reaches 85% in the case of unemployment insurance and 93% in the case of pensions.

Do these numbers mean anything? One indication that they do comes from the responses to the other questions in the survey. For example, when the same individuals were asked about national defence and the armed forces, less than a third replied that they would like to see an increase in spending on them (table 2). This shows that the respondents made a clear distinction between economic security and national security, and ranked the former significantly above the latter. Another indication comes from comparing results of similar surveys in other settings. When surveys of this

kind are undertaken in the advanced industrial countries, the proportions of respondents that favour increased spending on pensions and unemployment benefits tend to be significantly lower than the numbers reported above. Moreover, the proportions vary significantly according to income levels.¹ A poignant example from Brazil was recently highlighted in the *New York Times*, which reported that as many as one million people (one out of every 160 Brazilians) were competing in August 1999 for 10,000 desk jobs at the Banco do Brasil, a government-run institution that "pays salaries on time and in full" and provides comprehensive health insurance and pension benefits. "I need stability in my life", a 23-year old job applicant was quoted as saying when asked why she applied for a job that actually pays less than her present salary (Romero, 1999). Dealing with economic insecurity would appear to be a key part of the unfinished agenda of Latin America's reforms.

¹ For some comparative evidence, see Taylor-Gooby (1989).

How can policy-makers progress in this? A first step is to understand the root causes of economic insecurity. In this paper I highlight the role of three sets of critical contributory factors. First, we must begin with the trauma of the 1980s. The deep recession that most of the countries of the region experienced in the aftermath of the debt crisis is reminiscent in some ways of the Great Depression in the United States during the 1930s. While the Great Depression resulted in a steeper fall in incomes, the recovery was more rapid as well. In the United States, the hardships caused by the Depression, and especially the losses suffered by the middle classes, stimulated a set of government programmes –collectively known as the New Deal– which greatly expanded the role of the government, established social safety nets, and provided social insurance. In Latin America, the upshot of the debt crisis was a series of reforms that actually served to weaken social insurance institutions. Employment generally became less secure, and publicly provided safety nets were weakened.

Second, as Latin America entered the 1990s it found itself in a world of high macroeconomic volatility, which was driven in large part by erratic capital flows, or at least magnified by them. The spread of international financial markets and the region's enthusiastic embrace of them left macroeconomic policy dependent on (and often hostage to) the fancies of short-term investors. Key instruments such as fiscal policy and the exchange rate became overwhelmed by the need to manage capital flows and could no longer be targeted at domestic stability. Macroeconomic policy became increasingly divorced from the real economy. This has exacerbated the volatility of economic outcomes both over time and across households.

Third, a key shortcoming in Latin America is that social and political institutions have not been adequately responsive so far to the clamour for greater economic security. As mentioned above, States have retrenched rather than taken on the added responsibilities that managing risk in market-oriented societies requires. But the problem goes beyond governments. Political sys-

tems as a whole have failed to create viable mechanisms of voice: national legislatures have been fragmented and unrepresentative, and political parties weak. Trade unions have been unable to develop an adequate and encompassing strategy for dealing with job insecurity and have lost members. And the monopolization of policy discussions around a narrow, Washington Consensus-based view of development policy, sharply constrained by the "requirements" of global economic integration, has prevented the emergence of an alternative (or at least complementary) vision of economic reform driven by local concerns and national aspirations.

I will discuss these issues and their policy implications in the rest of the paper. But a key caveat needs to be mentioned at the outset. The focus in this paper is not on the poor and most vulnerable *per se*. I do not deal with anti-poverty policy, nor do I discuss how to reduce the vulnerability of the poor to volatility and shocks.² The Latin American poor have always been excluded and vulnerable. What seems to be new is that the fear of downward mobility now affects a large part of the middle classes as well. The survey mentioned earlier reveals that in some of the largest countries of Latin America –Argentina, Brazil, Mexico and Venezuela in particular– the middle-income groups are more pessimistic about their children's future than the lowest-income groups. Indeed, that is what gives the demand for "social protection" its political salience in the region. My focus will be on this broader notion of economic insecurity and its consequences.

Finally, I should emphasize that the purpose of this paper is to stimulate discussion, suggest hypotheses and lay out an agenda for further research, just as much as it is to present specific arguments with supporting evidence. Many of my arguments below remain speculative. The empirical "tests" that I do present are suggestive rather than definitive. But if the paper helps open new lines of inquiry it will have achieved its objective.

² For a good set of essays on these issues, see Lustig (ed.), 1995.

II

The trauma of the 1980s

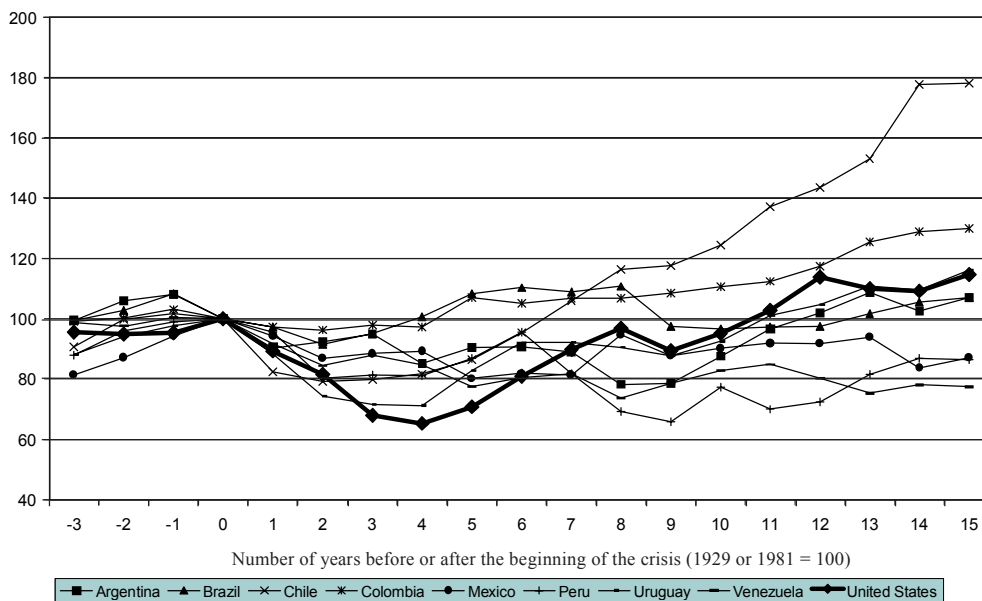
The debt crisis of 1982 engulfed Latin America in a deep and prolonged recession. Figure 1 shows an index of per capita income in the leading countries of the region, comparing their experience with that of the United States during the Great Depression. In the United States, incomes declined on average by 35% between 1929 and 1933, and unemployment peaked at 25% (in 1933). As figure 1 shows, the decline in real incomes (and rise in unemployment) was not as steep in Latin America after 1981: it was of the order of 20% in Argentina, Chile, Mexico and Venezuela, and 10% in Brazil. Among the major countries, only Peru (thanks to President García's disastrous policies) experienced an income collapse of the same magnitude as that suffered by the United States in the Great Depression. However, with the notable exception of Chile, the recovery in Latin America was also more gradual. It took 10 years in the United States for per capita income to recover to its pre-crisis level. In Argentina and Brazil, it took 12 and 13 years respectively, and in Mexico, Peru and Venezuela per capita incomes were

still below 1981 levels in 1997 (the latest year for which national income estimates were available (World Bank, 1999). Moreover, the United States economy, boosted in part by the Second World War, experienced a much faster rate of expansion in the 1940s than it had during the 1920s. Latin America's growth rate during the 1990s, however, has failed to match the record of the 1960s and 1970s.

The United States responded to the Great Depression with a series of major institutional innovations that greatly expanded the role of the government in the economy and for the most part represented a sharp break with the past. Many of these innovations took the form of social insurance (Bordo, Goldin and White (eds.), 1998, page 6): social security, unemployment compensation, public works, public ownership, deposit insurance and legislation favouring unions were among the new mechanisms created to deal with the perceived shortcomings of the private marketplace. As Jacoby (1998) notes, prior to the Great Depression the middle classes were generally able to self-insure or buy insur-

FIGURE 1

Comparison between Latin America after 1981 and the United States in the Great Depression: Decline in real per capita income



ance from private intermediaries. As these private forms of insurance collapsed, the middle classes threw their considerable political weight behind the extension of social insurance and the creation of what would later be called the Welfare State.

The Great Depression had two effects: first, it undermined middle-class trust in the private system for handling labour market risks; the collapse of “welfare capitalism”, combined with mass layoffs and bank failures, created a crisis of confidence that caused middle-class Americans to mobilize in search of alternatives. Second, it caused the middle class to perceive its social status as precarious; actual or threatened downward mobility narrowed the social distance between the middle class and those below, making cross-class alliances more likely and weakening resistance to redistributive programmes that could benefit the downwardly mobile. In short, the experiences of the 1930s and 1940s inclined the American middle classes to favour social solidarity over rugged individualism: a shift that promoted the Welfare State, public education, and other forms of government expenditure (Jacoby, 1998, pp. 29-31).

Note the parallels with the Latin American experience in the aftermath of the debt crisis. As in the case of the United States, the crisis of the 1980s placed great strains on private insurance arrangements in Latin America. For example, Glewwe and Hall (1998) find in their analysis of Peru that inter-household transfer networks collapsed almost in their entirety during the second half of the 1980s. Since transfer-making households suffer during major crises too, private systems of income support tend not to be very resilient to macro shocks. And one implication of the generalized crisis was that, as noted in the introduction, social insurance has become a middle-class preoccupation in Latin America as well.

But there was also an ideological underpinning for the growth of government programmes in the United States. Rockoff (1998) has argued that the change in attitudes towards the role of the government was facilitated in the United States by an ideological shift among economists from *laissez-faire* to interventionism dating at least from a decade prior to the Great Depression. While macroeconomists tended to be conservative, microeconomists “championed a long list of reforms such as minimum wages, employment exchanges, old-age pensions, publicly owned regional power utilities, and so on” (Rockoff, 1998, p. 134). Hence ideology and interests coincided in spurring the adoption of social insurance programmes.

In terms of the role of government, Latin America entered the 1980s from a very different vantage point from that of the United States at the beginning of the 1930s. Most of the countries of the region had industrialized behind the protection of government-imposed trade restrictions, public enterprises had become commonplace, and fiscal deficits and macroeconomic mismanagement were the proximate causes of the debt crisis. Governments were seen as part of the problem rather than as the solution. And just as in the case of the United States, academic opinion had been largely transformed during the 1970s, but this time in the direction of favouring markets over government intervention.

The reforms that Latin America adopted in the 1980s and thereafter were correspondingly aimed at enhancing the scope of the market and reining in that of government. Privatization, deregulation, trade liberalization and financial liberalization were key items in the Washington Consensus. Public opinion surveys, like those cited earlier, generally show that a majority of Latin Americans prefer markets and the private enterprise system to government control. However, what is important from our perspective is the complete absence from the Washington Consensus agenda of prescriptions aimed at combatting economic insecurity.

This is especially striking in view of the fact that many of the market-oriented reforms had the predictable effect of increasing risk for workers and households. Privatization, deregulation and trade liberalization all entailed restructuring of the economy and greater risk of job loss, at least in the short run. The retrenchment of the public sector meant reduced opportunities for relatively safe public employment. Financial liberalization could be counted upon to generate volatility in the economic environment. Greater capital mobility implied the shifting of idiosyncratic country risk from mobile capital to immobile labour. It is only recently that the importance of such effects has come to be recognized.

We can therefore presume that the economic insecurity generated by the prolonged debt crisis was only amplified by the market-oriented reforms that all the countries of the region eventually adopted without instituting complementary programmes of social insurance. Whereas the response to the Great Depression in the United States was a significant strengthening of social protection, the response to the debt crisis in Latin America was a weakening of social insurance in the face of increased labour-market risks.

III

The decline of job security

While many of the reforms undertaken in Latin America could have been expected to raise job insecurity, at least in the short run, direct evidence on this is not easy to come by. Measures of involuntary job displacement are not widely available, and in any case are contaminated by the behavioral responses that economic insecurity generates: workers who feel less secure are more likely to accept wage reductions or make other concessions to avoid losing their jobs. Furthermore, there has not been much change in formal legislation on employment protection, despite much talk about the need to render labour markets more “flexible” (Márquez and Pages, 1998). Nonetheless, the available evidence does suggest that the proportion of workers with “secure” jobs has declined practically in all of the countries of the region for which relevant data exist.

One indication of this is the sharp reduction in trade union density since the 1980s, in all countries except Chile. This is significant, since bargaining for greater job security on behalf of their members is a key function of trade unions. Table 3 presents statistics from the International Labour Organisation (ILO) on trade union membership and trade union density for ten Latin American countries. Wherever a comparison between the 1980s and 1990s is possible, the numbers typically reveal a sharp decline. In Argentina, for example, the percentage of the non-agricultural labour force represented by unions has fallen from 49% in 1986 to 25% in 1995. In Mexico, the corresponding percentage went down (if the statistics are to be believed) from 54% to 31% in the span of two years (1989 to 1991). Chile, where the demise of Pinochet’s rule and the transition to democracy resulted in an initial jump in trade union membership and density, is the sole exception to the rule. However, even in Chile more recent figures show that union membership ratios have declined since the early 1990s, and are currently back at pre-democracy levels.³

Table 3 also shows another indicator of job insecurity: the proportion of workers who are not “protected” by formal written contracts or inclusion in social

benefit programmes. The definition of unprotected employment, taken from ILO (1999), is somewhat slippery, and refers to different things in different countries. For example, the Argentine figures relate to private employees without written contract as a share of total private employment in Greater Buenos Aires. In Bolivia, the numbers are for those not covered by labour and social legislation, as a share of total salaried employment. The Brazilian figures (taken from Ferreira and Paes de Barros, 1999) are for employees without *carteira* as a fraction of all wage employees and self-employed workers.

In all seven countries where a comparison between two points in time is possible, the numbers reveal an upward jump in “unprotected” employment: from 22% to 34% in Argentina, from 64% to 69% in Brazil, from 44% to 50% in Mexico. This time Chile is no exception to the trend (with an increase from 17% to 22%). Note that these proportions cannot be compared across countries, since the samples covered vary greatly, and the absolute shares in themselves are not very meaningful (unlike the changes therein). Since the denominators typically cover more privileged workers (in urban areas or those that are salaried), the absolute numbers represent in most cases an underestimation of the proportion of unprotected workers. The oft-repeated statement that the informal economy accounts for 80% of the new jobs created in Latin America over the last two decades (see for example ILO, 1999) provides a complementary perspective to these findings.^{4,5}

Since the legislation itself has not changed much, these trends have to be interpreted as the endogenous responses of the economy to the joint shocks of the debt crisis and structural reform. In Chile, for example,

³ Chilean Ministry of Labour figures, as reported in The Economist Intelligence Unit (1998).

⁴ The extent to which the decline in the share of formal sector employment is the outcome of restrictive employment legislation—such as minimum wages and mandatory benefits—remains debatable. Amadeo and Camargo (1997) argue in the Brazilian context that such legislation is only a small part of the story. Pessino (1997) provides an alternative perspective on Argentina.

⁵ Note that informal sector employment, despite generally lower levels of employment security, need not imply worse outcomes for workers. In many cases, workers may prefer informality so as to avoid paying income and other taxes.

TABLE 3

Latin America (10 countries): Indicators of employment security

	Trade union membership (thousands)		Trade union coverage (as % of non-agricultural workers)		“Unprotected” employment (as a percentage of number of workers)	
Argentina	1986	3 262	1986	48.7	1990	21.7
	1995	3 200	1995	25.4	1996	34
Bolivia	1994	276	1994	16.4	1991	28
					1997	34.8
Brazil	1991	15 205	1991	32.1	1985	63.6
					1996	68.5
Chile	1985	361	1985	11.6	1990	17
	1993	684	1993	15.9	1996	22.3
Colombia	1985	877	1985	11.2		
	1995	840	1995	7.0		
El Salvador	1985	79	1985	7.9	1994	59.1
	1995	103	1995	7.2	1997	61.3
Mexico	1989	9 500	1989	54.1	1990	43.4
	1991	7 000	1991	31.0	1997	49.6
Peru	1991	442	1991	7.5	1990	25.2
					1996	34.1
Uruguay	1990	222	1990	19.9		
	1993	151	1993	11.6		
Venezuela	1988	1 700	1988	25.9		
	1995	1 153	1995	14.9		

Source: ILO, 1997, tables 1.1 and 1.2; ILO, 1999, table 7; Ferreira and Paes de Barros, 1999, table 1.

^a The term “unprotected” employment refers to the proportion of private sector or urban workers without a contract or social security benefits in each country. See ILO, 1999, table 7 for the original sources and more details.

the period since the debt crisis has witnessed historically high levels of labour turnover. Moreover, trade liberalization has resulted in the expansion of activities (forestry and agriculture in particular) where long-term contract employment is less common and self-employment more so than in traditional activities (such as copper mining and manufacturing). The expansion of exports has also been associated with greater subcontracting, which generally shifts risk to small enterprises and the self-employed. In forestry, an impressive export performance has been “accompanied by a type of work organization characterized by a high share of subcontracting activities and employment instability” (ILO, 1998). In Brazil, labour turnover remains quite high by European or even U.S. standards, a situation that Amadeo and Camargo (1997) characterize as a case of “excessive” employment flexibility.

Has the evident decline in job protection been compensated by lower rates of unemployment overall? The

empirical literature on the relationship between termination costs and unemployment rates does not yield strong conclusions. The cross-national evidence generally suggests that the first-order effects of employment protection are distributional: the beneficiaries tend to be older, male workers, while younger, female workers lose out. But the relaxation of job protection legislation appears to have weak effects on overall levels of employment. The limited evidence from Latin America is consistent with such findings (Márquez and Pages, 1998).

Table 4 displays unemployment rates for 16 Latin American countries for three sub-periods since 1981 (1981-1988, 1989-1993, and 1994-1998). For most countries, unemployment exhibits a U-shaped pattern. The early years following the debt crisis were generally a period of high unemployment. Unemployment fell during the late 1980s, but has subsequently risen since the mid-1990s. Brazil, Mexico, Uruguay and

TABLE 4
Latin America (16 countries): Rates of unemployment
(Percentages)

	1981-1988	1989-1993	1994-1998
Argentina	5.4	7.6	15.3
Bolivia	7.6	6.9	3.6
Brazil	5.6	4.7	5.7
Chile	14.9	7.2	7.6
Colombia	11.6	9.9	10.4
Costa Rica	6.2	4.4	5.4
Ecuador	8.2	8.1	8.8
El Salvador	9.4	8.5	7.2
Guatemala	9.1	4.1	4.0
Honduras	10.3	7.1	5.6
Mexico	4.0	2.9	4.8
Nicaragua	13.0	14.7	16.5
Paraguay	5.6	5.6	6.0
Peru	6.9	8.3	7.8
Uruguay	11.3	8.8	10.8
Venezuela	10.4	8.4	10.5

Source: Inter-American Development Bank (IDB, undated).

Venezuela all exhibit this distinctive pattern. But there are also exceptions. In Chile, unemployment has remained well below the levels of the early to mid-1980s. In Argentina, unemployment has increased more or less steadily since the early 1980s for workers at all skill levels (Pessino, 1997). It is striking that half of the countries in the table (eight out of sixteen) had higher unemployment rates in 1994-1998 than they did during 1981-1988 (Argentina, Brazil, Ecuador, Mexico, Nicaragua, Peru, Paraguay and Venezuela).

Therefore the decline in job protection has been accompanied by rising unemployment levels during the 1990s in most countries of the region. While it is possible that unemployment would have risen to greater heights had unions not lost membership and other forms of job protection not weakened, the international evidence suggests that this is not a very likely scenario. The risks of job loss followed by a period of unemployment seem to have clearly increased.

IV

Macroeconomic volatility and its relation to household incomes: a decomposition

While the fear of drastic reduction in income associated with job loss and unemployment is an important component of economic insecurity, another is sheer volatility of the household income stream. As Gavin and Hausmann (1996) have emphasized in their work, Latin America is a volatile region, where the standard deviation of GNP growth rates tends to be on average around twice the level observed in industrial economies. For individual households, what matters is the volatility of their own income streams. While, by definition, not all households can successfully shield themselves from the average volatility of the economy (as captured in movements of aggregate GNP), the distribution of uncertainty across households does depend on the degree to which household risks vary with national output.⁶

We can express the relationship between household and national income volatility using a simple decomposition based on the identity:

$$d \ln y_{it} = d \ln y_t + (d \ln y_{it} - d \ln y_t)$$

where y_{it} and y_t are household and national incomes at time t , and $d \ln y_{it}$ and $d \ln y_t$ are the growth rates of the i th household's income and of GNP, respectively. Let us define the household and national growth rates as:

$$d \ln y_{it} = \delta_{it}$$

$$d \ln y_t = \delta_t$$

Furthermore, let the household's income growth rate relative to the national average be given by:

$$(d \ln y_{it} - d \ln y_t) = \rho_{it}$$

Now we can decompose the volatility of the i th household's income growth into three separate terms.

$$\sigma_{\delta_i}^2 \equiv \sigma_{\delta}^2 + \sigma_{\rho_i}^2 + 2 \text{cov}(\rho_{it}, \delta_t)$$

The first term represents the volatility of the national economy (σ_{δ}^2). This term captures the macro shocks

⁶ For the purposes of this discussion, I shall treat national income and GNP interchangeably.

that affect the economy and is the volatility on which the work by Gavin and Hausmann (1996) focuses. The second term is the volatility of relative household incomes ($\sigma_{\rho_i}^2$). This captures the purely idiosyncratic shocks that hit a given household. Finally, the third term is the covariance between the growth rates of GNP and a household's relative incomes ($\text{cov}(\rho_{it}, \delta_t)$). This term will be positive whenever a household's relative income is pro-cyclical: i.e., when the household's income grows faster than the average in good times for the national economy and slower than the average in bad times. Obviously, the third term cannot have the same sign for all households in the economy. Lustig (1999) cites studies showing that for every one percentage point decline in growth, poverty rises by 2%. If the poor are more vulnerable to economic downturns, as these studies indicate, the third term will be positive for households at the bottom of the income distribution and negative for households at the top.

The decomposition is useful in that it helps organize our thinking on how uncertainty at the household level can best be tackled. It highlights three sources of uncertainty with three different kinds of implications for policy. If most of the uncertainty is at the macro level, improving the quality of macroeconomic policymaking would be the most direct and effective way of reducing household risk. If most of it is instead idiosyncratic, specific to individual households, what is needed is insurance pure and simple (whether provided privately or through the government). If a considerable amount of it originates from the excessive susceptibility of particular households to macroeconomic downswings, then the appropriate response consists of identifying those households and making sure that transfer mechanisms are (a) appropriately targeted and (b) resilient to macro shocks.⁷

Carrying out this decomposition requires repeated household panels, which do not exist for many countries. Peru's Living Standards Measurement Surveys do provide data in panel form. They have been used by Glewwe and Hall (1998) for the purpose of identifying the households that are more vulnerable to shocks.

In order to show how the decomposition can be put to work, I will now undertake a very rough exercise based on easily obtainable data on average real

wages. The exercise consists of making illustrative calculations for an "average" worker household. We consider a household whose sole source of income is wages, and which earns the average wage in the economy and cannot vary the hours worked. Then the relevant volatility decomposition for this household can be written as follows:

$$\sigma_w^2 = \sigma_{\delta}^2 + \sigma_{\rho}^2 + 2\text{cov}(\rho, \delta),$$

where σ_w^2 stands for the volatility of real wage growth, σ_{ρ}^2 for the volatility of real wages relative to GNP, and the other terms have the obvious interpretations. As before, the equation decomposes the volatility of the average worker's earnings into three components: a macro term, an idiosyncratic term, and a covariance term.

Note an important caveat here: Basing the calculations on an economy-wide average wage defeats the purpose of the decomposition methodology in that it clouds the distinction between idiosyncratic and macro risks. The incidence of risk *among* workers is ignored. The only source of idiosyncratic risk that this particular calculation can capture is that which affects average (formal-sector) labour income relative to other sources of income. For that reason, the exercise cannot be interpreted as giving an accurate guide to the magnitude of idiosyncratic versus macro risks. It is only an illustrative guide to the experience of an "average" worker.

Table 5 shows the calculations for four countries (Chile, Mexico, Peru and Venezuela), selected according to the availability of real wage data. For each country, the calculations are shown for two sub-periods since the early 1980s. The main result that comes across in table 5 is the difference between Chile and the other countries in the sample. First, the volatility of real wages has increased greatly in the 1990s in all countries but Chile. In Chile's case wage growth has been considerably more stable in the period since the 1980s collapse. Second, the growth of wages relative to national income is either pro-cyclical (Peru) or has become so in the 1990s (Mexico and Venezuela) in all countries but Chile. In other words, macroeconomic volatility is transmitted on to wages in these countries in a magnified manner. Third, for the average worker, the "idiosyncratic" component of wage volatility accounts for around half or less of total wage volatility in the three countries other than Chile. Hence, macro shocks and their interaction with wage movements are a major –if not *the* major– part of wage uncertainty in Mexico, Peru

⁷ See Lustig (1999), especially on the design of poverty-sensitive responses to adverse shocks. Lustig calls for the institution of counter-cyclical safety nets to protect the poor from excessive vulnerability to economic downswings.

TABLE 5

Latin America (4 countries): Decomposition of volatility of real wages^a

Periods	Var ($d \ln w$)		Var ($d \ln y$)		Var ($d \ln w - d \ln y$)		$2xcov (d \ln y, d \ln w - d \ln y)$		
	Value	%	Value	%	Value	%	Value	%	
Chile	1981-1986	2.13	100	0.77	36	3.13	147	-1.77	-83
	1987-1992	0.22	100	0.13	60	0.29	131	-0.20	-91
Mexico	1984-1989	0.40	100	0.66	165	0.21	54	-0.48	-119
	1990-1995	0.86	100	0.35	41	0.42	48	0.09	11
Peru	1983-1988	3.11	100	1.30	42	1.12	36	0.70	23
	1989-1994	6.90	100	1.61	23	3.25	47	2.04	30
Venezuela	1983-1988	0.36	100	0.34	93	1.16	320	-1.13	-312
	1989-1994	1.77	100	0.53	30	0.91	51	0.33	19

Source: Calculated on the basis of data from World Bank (1999), IMF (various years) and IDB (undated).

^a The variances and covariances have been multiplied by 100.

TABLE 6

Latin America and the Caribbean (26 countries): Volatility indicators^a

Country	Volatility of GNP		Volatility of income terms of trade		Volatility of private capital flows	
	1980s	1990s	1980s	1990s	1980s	1990s
Argentina	0.048	0.050	0.007	0.004	0.032	0.058
Bahamas	0.028	0.023				
Barbados	0.052	0.030			0.047	0.045
Belize	0.032	0.010			0.031	0.011
Bolivia	0.045	0.031	0.009	0.016	0.025	0.003
Brazil	0.044	0.039	0.008	0.003	0.009	0.040
Chile	0.070	0.027	0.021	0.029	0.049	0.018
Colombia	0.015	0.016	0.019	0.011	0.010	0.012
Costa Rica	0.045	0.024	0.042	0.014	0.068	0.028
Dominican Republic	0.047	0.043	0.030	0.035	0.023	0.036
Ecuador	0.044	0.012	0.030	0.027	0.035	0.009
El Salvador	0.027	0.007	0.039	0.022	0.026	0.009
Guatemala	0.049	0.052	0.013	0.013	0.011	0.006
Guyana	0.026	0.024	0.063	0.197	0.058	0.051
Haiti	0.017	0.069	0.026	0.016	0.004	0.014
Honduras	0.036	0.024	0.026	0.040	0.010	0.014
Jamaica	0.042	0.038			0.039	0.024
Mexico	0.051	0.023	0.016	0.008	0.029	0.017
Nicaragua	0.069	0.026	0.032	0.060		
Panama	0.083	0.053	0.021	0.019		
Paraguay	0.035	0.015	0.020	0.011	0.021	0.016
Peru	0.047	0.019	0.014	0.006	0.017	0.032
Suriname	0.060	0.074			0.140	0.034
Trinidad and Tobago	0.043	0.022			0.037	0.032
Uruguay	0.055	0.028	0.026	0.008	0.037	0.033
Venezuela	0.050	0.052	0.060	0.030	0.085	0.104
Average	0.045	0.032	0.026	0.028	0.037	0.028
Median	0.045	0.027	0.023	0.016	0.031	0.024

^a The volatility is calculated as the standard deviation of annual GNP growth rates and the income terms of trade, and the standard deviation of gross private capital flows as a proportion of GNP. The information on GNP and the terms of trade is taken from the IDB database, while the data on private capital flows are from World Bank (1999).

and Venezuela. In Chile, it is the idiosyncratic component of wage movements that exerts the dominant influence.

These calculations and conclusions are necessarily tentative, especially since one would like to carry out the decompositions with household-level data instead of average wages. Nonetheless, they are indicative of the significant and growing role played by macroeconomic instability—in addition to idiosyncratic shocks—in driving income uncertainty for workers in the region. The implication would be that increasing the stability of the macroeconomic environment should make a substantial contribution—perhaps in some cases more than social insurance programmes *per se*—to the economic security of workers.

Latin America is indeed a region with a very high level of aggregate macroeconomic volatility. While volatility has decreased somewhat since the debt-crisis years, it still remains high in comparative terms. Table 6 shows volatility figures for the countries of the region for the 1980s and 1990s. In unweighted terms, average GNP growth volatility has come down from 4.5 percentage points during the 1980s to 3.2 points in the 1990s. Even so, this is still twice the level of volatility experienced in an industrial economy such as the United States. Moreover, in a number of significant cases volatility has increased: Argentina and Venezuela are two countries with above-average volatility levels where the 1990s have been even more volatile than the 1980s.

A longer-term comparison with the 1960s and 1970s is undertaken in table 7 for the larger countries of the region. Rather than presenting raw standard deviations, I have chosen to present the numbers in a somewhat different form. The figures in this table answer the following question: what is the probability in any given year that per capita income will fall by 5% or more? Since economic insecurity is often based on the fear of a sharp drop in income, this would seem to be a better measure than volatility *per se*. I have based my calculations on the decadal averages of growth rates and their standard deviation, assuming that annual growth rates are identically and normally distributed. For a given growth rate, the probability of a 5% decline in income increases with volatility. On the other

TABLE 7

Latin America (8 countries): Economic insecurity in a long-term perspective

(Percentage probability that per capita income will fall by 5% in a year)

	1960s	1970s	1980s	1990s
Argentina	7.9	5.4	36.5	3.3
Brazil	2.3	0.2	12.4	14.4
Chile	0.4	25.5	17.5	0.0
Colombia	0.0	0.0	0.5	0.0
Mexico	0.0	0.0	17.1	19.0
Peru	3.5	3.6	36.5	17.8
Uruguay	4.3	0.3	28.7	0.4
Venezuela	5.4	1.5	37.3	9.0
Average	3.0	4.6	23.3	8.0
Median	2.9	0.9	23.1	6.1

Source: Calculations by the author, based on decadal averages of growth rates of per capita income and their standard deviation, assuming that growth rates are distributed identically and normally over a decade.

hand, for a given level of volatility (expressed as the standard deviation of growth), the same probability is declining in the average growth rate. Hence, the probabilities shown in table 7 combine information from both the growth rate of income and its volatility.

The table reveals that the 1990s were a vast improvement over the 1980s. But it also makes clear that, for most of the countries shown, aggregate income insecurity was substantially higher in the 1990s than it was during the 1960s and 1970s. In Brazil, Mexico, Peru and Venezuela, the likelihood that average incomes will fall by 5% or more in any given year is in the range of 10-20%, which is substantially above the levels experienced prior to the 1980s. Only Argentina and Chile can be said to have experienced clear improvements in income security by this measure. Taking the sample of countries as a whole, the average probability of a sharp contraction in income (of 5% or more) during the 1990s was around twice the levels observed during the 1960s and 1970s (8.0% versus 3.0% and 4.6%, respectively).

V

The sources of macroeconomic volatility: the importance of capital flows

The causes of macroeconomic volatility in Latin America have been investigated by Hausmann and Gavin (1996). As these authors emphasize, volatility is driven both by external shocks and by domestic policy failures. On the external front, instability in the terms of trade and in capital flows are the key contributors. Some data on these external determinants are shown in table 6. On the policy front, the collapse of pegged exchange rate regimes and erratic monetary policies have generally played a large role. Hence in general exogenous shocks and domestic institutions and policies all matter.

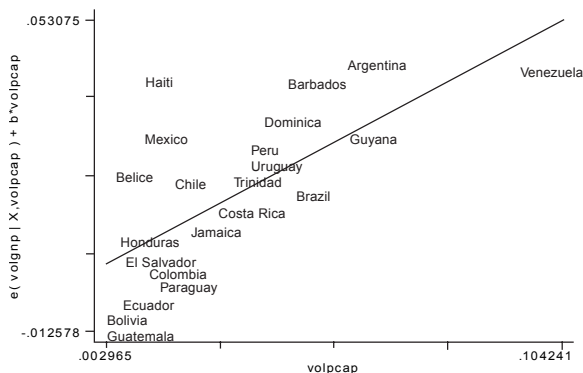
For the 1990s, the evidence suggests that the instability in private capital flows has been perhaps the most important single determinant of macroeconomic volatility. This is the central message that comes out of the regressions shown in table 8.

That table shows the results of regressing averages of GNP growth volatility for each of the two decades (1980s and 1990s) on a number of determinants: the volatility of the income terms of trade, volatility of gross private capital flows, volatility of monetary conditions, financial depth, per capita income, and a dummy for the 1990s.⁸ The first column, which pools the averages for the two decades (and contains up to two observations per country), shows that the volatility of capital flows is a highly significant correlate of GNP volatility. The estimated coefficient of terms-of-trade volatility is positive but insignificant. Financial depth (proxied by M2/GDP) seems not to matter. Volatility of domestic monetary conditions is statistically significant, but only at the 90% confidence level. The dummy for the 1990s is negative and significant, with an estimated coefficient that is roughly equal to the decline in average GNP volatility between the two decades. Finally, there is a negative and significant association between per capita income and volatility. The second column in table 8 drops the insignificant variables (terms-of-trade volatility and financial depth) to gain a few additional ob-

servations. The results remain unchanged. In particular, the volatility of gross private capital flows enters with a highly significant coefficient.

The last two columns of table 8 show the results when the regressions are run decade by decade. We find that the association between GNP volatility and the volatility of private capital flows is particularly strong in the 1990s. In fact, together with per capita income, capital-flow volatility accounts for close to half of the cross-national variation in GNP volatility within Latin America during the 1990s (compared with less than 20% during the 1980s). The coefficient estimate indicates that a one point increase in the standard deviation of gross private capital flows (as a percentage of GNP) is associated with an increase in the standard deviation of GNP growth rates of more than half a percentage point. The exceptionally strong relationship during the 1990s between the volatility of capital flows and GNP volatility in the region is also shown in figure 2. As that figure shows, some of the smaller countries of the region with little access to private capital flows (Bolivia and Guatemala) have experienced the lowest levels of macroeconomic volatility. Argentina and Venezuela are at the other extreme, with very high levels of exposure to volatility of private capital flows and correspondingly high levels of macro volatility. Countries like

FIGURE 2
Relation between GNP volatility and volatility of gross private capital flows during the 1990s (taking account of per capita income and monetary volatility)



⁸ See Easterly, Islam and Stiglitz (1999) for a cross-national analysis of a similar nature.

TABLE 8

**Latin America and the Caribbean: Determinants of
GNP volatility for the 1980s and 1990s^a**

	Dependent variable: standard deviation of GNP growth rates			
	(1)	(2)	(3)	(4)
Constant	0.087* (0.029)	0.067* (0.019)	0.044 (0.031)	0.079* (0.024)
Log per capita income	-0.009** (0.004)	-0.006** (0.003)	-0.003 (0.005)	-0.009** (0.003)
Volatility of monetary policy (standard deviation of M1 growth)	0.011*** (0.006)	0.010*** (0.005)	0.012 (0.007)	0.003 (0.009)
Volatility of income terms of trade	-0.049 (0.112)			
Volatility of gross private capital flows	0.505* (0.130)	0.454* (0.099)	0.419** (0.177)	0.509* (0.127)
Financial depth (M2/GNP)	0.0000 (0.0003)			
Dummy variable for the 1990s	-0.010** (0.005)	-0.010** (0.004)		
Period covered	1980s 1990s	1980s 1990s	Only 1980s	Only 1990s
N	36	44	22	22
Adjusted R ²	0.39	0.41	0.16	0.46

^a The regressions use up to two observations per country: one for the 1980s and one for the 1990s. The standard errors are shown in parentheses. The asterisks indicate the level of significance: * = 99%, ** = 95% and *** = 90%. The samples used in these regressions excluded four small countries with very volatile private capital flows: Suriname, Panama, Bahamas and Nicaragua.

Brazil, Chile and Colombia, which have managed their private capital flows, are somewhere in between.

It is also possible to interpret these results in a different manner, emphasizing the causality in the opposite direction. Perhaps capital flows simply respond to underlying volatility in the economic environment, and are not a determinant of it. This would be the appropriate interpretation under the assumption that private capital flows follow fundamentals and there are no multiple equilibria, with the result that capital flows are not an independent source of disturbances. Even under this

scenario, however, our results indicate that capital flows, by being very sensitive to other shocks, are a potential source of magnification of such shocks. In this sense, countries that are very open to private capital flows may suffer from additional volatility generated by reversals in flows even if capital flows respond only to fundamentals. This point is picked up in greater detail in the following section, which shows how capital mobility aggravates risk for the domestic economy even when capital responds only to exogenous “productivity” shocks.

VI

Capital mobility and the incidence of macro risk

The finding that erratic capital flows are a strong correlate of macroeconomic volatility has an important implication which has to do with the distribution of macroeconomic risk across domestic households. As the decomposition in a previous section highlighted, households whose relative income streams co-vary with the national average bear greater income risk than those whose relative incomes are counter-cyclical. In particular, as my illustrative empirical application highlighted, workers whose real wages are pro-cyclical—rising more than national income in good times, and falling more in bad times—suffer disproportionately from macroeconomic volatility.

One implication of capital mobility is precisely that more of the macro risk gets shifted on to domestic factors of production—such as labour—that are not internationally mobile. Since capital can move in and out in response to, say, domestic productivity shocks, it can evade the risk posed by the stochastic nature of the domestic economic environment. But capital flows thereby impose an externality on internationally immobile groups because the latter now have to bear a greater share of the domestically undiversifiable risk.

A simple model, adapted from Rodrik (1997, chap. 4), illustrates how this works. Let us assume a small open economy that produces (and exports) a single good, whose price is determined in world markets. This good is produced under constant returns to scale, using labour and capital. Unlike labour, capital can move across borders, but at a cost. The magnitude of this cost will be the parameter capturing the degree of capital mobility in the economy. Labour, whose welfare is the focus of the analysis, consumes only the importable. The only source of uncertainty in the model is the productivity level in the exportable sector, which is assumed to be stochastic. Labour income consists of wage income plus the proceeds of a tax on domestic capital.

Let the production function of the exportable sector be written as $pf(k, l)$, with the usual regularity conditions: $f_k > 0$, $f_l > 0$, $f_{kk} < 0$, $f_{ll} < 0$, and $f_{kl} > 0$. The stochastic productivity parameter is given by p . (We could equivalently think of p as the terms of trade.) We normalize the economy's fixed labour endowment to

unity, so the production function can also be expressed as $pf(k)$. The domestically-owned capital stock is exogenously fixed at k_0 . Note that k , the capital used at home, can differ from k_0 as capital moves in and out of the country. A key assumption is that an increasing cost is incurred by capitalists as capital moves across borders. We can think of this as the cost of setting up business in a less familiar environment, the cost incurred in transporting the final goods back to the home economy, the cost of communicating with subsidiaries in a different country, etc. Increased capital mobility will be captured in the model by reductions in the parameter λ .

The model can be described in three equations:

$$r = pf'_k(k) - \tau \quad [1]$$

$$r = r^* - \lambda(k_0 - k) \quad [2]$$

$$w = pf'_l(k) \quad [3]$$

The domestic return to capital (r) is given by the marginal value product of capital net of the domestic tax. International trade in capital services requires that this return be equal to the international return (r^*) minus a margin that is related to the cost of moving capital abroad. Hence a capital outflow which reduces the capital stock at home to k_1 would depress the rate of return earned by domestic capitalists to $r^* - \lambda(k_0 - k_1)$. Equation [2] expresses this arbitrage condition. Finally, equation [3] states that the domestic wage (w) equals the marginal value product of labour. These three equations determine the three endogenous variables in the system, w , r , and k .

Figure 3 presents a graphical view of the way the model works. The downward sloping schedule shows the negative relationship between r and k expressed in equation [1]. As domestic productivity (p) moves around, so does this schedule. Intuitively, for any given amount of capital invested at home, the return to capital fluctuates in tandem with the productivity in the exportable sector. The upward sloping schedule, for its part, represents the relationship expressed in equation [2]. Two versions of this schedule are shown, one for high λ (low capital mobility) and one for low λ (high

capital mobility). The lower is λ , the flatter this schedule. At the limit, with capital fully mobile at zero cost, the schedule would be horizontal and it would fix the domestic rate of return at r^* .

Let us denote by $k(p, \tau, \lambda)$ the equilibrium level of capital employed at home. Consider an initial equilibrium where the combination of parameters is such that $k(p, \tau, \lambda) = k_0$. In this equilibrium, denoted by A in figure 3, $r = r^*$. Changes in λ would have no effect on w or k (or r) starting from this initial equilibrium, since

$$\frac{dk}{d\lambda} = \frac{k - k_0}{pf_{kk} - \lambda},$$

$$\frac{dw}{d\lambda} = pf_{kl} \left[\frac{k - k_0}{pf_{kk} - \lambda} \right]$$

and both expressions equal zero when $k = k_0$. Intuitively, we fix the initial equilibrium such that capital has no incentive to move in or out of the domestic economy, and consequently changes in the cost of mobility are of no consequence (holding p constant).

Now let us consider what happens as p fluctuates. A reduction in p drives down the domestic return to capital and results in a capital outflow, the magnitude of which is inversely proportional to λ . As the figure demonstrates, the greater the mobility of capital, the wider the fluctuations in the domestic capital stock in response to changes in the world price. Formally,

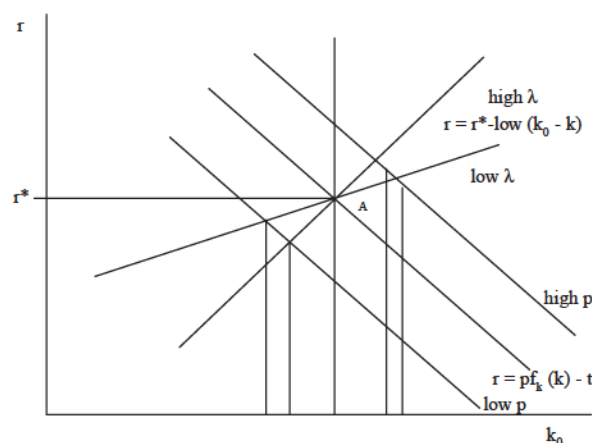
$$\frac{dk}{dp} = \frac{f_k}{\lambda - pf_{kk}} > 0,$$

which is decreasing with respect to λ . The consequences for labour can be easily deduced. Since the domestic wage (in terms of the importable) is determined by the value marginal product of labour in the exportable (equation [3]), capital mobility accentuates the fluctuation in the consumption wage. The lower is λ , the wider the amplitude of fluctuations in w :

$$\frac{dw}{dp} = f_l + \frac{pf_{kl}f_k}{\lambda - pf_{kk}} > 0,$$

which is decreasing in λ .

FIGURE 3
Functioning of the model



In fact, things are even worse for labour, insofar as part of workers' income comes from the tax on capital. Denoting workers' total (real) income by I ,

$$I = w + \tau k$$

Fluctuations in I therefore result not only from fluctuations in wages, but also from fluctuations in the tax base (k) as capital moves back and forth in search of higher returns.

Hence, by rendering capital more responsive to changes in domestic productivity, capital mobility magnifies the amplitude of fluctuations in workers' incomes at home. The effect arises because workers' incomes depend not only on domestic productivity, but also on (a) the domestic capital stock, which fluctuates in response to productivity shocks; and (b) the economy's tax base, which also fluctuates to a greater extent as a result of capital mobility. The effect of capital mobility is increased exposure of labour to macro risk. This can be appropriately viewed as a negative externality that capital imposes on labour. Moreover, when capital mobility is sufficiently high, it becomes impossible to compensate labour through suitable adjustments in the tax on capital: capital mobility allows capitalists to evade the tax, which leaves workers even worse off. The model thus captures in schematic fashion a policy dilemma faced all around the world, but especially strongly in Latin America, where the volatility of capital flows is particularly significant.

VII

Exchange rates, capital mobility and macroeconomic volatility

The association between exchange-rate policy and macroeconomic volatility has already been noted: the collapse of unsustainable currency pegs has historically been an important source of instability for Latin American countries. One of the findings of Hausmann and Gavin (1996) is that countries with flexible exchange rates have typically experienced lower GDP volatility than countries with fixed rates. One reason has to do with the avoidance of currency crises. The other is that flexible exchange rates provide greater insulation against real shocks: a decline in productivity in tradeables sectors or the terms of trade can be met by immediate currency depreciation, short-cutting an adjustment process that under fixed rates would have to be effected through domestic price changes and would take much longer.

Capital mobility in the 1990s has undercut the ability of flexible exchange rates to perform that stabilizing function. Where they are not fixed, currency values have been driven less by shocks to competitiveness or changes in the trade balance and more by considerations of maintaining short-term capital flows and investor confidence. Michael Gavin summarizes the response in the region to the shocks since the Asian crisis as follows:

“The first stylized fact is that despite the magnitude of the external shocks, *most countries used their exchange rate flexibility very sparingly*... In Peru—a formally floating rate country that was severely hit by both El Niño and the collapse in the terms of trade—the cumulative devaluation barely kept pace with inflation. Chile also allowed minimal movements in its exchange rate in spite of a major collapse in the price of copper and in the Asian demand for its exports” (Gavin, 1999, p. 3; italicized in the original).

Gavin goes on to discuss how the policy response of choice was instead the interest rate, which was used aggressively to defend the exchange rate. In other words, rather than letting the nominal exchange rate depreciate sufficiently to give the real economy a boost, Latin American governments chose to tighten monetary

conditions to prevent depreciation. Exchange-rate policy was de-linked from the needs of the real economy.

Table 9 provides a more systematic look at this by analyzing the correlation between real exchange rate changes and balance-of-payments flows of different kinds. The exercise is inspired by a similar one reported in ILO (1999, table 3), which however covers only a single Latin American country. It consists of calculating the correlation coefficients between the quarterly movements in the real exchange rate and flows of two kinds: “real” flows and “financial” flows. The first category of flows is defined as the sum of the current account and inward foreign direct investment (FDI). The second category covers all capital account movements except FDI and reserve changes, and includes errors and

TABLE 9
Latin America (6 countries): Correlations between the real exchange rate and balance of payments flows^a

	Coefficient of correlation between the real exchange rate and:		
	Current account + FDI	Financial inflows	Period ^b
Argentina	0.19	-0.52*	89Q2-98Q4
Brazil	0.40***	-0.23	93Q1-97Q4
Chile	-0.24	-0.03	89Q1-98Q4
Mexico	0.68*	-0.69*	89Q1-98Q4
Peru	0.40	0.21	94Q1-97Q4
Venezuela	0.24	-0.06	94Q1-98Q4

Source: Calculated on the basis of data from IMF (various years).

^a The exchange rates are defined in terms of units of national currency per unit of foreign currency, so that an increase represents a depreciation in real terms. Financial inflows correspond to all capital account movements other than FDI inflows and variations in reserves, including errors and omissions. The periods were selected according to the availability of quarterly data. The levels of statistical significance were as follows: * = 99%, ** = 95%, *** = 90%.

^b Q = quarter.

omissions.⁹ The exercise is carried out for all of the major Latin American countries for which the IMF's *International Financial Statistics* report the relevant quarterly data for some time during the 1990s. There are six countries in all.

The results tell a consistent story. The correlation between financial flows and real exchange rate movements is negative in all but one case (Peru is the sole exception). This indicates that there is a general tendency for the real exchange rate to appreciate in response to financial inflows. The correlation between the real exchange rate and real flows, on the other hand, is positive in five out of six cases (Chile is the sole exception in this case). In other words, in all countries except Chile, deteriorations in the current account (and the FDI balance) are associated with an appreciation of the real exchange rate.

What these results seem to reflect is an increasingly common pattern where financial flows are in the driving seat for the real exchange rate. As far as stabi-

lizing demand for domestic output is concerned, the exchange rate tends to move in the "correct" direction in the case of financial flows—a reduction in inflows depreciates the real exchange rate—but in the "wrong" direction in the case of trade flows: a deterioration in the current account is accompanied by appreciation of the real exchange rate. This pattern is clearest in the case of Mexico, where increasing financial inflows and current account deterioration between 1988 and 1994 were matched with an ongoing real appreciation of the currency. This is picked up in table 9 in the form of very strong correlations between these flows and the real exchange rate. Of course, it is possible to interpret Mexico's experience as an equilibrium appreciation of the currency in anticipation of future productivity gains, notwithstanding the eventual peso crisis. It is nonetheless the case that the real exchange rate was governed by short-term investors' expectations rather than by the state of domestic demand or the large and growing current account deficit.

VIII

Exchange rate flexibility as social insurance

The operation of exchange rate policy during the 1990s has contributed to greater economic insecurity in the region in a more subtle fashion as well. An exchange rate that is targeted on the real economy not only serves a stabilization function; it also serves a social insurance function. The reason is that when the exchange rate follows the behaviour of the current account, shocks to the competitiveness of individual industries are dissipated throughout the entire economy via changes in the value of the currency. On the other hand, when the exchange rate is fixed or is responsive mainly to financial flows, the affected industries have to bear the full brunt of the shock. Since this point is not widely recognized, I will develop it using a simple model.

Let us consider a small open economy that produces two tradeable goods (denoted by 1 and 2) and a single non-tradeable good (denoted by n). We will as-

sume for simplicity's sake that neither of the two tradeable goods is consumed at home, and that the total domestic output of these goods is exported. Households consume the non-tradeable good as well as an imported good that is not produced at home. We fix the (exogenous) world prices of the tradeable goods at unity. Let e stand for the nominal exchange rate in units of home currency per foreign currency unit. The domestic price of all three tradeable goods (the two exportables and the importable) is then given by e . Let the price of the non-tradeable be p .

We will simplify the structure of the economy further by assuming that labour is the only factor of production, and that each of three productive sectors at home uses labour specific to that particular activity. There is no intersectoral mobility of labour. Let the inelastically supplied labour of each type be given by, \bar{l}_1 , \bar{l}_2 and \bar{l}_n , with associated wages w_1 , w_2 , and w_n , while labour productivity in the three sectors is given by a_1 , a_2 , and 1, respectively.

To allow nominal exchange-rate policy to have real effects, we shall assume that w_1 and w_2 are rigid down-

⁹ Note that since changes in reserves are excluded from the calculations, the two sets of correlations need not produce symmetrical results (identical in absolute value and opposite in sign).

wards. The implication is that when unit labour costs exceed prices in either one of the export sectors, labour in that sector will become unemployed. Formally,

$$l_1 = \begin{cases} \bar{l}_1 & \text{if } w_1 \leq ea_1, \\ 0 & \text{otherwise} \end{cases} \quad [2.1]$$

and similarly for the other export sector:

$$l_2 = \begin{cases} \bar{l}_2 & \text{if } w_2 \leq ea_2, \\ 0 & \text{otherwise} \end{cases} \quad [2.2]$$

Labour in the non-tradeable sector is always fully employed, and the price-cost relationship in that sector is given by

$$w_n = p. \quad [2.3]$$

Note that the inequalities in (2.1) and (2.2) will hold as equalities as long as labour of the respective type is not unemployed.

To close the model, we need to specify equality between demand and supply. We shall assume that trade balance holds, so that it is sufficient for our purposes to state the equality between supply and demand for tradeables. Let $Y = ea_1l_1 + ea_2l_2 + pl_n$ stand for aggregate income, and $D(e, p, Y)$ for the demand function for importables. The trade balance equation is:

$$a_1l_1 + a_2l_2 - D(e, p, Y) = 0.$$

It will be convenient to work with a specific functional form, so we will assume that preferences are Cobb-Douglas. Let α stand for the budget share of importables, so that $D(\cdot) = \alpha Y/e$. Then the trade-balance equation can be written as follows:

$$(1 - \alpha)a_1l_1 + (1 - \alpha)a_2l_2 - \alpha \left(\frac{p}{e}\right) \bar{l}_n = 0. \quad [2.4]$$

To see how the model works, let us first consider the case with no wage rigidity. Then we have full employment with $\bar{l}_1 = l_1$ and $\bar{l}_2 = l_2$, and equation [2.4] determines the “real exchange rate” (e/p) as a function of labour productivities a_1 and a_2 . A decrease in the productivity of either of the export sectors results in a depreciation of the real exchange rate (a rise in e/p). Equations [2.1]-[2.3] give us three additional equations with additional endogenous variables w_1 , w_2 , and w_n . We have a total of four equations and five prices (the three

wages plus p and e), so only four relative prices can be determined. It does not matter whether the nominal exchange rate or one of the wage rates is used as the numerator.

For future reference, let us carry out a static comparative analysis of the case with no nominal rigidity (the solutions for this case will remain valid under wage rigidity as well, as long as no downward adjustment in tradeable-sector wages is called for in equilibrium). Let us consider a change in a_1 , with a_2 remaining unchanged. We will define $\theta \equiv \frac{a_1\bar{l}_1}{a_1\bar{l}_1 + a_2\bar{l}_2}$, with $1 > \theta > 0$. Then it can be shown that relative prices move as follows.

$$\hat{w}_1 - \hat{e} = \hat{a}_1 \quad [2.5]$$

$$\hat{w}_1 - \hat{p} = (1 - \theta) \hat{a}_1 \quad [2.6]$$

$$\hat{w}_2 - \hat{e} = 0 \quad [2.7]$$

$$\hat{w}_2 - \hat{p} = \theta \hat{a}_1 \quad [2.8]$$

$$\hat{w}_n - \hat{e} = \theta \hat{a}_1 \quad [2.9]$$

$$\hat{w}_n - \hat{p} = 0, \quad [2.10]$$

where a hat indicates a proportional change ($\hat{x} \equiv dx/x$). These relationships enable us to determine the implications for the real wages, and hence the welfare, of each of the three groups of workers.

Suppose productivity in sector 1 decreases ($\hat{a}_1 < 0$). We see from equations [2.5] and [2.6] that workers in sector 1 lose unambiguously. Workers in the other export industry (sector 2) benefit, however, since their wage stays unchanged in terms of the importable but rises in terms of the non-tradeable good (see equations [2.7] and [2.8]). Workers in the non-tradeable sector lose, due to the real depreciation of the exchange rate. These results are independent of the “exchange rate regime”, since in a model without wage rigidity, the nominal exchange rate has no real effects whatsoever.

1. Nominal wage rigidity and fixed exchange rates

Let us consider now what happens when we require that wages in both tradeable sectors be rigid downwards, that is, $\hat{w}_1 \geq 0$ and $\hat{w}_2 \geq 0$. The exchange rate now matters because under a fixed-rate regime (with $\hat{e} = 0$), the downward adjustment of wages in relation to traded-good prices is blocked. Since such an adjustment is

required in order to maintain full employment when an industry receives a negative productivity shock, the outcome will be unemployment.

Comparative static analysis of this case, with $\hat{a}_1 < 0$ as before, yields the following results under fixed exchange rates:

$$dl_1 = -\bar{l}_1 \quad [2.11]$$

$$\hat{w}_2 - \hat{e} = 0$$

$$\hat{w}_2 - \hat{p} = \theta \hat{a}_1 + \theta \quad [2.8']$$

$$\hat{w}_n - \hat{e} = \theta \hat{a}_1 - \theta \quad [2.9']$$

$$\hat{w}_n - \hat{p} = 0.$$

We note three changes. First, all workers in industry 1 lose their jobs (equation 2.11). Second, workers in industry 2 now experience an even larger gain in real wages (compare equations 2.8 and 2.8', remembering that $\hat{a}_1 < 0$). Third, workers in the non-tradeable sector experience a bigger drop in real wages (compare 2.9 and 2.9'). The last two results are due to a sharper change in the real exchange rate when wage rigidity combined with fixed exchange rates results in unemployment. The intuition is as follows: when export industry 1 collapses as a result of becoming uncompetitive, the incipient trade deficit is much larger, and the requisite relative-price correction is commensurately bigger.

The important result from our perspective is that the distributional implications of the productivity shock are accentuated. Wage rigidity combined with fixed exchange rates results not only in inefficient outcomes

(captured here by unemployment), but also in greater dispersion of the distributional outcomes.

2. Nominal wage rigidity and flexible exchange rates

When the exchange rate is not fixed *and* can be targeted on the trade balance, these effects can be offset by a depreciation of the nominal exchange rate that is large enough to restore unit labour costs in industry 1 to their original level (i.e., $\hat{e} = -\hat{a}_1$). Flexibility in e allows the wage in sector 1 to be reduced in terms of traded-goods prices, eliminating unemployment. Therefore, equations [2.5] to [2.10] continue to describe the behaviour of the economy, despite downward rigidity in w_1 . The distributional outcomes are the same as in the absence of wage rigidity.

The results with productivity shocks to sector 2 are analogous, and need not be discussed in detail. Table 10 summarizes the distributional impacts for the three sectors, under both positive and negative shocks. Note that under positive productivity shocks, the distributional impacts do not depend on whether the exchange rate is fixed or targeted on the trade balance. This is because of the (plausible) assumption that wages are rigid downward but not upward. Consequently, non-classical results obtain under fixed exchange rates only when one of the sectors is hit with a negative shock. When that happens, the distributional effects are aggravated under fixed rates through the two channels mentioned above: first, incomes collapse in the adversely affected sector because of unemployment, and second, there is a larger relative price change to the benefit of the other tradeable sector and the detriment of the non-tradeable sector.

TABLE 10

Distributional implications of productivity shocks under different exchange-rate regimes

	Shock to export sector 1						Shock to export sector 2					
	Positive shock ($\hat{a}_1 > 0$) Implication for sector:			Negative shock ($\hat{a}_1 < 0$) Implication for sector:			Positive shock ($\hat{a}_2 > 0$) Implication for sector:			Negative shock ($\hat{a}_2 < 0$) Implication for sector:		
Exchange rate regime	1	2	n	1	2	n	1	2	n	1	2	n
Fixed exchange rates	+	-	+	---	++	---	---	+	+	++	---	---
Flexible exchange rates	+	-	+	-	+	-	-	+	+	+	-	-

^a The model assumes that nominal wages are rigid downwards in sectors 1 and 2. See text for description of model and discussion.

IX

Institutions of voice

The demise of military rule and the transition to democracy have been the most encouraging developments to take place in Latin America during the last two decades. Cross-national evidence suggests strongly that societies with greater political openness and participation are better at adjusting to external shocks, experience lower economic volatility, and generate lower inflation (Rodrik, 1998). Hence, the institutionalization of democracy should eventually produce more stable economic outcomes and alleviate economic insecurity in the region.

The international evidence on the relationship between type of political regime and economic stability is shown in figures 4 and 5. These scatter plots display the (partial) association between a measure of non-elite political participation and two indicators of macroeconomic volatility over the span of two decades (1970s and 1980s). The volatility measures are the standard deviation of real GDP growth rates (figure 4) and the average inflation rate (figure 5). The measure of participation (*parcomp*) is an index taken from the Polity III data set of Jagers and Gurr (1995), and is defined as the “extent to which non-elites are able to access institutional structures for political expression”. The latter is highly correlated with usual measures of democracy (such as the commonly used Freedom House index), but I have found that it is a better predictor of macroeconomic volatility than others. The regressions on which the scatter plots are based contain the following additional controls: per capita income, population size, terms-of-trade volatility, and regional dummies for Latin America, Africa, and East Asia. The scatter plots show the association between political participation and volatility, controlling for these other variables.

Political participation turns out to be strongly, and negatively, correlated with both GDP volatility and inflation levels. While correlation does not prove causation, other econometric work and a range of case studies suggest that the degree to which a political system is open to participation from below does affect the quality of macroeconomic management for the better (see Rodrik, 1999, and references therein). Participation helps in a number of different ways. First, democracy allows a smooth transfer of power from failed policies and politicians to a new group of government leaders.

FIGURE 4
Relationship between GDP volatility and political participation, 1975-90 (96 countries)

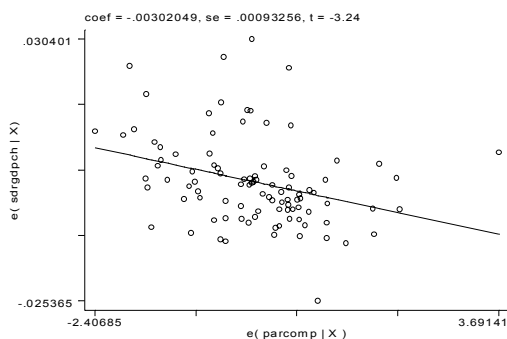
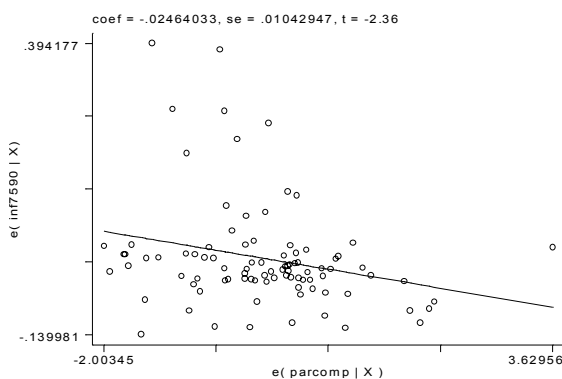


FIGURE 5
Relationship between inflation and political participation, 1970-90 (96 countries)



Second, participation enables mechanisms of consultation and bargaining, allowing policy makers to fashion the consensus needed to undertake the necessary policy adjustments in a decisive manner. Third, institutionalized mechanisms of “voice” obviate the need for riots, protests, and other kinds of disruptive actions by affected groups, as well as lowering the support for such behaviour by other groups in society.

Participatory institutions in Latin America still have a number of important weaknesses, however, despite

the region's transition to democracy. These weaknesses have to be seen as one of the elements aggravating economic insecurity: when large segments of the population lack an effective mechanism of voice in matters that affect them, they naturally feel less in control of their fate.

As already noted, trade unions, which are an important institution of collective voice, have lost membership in all countries for which data are available, except Chile. Unions are important to workers not only because they act as pressure groups in the political sphere, but also because they enable participation in decision making in the workplace. On both accounts, unions provide their members with a greater sense of control over their working environment. As Pencavel (1997, p. 58) puts it in his discussion of Latin America:

"It is important... that workers not feel alienated from the economic and social system and [that they] believe they have a stake in it. Process matters: even if outcomes are identical, employees value the fact that they or their agents help to shape their working environment. The labour union has been the primary vehicle for accomplishing this situation".

The old style of trade union activity in Latin America, consisting of lobbying for legally mandated forms of job protection and wage advantages, is arguably not well suited to the requirements of economies with competitive markets and smaller production units. In the past, unions have been too often associated with populist and protectionist policies. As Márquez and Pages (1998) argue, neither trade union leaders nor policy makers have yet been able to fashion an environment in which unions are seen as sufficiently responsive to the needs of workers as a group.

The broader political system in Latin America is faced with what Domínguez (1997) calls a "crisis of representation". As he puts it, "long-standing forms of representation—populist parties and so-called corporatist arrangements—have weakened precisely at the moment when public support must be found to help guarantee the stability of economic reforms and constitutional government.... Government officials in Latin America are perceived as corrupt, political parties as a collection of factions, legislatures as ineffective, and presidents as either saviors or rascals to be impeached. While military coups have all but disappeared, new forms of threats to constitutionalism have emerged: rule by Presidential decree, mutinies led by disgruntled middle-ranking military officers, and Presidential "coups" against

the legislature, courts and all vehicles that help civil society seek advocacy and representation for its interests" (Domínguez, 1997, pp. 109-112). Mutinies from within the military have taken place in Argentina, Ecuador, Guatemala, Panama and Venezuela, while presidential coups have been attempted in Guatemala, Peru and Venezuela.

Colonel Hugo Chávez, a Venezuelan paratrooper, typifies all these trends: in 1992 he unsuccessfully tried to topple the democratically elected government of Venezuela. Even though he failed, his attempt was sufficiently popular to carry him to a clear majority in the presidential elections of 1998. In late 1999, Chávez still maintained high popularity ratings despite his decision to effectively disband the legislature and replace it with a constitutional assembly elected to draft a new constitution. This is indicative of the frustration that Latin Americans evidently feel regarding their political systems.

As in so many other instances, Chile stands out as an exception to many of these trends. The transition to democracy in Chile in 1990 was accompanied by the initiation of a social dialogue between labour, business and the government and a series of annual tripartite agreements. The democratically-elected government of Patricio Aylwin sought to gain social legitimacy for its economic policies by increasing spending on social programmes and by drawing on the labour movement. The Aylwin government's first significant piece of legislation was a tax increase earmarked for greater social spending (Domínguez, 1998). The tripartite agreements allowed the unions to participate in national decision making over such matters as the raising of the minimum wage and the reform of labour laws. In the words of Cortázar (1997), the centre-left coalitions that have run Chile since 1990 have looked on labour unions as an "opportunity for, rather than a threat to, development". Employers, for their part, have found it convenient in the post-Pinochet period to have a social partner across the negotiating table in order to avoid social strife. The result has been a comparatively harmonious system of labour relations¹⁰ and a political system that has perhaps a surprising amount of popular legitimacy despite its failure to come to grips with Pinochet's legacy.

¹⁰ A 1997 survey, carried out among 300 private-sector companies in Santiago, found that an astonishing 83.7% of employers consider labour unions to help labour relations, and only 6% believe that they make them more difficult. Among trade union leaders, 65.3% said that most of the time employers facilitate the work of trade unions. (Reported in The Economist Intelligence Unit, 1998).

X

Concluding remarks

I have argued in this paper that economic insecurity in Latin America is multifaceted and has many sources that feed on each other. Some of the insecurity arises from the decline in employment protection and increased volatility of household outcomes. Some of it is the result of erratic capital flows and the systemic instability generated by a divorce between the instruments of stabilization and the real economy. Finally, an important component is the weakness of the institutions of voice and representation.

An important implication of this is that programmes aimed at social protection *per se* can be of partial help only. Well-functioning safety nets—unemployment compensation, old-age and medical benefits, targeted social funds—may help cope with some of the idiosyncratic risks that households face. But they will have to be complemented by macroeconomic policies (with regard to capital flows and the exchange rate in particular) that are more conducive to the stability of the real economy and by loosening the control of financial markets over the instruments of macroeconomic policy. They will also require access to representative institutions—trade unions, political

parties, and legislatures—with greater responsiveness and legitimacy than those that exist at present.

Perhaps what Latin America needs most, however, is a vision of how social cohesion can be maintained in the face of large inequalities and volatile outcomes, both of which are being aggravated by the growing reliance on market forces. In today's advanced industrial countries, the expansion of the market's role has historically gone hand in hand with the strengthening of the institutions of social insurance. Since the New Deal in the United States, and even more so since World War II in Europe, that has meant the growth of the public sector and the erection of a welfare state. If Latin America is to carve a different path for itself, the region will have to develop an alternative vision that articulates how the tension between market forces and the yearning for economic security can be eased.

The good news is that this question is at least being addressed. The bad news is that no-one, least of all economists, has a very useful answer to offer so far.

(Original: English)

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Strengthening *regional financial* cooperation

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The severe international financial crises which rocked the Latin American economies in the 1980s and 1990s suggest that the international financial system suffers from serious defects. This article looks at one of the reforms which has been mooted in recent years: strengthening regional financial cooperation. It concludes that a Latin American fund made up of a modest portion of the reserves of the countries of the region, possibly backed up with contingency credits from the international banking system, could be an effective line of defense against financial crises caused by capital flight and could help to prevent the spread of crises within the region. A fund of this nature could also have other functions, such as providing finance to cope with balance of payments problems associated with temporary slumps in the terms of trade. It would also promote harmonization of the macroeconomic policies of its members, which is an essential condition for achieving more stable bilateral exchange rates and effective regional integration. Such a regional fund would not be a substitute for the International Monetary Fund, but would be complementary to it.

I

Introduction

The recurrent international financial crises which have rocked the “emerging” economies have given rise to a vigorous debate on possible reforms in the international financial architecture. Many reform proposals have been put forward, and some of them include the creation of regional monetary bodies (see Ocampo, 1999, pp. 68-70; Mistry, 1999; FLAR, 2000). This article analyses the importance of the role that could be played by measures to strengthen the capability of regional bodies to tackle financial “contagion” and promote intra-regional trade and investment.

The Latin American countries have been particularly active in efforts to establish subregional financial institutions to come to the aid of countries with balance of payments problems. There are also regional and subregional mutual payments mechanisms in Latin America which are designed to reduce the need to resort to foreign exchange to finance payments among their members. Although these institutions have played an important role in the last two or three decades, they need to be strengthened in order to face up to the challenges of globalization and become the regional link currently absent from the international financial architecture.

Strengthening the regional financial institutions would have the following objectives:

- i) helping member countries to cope with balance of payments crises due to reasons unconnected with the quality of their macroeconomic policies;
- ii) promoting regional integration by furthering greater stability of the bilateral exchange rates between the countries of the region;

- iii) protecting intra-regional trade and investments at times of global financial crisis;
- iv) providing a forum to help in the coordination of macroeconomic policies, thus leading to less vulnerability to external crises and greater stability of bilateral exchange rates; and
- v) promoting the exchange of information on matters vital for international financial stability, such as prudential regulation of the financial sector and capital flows.

After it is posited in the introduction to this article that the nature of financial crises within the context of globalized finance makes it advisable to have stronger regional institutions in this field, section II deals with the last-generation financial crises and their effects on recipient economies. Section III sets out the arguments in favour of the strengthening of regional financial mechanisms. Section IV deals with the role such mechanisms could play in promoting regional integration. Section V then describes two of the international financial cooperation institutions which already exist in the region: the Latin American Reserve Fund (FLAR) and the Mutual Payments and Credits Agreement (CPCR) of the Latin American Integration Association (ALADI), after which section VI presents some options for strengthening the regional financial institutions to face the challenges of financial globalization and Latin American integration. Section VII analyses the feasibility of a strengthened regional fund and the size it should have in order to be considered capable of coping with the challenges of globalization. Finally, section VIII presents some conclusions.

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II

The latest generation of financial crises

The international financial crisis set off by the depreciation of the Thai baht in July 1997 had world repercussions and severely affected the developing countries which had managed to gain access to the international capital markets. In this context, the Latin American countries were not able to isolate their economies from the vicissitudes of international capital. As from 1998, the region's growth rate markedly deteriorated, and in 1999 they turned in their worst economic performance since the debt crisis.

In the paragraphs below we will define more precisely what the word "contagion" means in this context. Suffice it to say at this point that we consider contagion to mean a pure external shock which has nothing to do with the virtues or shortcomings of the domestic economic policy of the countries affected by it. Generally speaking, the term contagion has been used with reference to the financial field: a financial crisis acts as a signal, and this signal sets off forms of herd behaviour in the capital markets. Although this is one of the most important forms of contagion in a financially globalized world economy, it is by no means the only form, however. There are countries in Latin America which participate only marginally in the global financial markets but have nevertheless been severely affected by the indirect effects that events in those markets have on their terms of trade or export volumes. For these reasons, we use the term contagion in a broader sense which also naturally covers capital flight caused by international financial problems in other countries or by interest rate rises in the industrialized countries.

The contagion mechanisms suffered by the region during the most recent world financial crisis were of various types:

- i) there was trade contagion through the impact on the terms of trade caused by the recession in the Asian economies (which were the hardest hit by the financial crisis): the prices of various raw materials exported by the Latin American countries to international markets went down sharply. Although it is true that the fall in the prices of export products was offset to some extent in some cases by lower prices of some imported products (especially oil and manufactures), there was nevertheless a deterioration in the terms of trade of most of the countries;¹
- ii) trade contagion also occurred through a contraction in the volumes of exports to Asia, with particularly severe effects on the countries for which the Asian economies are important markets, but it also took the form of a disproportionate contraction in intra-regional exports, which are concentrated on manufactures;
- iii) financial contagion was serious for most of the countries of the region, and it had particularly adverse effects. As a result of the run on capital by all the emerging countries, the banks and companies of many countries of the region had difficulty in renewing their lines of credit. The spreads at which they could sell new corporate bonds increased dramatically. In some cases, even first-line companies in the region simply could not sell bonds at any price, while foreign portfolio investors liquidated their holdings;
- iv) financial contagion also had a purely domestic aspect. The sudden increase in exchange risk caused domestic agents to shift their investments from national-currency securities to others denominated in dollars, thus aggravating the trend towards depreciation of the local currency. Companies with foreign-exchange liabilities, accumulated during the long period of easy availability of foreign capital, hastened to cover themselves, thus further aggravating the crisis caused by the flight of foreign capital and the non-renewal of loans by the international banking system;
- v) all the countries (except those with fixed exchange rates) registered excessive degrees of exchange-rate depreciation in nominal and even in some cases real terms, although some of these have now been reversed.

Most of the countries of the region suffered both trade and financial contagion, which was why the crisis had such severe effects. The consequences of both types of

¹ This study was completed before the oil price rises in the second half of 2000.

contagion can be relieved through the provision of suitable finance. In the case of trade contagion, if it is expected that the deterioration in the terms of trade and/or the drop in export volumes are temporary and reversible, the best policy is to obtain compensatory finance to tide over the period of such problems. This is the reason for the existence of the IMF Compensatory Financing Facility.

Financial contagion is also of a temporary nature. As the Mexican and Asian crises of the 1990s showed, inflows and outflows of capital follow each other in a cyclical manner (a matter which will be dealt with below in greater detail). If balance of payments problems are due to financial contagion, there would be grounds for the provision of advance lines of credit to supplement the international reserves of the countries affected, thus saving their authorities from having to apply over-restrictive policies to reduce the external deficit.

In view of the globalization of finance, the growing participation of the countries of the region in the international capital markets and the behaviour of both domestic and international financial agents make it very likely that financial crises will be increasingly frequent and increasingly due to contagion from outside. The reforms proposed in the international financial architecture are designed to reduce the likelihood that such crises will occur and protect the developing countries from the worst effects of those that do take place.²

This means that the balance of payments crises now being suffered by many countries may have little to do with erroneous macroeconomic policies. The typical balance of payments crises to which we were accustomed in the region in the past were due to current account deficits which it became impossible to finance. The macroeconomic policies associated with these crises included heavy fiscal deficits (even in cyclic boom periods), which had to be monetarized in some way, and over-expansionary monetary policies or insistence on the maintenance of an overvalued exchange rate (perhaps because domestic inflation had been higher than international levels for a substantial length of time). Imprudent macroeconomic policies led to ultimately unsustainable current account deficits and to loss of reserves by the Central Bank. It is this kind of situations that the IMF is prepared to tackle by granting its conditional loans.

² There is extensive literature on this subject, and many reform proposals have been put forward. See for example Ocampo (1999), Eichengreen (1999), Agosin (1999) and Ahluwalia (2000).

The region is not of course entirely free as yet of these “first generation crises” (whose formal expression as a model may be found in Krugman, 1979). What distinguishes the present crises from those crises is that they now occur in several countries in sequence, often without any evident causes attributable to the macro-economic management of the countries concerned. This is what we call “financial contagion”. As we shall see below, this sequential nature was very evident in the Asian financial crisis.

An empirically verifiable constant is that countries which become victims of this new generation of crises associated with globalization first of all receive a heavy inflow of capital. This is what happened in Mexico in the period before 1994, and it also happened in all the countries most severely rocked by the recent financial crisis: Thailand, Malaysia, Indonesia, the Philippines, South Korea, Russia, Brazil and Argentina. Thus, to some extent financial crises are gestated during periods of excessive capital inflows, especially of short-term capital (Rodrik and Velasco, 1999). The massive inflow of resources into certain countries is due to a combination of factors, including the favourable perceptions of foreign financial investors or simply expectations that the currency in question will appreciate.³ Since interest rates are normally higher in emerging markets than in those of the developed countries, expectations of exchange-rate appreciation can spark off heavy capital inflows.

Those inflows are often by no means marginal for an individual recipient. In emerging economies, they may amount to over 10% of the gross domestic product (GDP). Furthermore, as the financial markets of those economies are very shallow, capital movements often form a very high proportion of the national finances. As may be seen from table 1, whereas in the developed countries international capital movements hardly ever exceed 5% of the (M2) money supply, in emerging economies they may amount to as much as 25%.

Consequently, waves of capital inflows can cause serious negative externalities in the developing countries, for they can generate current account deficits, lead to exchange rate appreciation, give rise to asset price bubbles, and increase the national financial system's

³ This is a rather *sui generis* international version of Keynes's “beauty queen contests” (Eatwell, 1997, p. 243). Thus, some agents are more sensitive to what other agents plan to do than to the intrinsic value of assets. When these agents predominate over the “fundamentalists”, financial markets can become extremely volatile.

TABLE 1

**Developed and emergent economies (14 countries):
Net capital flows^a as a percentage of M2^b**

Country	1990-1998	1990-1994	1995-1998
Japan	1.7	1.8	1.7
Canada	3.1	4.2	1.7
United States	3.1	2.1	4.2
Switzerland	5.7	5.3	6.0
South Korea	5.7	4.7	7.0
Brazil	7.2	3.3	10.4
Indonesia	9.1	8.9	8.4
Malaysia	11.2	13.2	6.3
Venezuela	14.5	18.5	11.4
Chile	18.6	18.9	19.2
Colombia	18.5	11.8	26.0
Mexico	18.9	23.8	12.9
Ecuador	19.6	16.4	19.3
Argentina	22.0	25.5	18.2

Source: IMF (2000).

^a Net inflows or outflows (outflows in the case of Switzerland and Japan, inflows in all the other countries).

^b Currency outside banks, demand deposits, term deposits and savings deposits.

vulnerability to a run on short-term credits or failure to renew them. Moreover, they often raise the ratio of short-term debt to the international reserves. Likewise, the short-term nature of capital flows means that investors can easily leave the country in masses and creditors may refuse to renew their loans as soon as they sense some problem.

When there is a change in the fundamental economic variables, at some point the perceptions of vulnerability begin to grow and the inflow of capital shrinks and may even turn into a net outflow, with massive flight of resources. When a country has lost a certain volume of its reserves, foreign and domestic financial investors perceive the existence of exchange risk, and when fears of devaluation begin to gather force, everyone begins to liquidate their national currency holdings or try to cover their foreign-exchange liabilities, thus speeding up the loss of reserves and precipitating an acute crisis.

As the banks were major recipients of foreign credits during the boom period, outflows of capital are associated with the non-renewal of credits and cause serious banking crises. Because of this, the last-generation crises are usually "twin crises" affecting the balance of payments and the banking system simultaneously (Kaminsky and Reinhart, 1996; Kaminsky, Lizondo and Reinhart, 1998).

It should be stressed that in the present context both inflows and outflows of capital are subject to contagion. In the case of inflows, portfolio investors and bank creditors tend to underestimate the risks involved in investing or lending money to agents in the recipient economy. Inflows of capital into an emerging economy are usually accompanied by inflows into other countries with similar characteristics. In contrast, at times of abrupt outflows there is a tendency to overestimate the risks involved in staying in them (Ocampo, 1999, p. 21). The vast majority of the Latin American economies received enormous amounts of portfolio investments and international bank loans in the 1990s. Among these economies, some had already carried out profound economic reforms, while others were just embarking on that process (Calvo, Leiderman and Reinhart, 1993; Devlin, Ffrench-Davis and Griffith-Jones, 1995; Ocampo and Steiner, 1994). Consequently, although many countries had made great progress in their macroeconomic management, many were very vulnerable to contagion from financial stampedes like those that occurred after the Asian crisis, the Russian crisis (July 1998) and the two Brazilian crises (August-September 1998 and January 1999).

When there are capital inflows which are very large in comparison with the size of the financial markets of the recipient economies, macroeconomic management becomes a very complicated business in the latter. Although it is possible to counteract the expansionary effect of the inflows to some extent with restrictive fiscal and monetary policies, no Latin American country has been completely successful in this, even in the case of those like Chile and Colombia which made this an explicit objective of their economic policy. Experience shows that the wisest course for emerging economies is to adopt prudential regulations on capital flows.

Although there is evidence that some forms of financial contagion are simultaneous (simultaneous increases in the spreads that debtors in emerging economies must pay, for example), the experience of the last few years indicates that international financial crises tend to occur sequentially. After one economy begins to suffer from capital outflows, international investors and creditors begin to have doubts about the creditworthiness of debtors in other countries which might display similar symptoms. In some cases, the contagion is due to the effects of the initial crisis: the exchange-rate depreciation caused by the first crisis makes the exports of other economies with similar export profiles less competitive.

III

The role of regional funds in coping with financial crises

As already noted at the beginning of this article, the phenomena described here have given rise to the perception that the international financial architecture needs major modifications and have set off a very interesting international debate on the elements that should make up this new structure. One conclusion reached is that much greater importance should be attached to the regional monetary institutions as an extra line of defense against financial crises and contagion.

This objective of strengthening the regional financial institutions does not mean making them take the place of the IMF, which is a key institution in the international monetary system. No regional fund would have either the volume of resources of the IMF or the political capacity to mobilize large-scale financial rescue operations when necessary. Moreover, many international financial problems go beyond the regional ambit and require global solutions.

Regional funds could however be an important link between individual countries and a strengthened and reformed IMF, thus giving the system greater capacity to promote international financial stability. Furthermore, if international-level reforms were not carried out, this would be all the more reason for the Latin American countries to strengthen their lines of defense against financial crises by strengthening regional cooperation.

There are a variety of reasons for strengthening regional funds. All the Latin American countries are continually exposed to temporary external shocks due to fluctuations in their terms of trade, higher interest rates on international financial markets, or financial shocks like those described earlier. These shocks can be tackled in various different ways. One way is self-insurance, which consists of maintaining higher levels of international reserves than those currently prevailing or arranging contingency credit lines with the international banking system. This solution involves two problems: the opportunity cost of the reserves is high, and the contingency credits that each country could expect to receive from the international banking system are costly and quite modest in size. A second option would be to resort directly to the IMF. The Latin

American countries will undoubtedly continue to do this when they run into severe financial difficulties, but the Fund usually imposes conditions which are not always the right ones for dealing with the problem, and its decisions are usually too slow to cope with problems that call for quick responses. Finally, the Latin American countries have very little influence on the IMF's decisions and criteria.

For all these reasons, making use of a regional body could be an attractive option. A regional monetary body could respond effectively to essentially regional problems. The desirability of having adequate reserves to deal with common problems is thus a powerful argument in favour of establishing what would in effect be an international credit union in the region. If at the same time financial crises have an element of regional contagion, the arguments in favour of forming regional funds to deal with them become all the stronger, especially if avoiding a balance of payments crisis in one country of the region would mean avoiding similar crises in other countries of the same region. In other words, a regional financial body would have substantial externalities.

Regional contagion was clearly visible in the most recent financial crisis, which had two phases, both of them with strong regional implications. The first phase was markedly Asian: it began in July 1997 in Thailand and in the second half of the year it gradually spread in turn to almost all the emergent markets of Asia: Indonesia, the Philippines, Malaysia, Hong Kong, Taiwan, Singapore and finally, in November of that year, South Korea. The crisis was no respecter of persons, affecting not only countries with high levels of short-term indebtedness in proportion to their reserves (Thailand, Indonesia, Malaysia and South Korea) but also countries with a very sound reserve situation, such as Hong Kong and Singapore, and not only countries with high current account deficits as a proportion of their GDP (Thailand and Malaysia) but also countries with only moderate deficits (South Korea and Indonesia) and even economies with significant surpluses (Singapore and Hong Kong).

In 1998, after the Russian crisis, the Brazilian real had to withstand a first speculative onslaught in August and September. This worsened the crisis in Latin America, which was already experiencing substantial but still manageable trade and financial difficulties. By the middle of 1998, with the mass exit of portfolio investors from the emergent economies and the negative revision of Latin American debtors by international creditors, the countries of the region had already begun to experience serious balance of payments problems which called for severe adjustment policies. It was the second –and this time successful– attack against the real in January 1999, however, which sparked off the most acute phase of the crisis in the other countries of the region.

If the financial crises were not of a sequential nature, a regional fund would be unlikely to have sufficient resources to deal with cases of capital flight from several countries simultaneously. As crises of this nature can indeed occur (the debt crisis in the 1980s was an outstanding example of this), regional funds

cannot play the role of an institution like the IMF in solving such crises.

If crises gradually spread from one economy to another, a regional fund capable of stemming the capital flight from the first country in the region affected would significantly reduce the danger for the other countries of the region, assuming of course that the initial crisis was not due to bad macroeconomic management. A regional body designed to control cases of contagion would not be suitable for dealing with the latter situation, which could only be dealt with by the international provision of liquidity on suitable conditions.

Regional funds are also justified on other grounds. The countries of a region will have a much greater say in the policy of a regional fund than in that of an organization like the IMF, and a regional fund would therefore meet the needs of its member countries much more completely. This can be very important when trying to coordinate monetary and economic policies in order to attain a more advanced stage in regional integration: a matter which will be addressed in the next section.

IV

The role of regional funds in furthering integration

The need to strengthen regional financial cooperation goes beyond the pursuit of a common line of defense against possible contagion. Regional integration is a major objective of the development policy of all the Latin American countries. In recent years there have been substantial advances in the trade-related aspects of integration, both within the framework of the multilateral integration agreements already operating in Latin America –MERCOSUR, the Andean Community, the Central American Common Market (CACM) and the Caribbean Community (CARICOM)– and between individual countries. Likewise, since the beginning of the 1990s a number of quite comprehensive bilateral trade agreements have been signed. Both the multilateral and the bilateral agreements have helped to increase intra-regional trade significantly, and indeed it has grown faster than inter-regional trade.

However, the lack of harmonization of macroeconomic policies and the sharp fluctuations which have taken place in bilateral exchange rates have

militated against faster progress towards trade integration and mutual investments among the countries of the region. In the Andean Community, the strong growth of mutual trade registered in recent years came to an abrupt stop in 1998 because of the financial crisis.

So far, governments have acted on the implicit assumption that progress towards trade integration can be achieved by concentrating on tariff reduction and the removal of non-tariff barriers to trade, while leaving exchange and financial matters for a later stage. Perhaps now is the time to reverse these priorities. Experience has shown time and again that exchange rate volatility and financial crises seriously upset trade flows and end up in practice by dismantling the formal arrangements of the trade agreements. An international financial crisis can suddenly cause the exchange rate of a country vis-à-vis its regional partners to vary by a much larger percentage than its most-favoured-nation tariff. This shows that exchange-rate stability can be more

important than tariff reductions for promoting regional and subregional trade flows.

MERCOSUR itself –the most ambitious subregional integration process of recent time– has come under considerable pressures precisely because of the instability of the exchange rate prevailing between its two biggest members, caused by the impact on the economies in question of changes in direction of capital flows and the lack of macroeconomic and exchange rate coordination between countries.

There are various reasons why financial crises are so harmful to mutual trade. When a country begins to suffer from balance of payments problems, two phenomena occur in particular: its exchange rate is depreciated vis-a-vis the currencies of its neighbours, and there is a fall in aggregate demand. This latter effect can be further amplified by the adoption of restrictive policies aimed at tackling the balance of payments crisis. The trade-related effects of these phenomena hit neighbouring countries particularly hard, since they find it harder to sell their own products on the market of the country suffering the crisis, while at the same time they have to face stronger competition from the exports of that country.

Latin America's regional trade is strongly concentrated on manufactures, the demand for which is highly sensitive to fluctuations in the exchange rates and aggregate demand of other members. This is not so in the case of commodities, which are mainly exported to the industrialized countries.

Instability in the financial flows to Latin American countries gives rise to great volatility of bilateral exchange rates within the region and depresses economic activity in all the countries of the region. These two factors are highly prejudicial to the achievement of closer economic integration.

Generalized financial crises are particularly harmful to integration. When a country begins to suffer from contagion from other crises in the region, its currency is devalued and its producers recover the competitiveness they lost during the capital inflow boom that preceded the crisis. The positive effects of this currency devaluation are obtained at the expense of its regional partners, however. Furthermore, it cannot take full advantage of the situation because its regional partners are suffering recessions on account of the crisis. The abrupt changes in the competitiveness of Brazilian producers compared with those of Argentina during the recent financial crisis are a copybook example of this.

There can be no doubt, then, that in order to achieve greater integration of trade and investments, greater

exchange stability is needed among the countries seeking to integrate. Without this, it is unlikely that much more progress can be made in the region towards greater integration. This does not mean that we should hasten to adopt a common currency. Integration processes take place gradually, and in Latin America they are still at an early stage. It is essential, however, to take the first steps towards financial integration, for which bilateral exchange rates must be much more stable than they have been so far.

We need only recall the experience of Europe. The whole of the first stage of European integration took place within the framework of the exchange rate stability provided by the system of fixed (but adjustable) exchange rates adopted at Bretton Woods. When that system broke down in 1971-1973, much of the work for establishing a customs union had already been done. Nevertheless, the members of the European Economic Community quickly succeeded in giving their bilateral exchange rates a degree of stability that would have been impossible if they had decided to use the system that began to prevail as from 1973 for convertible currencies: flexible exchange rates with a dirty float. The European countries, however, decided first that their currencies would float together within what they called the "snake", which limited the fluctuations in bilateral exchange rates. They then went on to adopt the European Monetary System (EMS), with an exchange rate mechanism which fixed a central exchange rate for each currency with respect to the European Currency Unit (ECU), with narrow ranges of permissible floats around that central parity. The final stage in this process was reached early in 1999, with the establishment of the Euro.

The stormy moments that the exchange rate mechanism had to weather during the financial crises of 1992-1993 did not prevent final progress towards the irrevocable fixing of exchange rates and the adoption of the Euro by 11 European countries. There can be no doubt that the exchange rate stability which exists among the European countries, to which they are politically committed, has been a powerful impulse in favour of trade integration and real investment flows in Europe.

The existence of Community monetary institutions and concerted intervention in exchange markets have helped the European countries to attain the high degree of exchange rate stability they have enjoyed since the collapse of the Bretton Woods system.

One of the crucial differences between the member countries of the European Union and the Latin

American nations is that the European countries have convertible currencies and can carry out interventions in the exchange markets in their own currency. Furthermore, their central banks (and now likewise the European Central Bank) have lines of credit from the United States Federal Reserve and the Bank of Japan for intervening in exchange markets.

The Latin American countries are at a serious disadvantage in this respect, because as the currency for intervention is the U.S. dollar, they must use their reserves for this; furthermore, the possibility of coordinated intervention by their central banks to prevent sharp fluctuations and misalignments in bilateral exchange rates is much weaker, and they do not enjoy lines of credit from the Federal Reserve. Only at times of crisis, and even then only in the case of the biggest countries, can they have a chance of obtaining emergency financial resources from that source. Moreover, this only occurs when a crisis has already broken out, and only under an adjustment programme agreed with the IMF.

All this suggests that monetary and exchange support for integration will only be available from a much fuller system of regional financial institutions than that which currently exists. In order for Latin America to achieve greater trade integration, it is important to attain greater exchange rate stability among the countries of the region, which would also promote the growth of mutual investments. This process, which has already begun, is essential for achieving fuller economic integration.

V

A brief review of some existing regional external payments support institutions

Latin America already has financial and monetary institutions which carry out to some extent some of the functions that we consider a regional fund should have. They are the Latin American Reserve Fund (FLAR), the Mutual Payments and Credit Agreement (CPCR) of the Latin American Integration Association (ALADI), the Central American Clearing House of the Central American Common Market (CACM), the Latin American Monetary Stabilization Fund of the CACM, and the Caribbean Multilateral Clearing Facility of CARICOM.⁵ An analysis of their activities and the amounts of finance

The objectives of ensuring financial resources for limiting contagion phenomena at the regional and sub-regional levels and securing greater bilateral exchange rate stability are of course interrelated. Financial crises have an almost immediate effect on exchange rates, so if a regional financial institution fulfils the objective of preventing financial crises among its member countries it will likewise contribute to greater exchange stability among them.

Exchange rates are also sensitive to economic policy mismatches. Consequently, by promoting greater macroeconomic policy convergence, the existence of a regional financial institution would check exchange rate volatility among its member countries.

As already noted, financial crises are gestated during booms in foreign capital inflows. In order to avoid such crises, it is essential that countries should take measures to moderate capital inflows when these threaten to become excessive and to cause a deterioration in their macroeconomic balances. One of the missions of a regional financial institution would be to facilitate the exchange of information and thus promote common standards for bank regulation and prudential regulation of capital flows.⁴ As destabilizing capital inflows also include flows which do not pass through the banks (such as direct loans to local companies and inflows of portfolio investments), these prudential regulations are not only limited to adequate bank supervision, although of course this is essential.

these bodies provide would therefore be a good starting point for our study. We will concentrate our attention in particular on two of these institutions: FLAR and CPCR.

⁴ The recent experience of Chile and Colombia in this field has been analysed in Agosin and Ffrench-Davis (1997), Le Fort and Lehmann (2000), Barrera and Cárdenas (1997) and Ocampo and Tovar (1999).

⁵ For a description of other financial cooperation mechanisms in the region, see ECLAC (1990).

1. The Latin American Reserve Fund (FLAR)

FLAR was originally set up in 1978 by the Andean Community as the Andean Reserve Fund. In 1991 its then members (Bolivia, Colombia, Ecuador, Peru and Venezuela) decided to throw it open to participation by other Latin American countries, so that it became in effect a regional financial institution. At the end of June 1998, FLAR had assets of some US\$ 1,032 million, made up of the quotas of its member countries and its capitalized net profits (FLAR, 1998). With the incorporation of Costa Rica in mid-2000, FLAR began a process of expansion to bring in Latin American countries which are not members of the Andean Community, in order to increase the Fund's scope (FLAR, 2000).

The stated objectives of FLAR are:

- To provide member countries with support when they suffer from balance of payments problems.
- To help in the harmonization of macroeconomic and exchange policies in order to give countries support in complying with the commitments entered into under the Cartagena Agreement, which set up the Andean Community, and the Treaty of Montevideo, which set up ALADI.
- To improve the conditions for investment of member countries' international reserves.

FLAR is financed primarily from the quotas paid by the central banks of its member countries. Another way of securing funds is to accept time deposits by central banks and other authorized bodies. During the 1997/1998 financial year (1 July 1997 to 30 June 1998) central banks and the Andean Parliament made deposits amounting to US\$ 1,837 million, with the balance at 30 June 1998 standing at US\$ 237 million (FLAR, 1998).

FLAR's main activity is the provision of support services for its members' balances of payments. Thus, FLAR is a form of credit union along the lines of the IMF. The central banks of member countries can draw loans up to 2½ times their paid-up contribution of capital, in the case of Colombia, Peru and Venezuela, and up to 3 times that amount in the case of Bolivia and Ecuador.

FLAR provides the following services for the central banks of its member countries:

- Balance of payments support credits: these are granted for up to four years, including one year's grace, subject to macroeconomic performance commitments.
- Credits for restructuring the external public debt: these are granted under co-financing with other

multilateral bodies, with a term of up to four years, including one year's grace.

- Liquidity credits: these are designed to help countries to cover transitory liquidity needs through credits with a term of up to one year.
- Contingency Financing Facility: this facility, set up in 1998, is designed to help member countries to finance temporary balance of payments imbalances of external origin not due to fundamental inconsistencies in the balance of payments equilibrium conditions. This finance is for a term of six months, non-renewable. Loans granted by this facility must be guaranteed by the debtors with securities acceptable to FLAR.
- "Andean Peso": this was created in order to facilitate payments between central banks and other authorized holders. It has not been used much so far.

Thus, FLAR covers almost the whole range of activities that a strengthened regional fund should have. But how important, in quantitative terms, is the finance provided to the central banks of member countries in order to prevent or relieve balance of payments crises, particularly those due to exogenous causes, and how much does it contribute to the stability of bilateral exchange rates?

FLAR's importance as a supplier of finance depends on its quotas, which are its only stable source of finance. As may be seen from table 2, the quotas FLAR receives from its member countries (except in the case of Venezuela) are significant with respect to their IMF quotas. Furthermore, access to FLAR resources multiplies the value of those quotas by a factor of up to 3.5 for the less developed members (Bolivia and Ecuador) and 2.5 in the case of the other three members. This means that Bolivia and Ecuador have access to FLAR loans worth US\$ 437.5 million, which is considerably more than they could obtain from the IMF, which rarely grants loans larger than the borrower's quota, and when it does, grants them in tranches which are disbursed only slowly, and against proof that the borrower is complying with the conditions laid down in the Letter of Intent. The FLAR loans are not devoid of conditions, but these tend to be less strict. Disbursements are usually quite rapid, with only a meeting of the Board of Directors being needed to examine requests for loans greater than the respective quota, which, if approved, are disbursed forthwith.

For the smaller member countries, FLAR credits represent a substantial addition to their reserves and to their capacity to cope with an international financial crisis.

TABLE 2

**Latin American Reserve Fund (FLAR):
Relative size of quotas at end of 1997**
(Amounts in millions of dollars; ratios in percentages)

	Bolivia	Colombia	Ecuador	Peru	Venezuela
FLAR quotas	125	250	125	250	250
IMF quotas	170	757	296	628	2 633
International reserves	1 359	9 611	2 213	11 306	17 704
Short-term debt	374	5 759	2 069	6 832	4 395
Debt/reserves ^a	27.5	59.9	93.5	60.4	24.8
Debt/reserves as augmented by FLAR ^b	20.8	56.3	78.1	57.3	24.0

Source: IMF (1998); World Bank (1999); FLAR (1998).

^a Ratio of short-term debt to reserves.

^b Ratio of short-term debt to reserves as augmented by maximum indebtedness with FLAR.

This is not so in the case of the three largest members, since their international reserves are a high multiple of their quotas in FLAR.

The ratio between a country's short-term debt and its international reserves may be considered as a reliable indicator of that country's vulnerability to a run on its currency. Table 2 gives two different calculations of this ratio: between the short-term debt and the reserves as at the end of 1997, and between that debt and the reserves plus the maximum credit available from FLAR. As may be seen from the table, access to FLAR's resources significantly reduces the external vulnerability of Bolivia and Ecuador, but not that of the three biggest members.

Thus, in spite of its modest resources, FLAR is already playing an important role in the international finances of the Andean Community members. If FLAR or a successor with expanded capacity is to become an institution capable of providing the finance needed by its member countries, however, it will need considerably larger resources. Various ways of securing these are put forward in section VI below.

2. The ALADI Mutual Payments and Credits Agreement (CPCR)

CPCR began to operate in 1969, its aim being to minimize the use of the ALADI member countries' international reserves in the settlement of external trade transactions among them. The system has two components: a clearing house, with the Central Reserve Bank of Peru acting as banking agent, and mutual lines of credit with terms of four months. The banking agent carries out

settlements between creditors and debtors every four months. The central banks have given each other bilateral lines of credit in dollars which must likewise be settled every four months. The system has been a success, because a high and growing percentage of intra-regional trade has been covered by its operations (ECLAC, 1990). In 1990, the coverage of operations handled by the Agreement compared with the total value of intra-regional trade was almost 100%. At the same time, the foreign exchange transferred by the banking agent amounted to less than 20% of the total value of the transactions. The existence of the CPCR has thus meant a substantial saving of foreign exchange by the central banks of the ALADI member countries.

The system was put to the test during the 1980s crisis. Because of that crisis, some central banks had difficulty in covering their debit balances and had to leave the system temporarily, negotiating bilateral terms of payment with the creditor central banks. As the financial crisis eased, however, the central banks returned to the system, which had recovered all its members by 1988.

The 1981 Santo Domingo Agreement established arrangements for granting credit to central banks which were unable to settle their debit balances within the four-month term. These arrangements provide credit for an additional four months, renewable for up to one year. The Agreement established a special credit programme for countries with general balance of payments deficits and those suffering from natural disasters. In the first case, the term of the credit is for two years, renewable for a further year, while in the second case the term is for two years, renewable on a

bilateral basis with the creditor central banks for five years.

Unlike the FLAR, the CPRC does not have resources of its own, but simply brings into effect the lines of credit that the central banks agreed to previously. When

the crisis spread over the whole region, however, those banks were not in a position to make the contributions they had promised. This is why it is essential that such a system of payments should operate in conjunction with a larger regional institution with greater resources.

VI

Options for strengthening the regional payments bodies

FLAR is undoubtedly an excellent starting point for measures to strengthen the regional financial institutions: it already operates on a significant scale, and the functions its member countries have assigned it are exactly those that a regional financial mechanism should have. In this section we will deal with various aspects that must be taken into account in considering a possible agreement by the countries of the region to set up a Latin American financial institution.⁶

1. Membership

The regional fund would be open to all the countries of Latin America and the Caribbean. Participation in a regional fund along the lines of FLAR could be an attractive proposition. The reserves deposited in it are multiplied at times of crisis, and moreover the fund could gain access to resources not available to the individual countries.

2. Resources

The resources available to a regional fund must be commensurate with its responsibilities. There are various options in this respect:

a) *Increases in the paid-up capital of the fund*

The fund's resources would increase with the entry of new members. Consideration could also be given to an

increase in the level of the quotas, which currently represent between 9% and 1.5% of the FLAR member countries' reserves.

b) *Contingency credit commitments*

The central banks of the member countries could provide the fund with lines of credit that would only be activated in the event of financial emergencies of a predetermined nature. This solution would be similar to the General Arrangements to Borrow (GAB) and New Arrangements to Borrow (NAB) between the International Monetary Fund and the central banks of the Group of Ten and Switzerland. The IMF also has a parallel agreement with Saudi Arabia. Under the GAB, 11 industrialized countries or their central banks have agreed to lend the Fund certain volumes of resources at market interest rates in situations of financial crisis which cannot be tackled with the IMF's regular resources. The NAB, which were approved in November 1994 as a result of the Mexican crisis, are similar to the GAB, except that they involve 25 countries. The resources available to the IMF under both arrangements can be loaned to both participating and non-participating countries. A mechanism of this type would provide the Latin American fund with resources that are much greater than its capital, for coping with financial emergencies in its member countries.

c) *Indebtedness on international capital markets*

The IMF is not authorized to assume indebtedness in order to finance its rescue operations for countries suffering from financial crises. There is no impediment to a Latin American institution doing this, however. A Latin American fund could imitate the World Bank and have two classes of capital: one would consist of the quotas of the central banks, while the other would serve

⁶ We are not necessarily suggesting that FLAR should become the strengthened regional monetary body referred to in this article. The exact way in which the region should progress from the present institutions to one with greater resources and capacity for action is a political question which goes beyond the scope of this article. The aim of this section is simply to outline the features that a future continental-scale financial body should have.

as a guarantee for the fund to take out debt directly on the market. This option would still be conservative, as even under this system the gearing ratio of the fund would still be less than 1.

Would the international financial markets be willing to accept long-term bonds from a Latin American fund, and would the spread for the fund's securities be less than for those of its member countries? The answer to both questions is probably affirmative: the joint guarantee of all the fund members would necessarily be better than in the case of each of them individually, since the financial capacity of a group of countries acting together is greater than that of the countries individually.⁷

By increasing the availability of financial resources, this option would endow the fund with great capacity to help member countries with financial problems.

d) *Contingency credits with the private banking system*

The fund could negotiate lines of credit with the international private banking system, to be activated in the event of financial crises threatening member countries. The central banks of Argentina and Mexico have already done this on an individual basis. The intervention of a regional body could undoubtedly help to obtain larger amounts of resources on better terms, however, as it would be backed up by all the central banks or governments of its member countries. This option, together with that discussed in the previous subsection, could make the fund attractive even for big countries needing finance at times of crisis on a scale that could exceed the fund's capacity.

e) *Creation of "Latin American Special Drawing Rights"*

FLAR already has an instrument of this nature: the "Andean Peso", but a Latin American peso that could be used in payments among the central banks of the region would undoubtedly have more uses. A unit of account of this nature could strengthen the CPCR and help to minimize the use of international reserves.

⁷ It could be argued that the spread payable by the fund would be a weighted average of the spreads for the sovereign debt of its members. We are assuming that the fund would enjoy substantial synergies because it is an institution with the simultaneous guarantees of a group of countries. In this sense, the existence of the fund could be seen as the solution to a problem of collective action.

As in the IMF, the member countries of the fund and the CPCR would receive allocations of Latin American pesos, which could be used in payments among central banks to settle their debts in the CPCR. Countries which registered a net absorption of Latin American pesos would undertake to pay off their net debit balances when their balance of payments situation improved or within maximum terms to be determined by the Board of Directors of FLAR. This option would obviously call for close relations between CPCR and the fund. CPCR could even become a direct dependency of the fund.

f) *Access to IMF resources*

If the regional institutions were strengthened within the context of a reform of the international financial architecture providing for the establishment of a network of regional funds to complement the IMF in the event of a crisis affecting a number of countries of the region, the Latin American fund, like other funds, could serve as an intermediary for the availability of resources between the IMF and the countries in question (Ocampo, 1999, p. 70). Likewise, the Latin American fund could be designated as a recipient of special drawing rights (SDRs), to which it could resort at times of crisis.⁸

3. Possible facilities of the fund and their conditions

It would be necessary to lay down quite clearly the occasions on which a country with balance of payments problems could seek assistance from the fund. Thus, four types of balance of payments problems should be distinguished: (a) temporary shortage of international liquidity; b) balance of payments crises due to fundamental imbalances in the member country's economic policy; c) balance of payments crises by contagion, and d) balance of payments problems due to a transitory deterioration in the terms of trade.

a) *Liquidity credits facility*

FLAR already has a facility for tackling transitory liquidity problems, under which countries can make use of a certain proportion of their quotas (75% in the

⁸ In another study (Agosin, 1999) the present author argued that in order to tackle acute crises in the international financial system the IMF could resort to extraordinary issues of SDRs, which would be annulled when the system returned to normal. The mere existence of such a possibility would make systemic crises less likely.

case of the two less developed member countries and 50% in the case of the other three) for a period of up to one year. A Latin American monetary institution could incorporate this facility without much alteration.

b) *Balance of payments support facility*

This facility would be available to countries suffering from balance of payments problems due to fundamental imbalances in their exchange, monetary or fiscal policies. Such credits should be granted subject to strict conditions, along the lines of the IMF. The regional fund could even conceivably act in a concerted manner with the IMF in these cases.

c) *Contingency credit facility*

This facility would have two objectives: to discourage potential speculators and to persuade member countries to coordinate their economic policies more effectively.

If well designed, this facility would be used only infrequently. It would be activated when a country suffered from a balance of payments crisis associated with capital flight that had nothing to do with fundamental macroeconomic imbalances. FLAR already has a contingency credit facility, approved quite recently. However, the term it allows for repaying the loans (six months) is too short, and the resources it has available for this purpose are too scanty.

In order to avoid moral hazard problems, member countries would have to satisfy some minimum prior requirements in order to have access to this facility. These could include progress in bank regulation, especially with regard to potential currency mismatches between assets and liabilities; financial fragility indicators (ratios between short-term debt and reserves and between reserves and M2), and current account deficit targets.

It is important not to add too many dimensions to these prior requisites. The mere fact of a country losing access to the facility could set off capital flight. Therefore, although it is impossible to do without some degree of prior conditionality, the fund should be free to manage this flexibly and constructively.

In order for the facility to be of use in halting herd effects on international markets, its disbursements should be quick and timely. If the interest rates charged were higher than for other operations of the fund, this would encourage user countries to repay the resources loaned as quickly as possible.

d) *Compensatory financing facility*

This facility would be activated when a country was facing balance of payments problems due to a transitory and reversible deterioration in its terms of trade. Consequently, as soon as those terms improved, countries would be under the obligation to repay the balance owed and/or loan resources to the fund, which could maintain a special account for this purpose. Debtor countries would pay interest, while creditors would receive it. A further option would be to include in this facility, as in the case of the IMF, the possibility of granting credits to cover needs connected with international interest rate rises.

As almost all Latin American countries suffer pronounced fluctuations in their terms of trade, either because the prices of their exports are volatile or because this is true of the prices of some specific imports (especially oil and grains). Terms-of-trade cycles are not synchronized between countries. Indeed, the movements of some key prices (such as those of oil, for example) simultaneously improve the terms of trade of some countries but depress those of others.⁹

It is therefore both possible and desirable that there should be a regional fund to help countries to cope with balance of payments problems due to this structural condition of their economies. As there is a trade-off between the countries whose terms of trade deteriorate and those whose terms improve, a regional fund could make much better use of foreign exchange than the stabilization funds that some countries maintain for this purpose. Countries which already have such funds could contribute part of the resources deposited in them to the regional fund. As already mentioned, these contributions would be suitably remunerated.

There is generally no correlation between movements in the terms of trade of the countries of the region, so that it would be financially viable for a regional body to operate a scheme like that suggested here. For the period from 1981 to 1999, 55 coefficients of correlation between the annual variations in the terms of trade of the pairs of countries were studied, but of

⁹ This is not only because some countries are exporters of oil while others are net importers. There is also an indirect effect on the prices of other industrial inputs. When oil prices rise, exports of other commodities such as copper, iron ore or wood may go down if the oil price rises generate expectations that the economic activity of the industrialized countries will be adversely affected.

these only 18 were significantly different from zero.¹⁰ Four of the 18 coefficients were negative; all of them involved a gas or oil exporting and an importing country (Bolivia-Brazil, Brazil-Ecuador, Brazil-Venezuela and Costa Rica-Venezuela). Three of the coefficients of correlation which were positive and significantly different from zero were between gas or oil exporters (Bolivia-Venezuela, Ecuador-Venezuela and Bolivia-Ecuador), and one of them was between copper exporters (Chile-Peru). The results are shown in table 3, with the coefficients which are significantly different from zero in bold type.

A regional compensatory financing facility could coordinate its activities with the corresponding facility of the IMF. If this were possible, the regional fund could mobilize more resources and help the countries of the region to make more use of the IMF facility.

4. Coordination of economic policy and bank supervision

A regional monetary institution could become a suitable and probably very effective forum for coordination of

¹⁰ At 10% significance. The stadigraph $z = \frac{\hat{\rho}\sqrt{n-2}}{\sqrt{1-\hat{\rho}^2}}$, which has a distribution t with n-2 degrees of freedom, was used. $\hat{\rho}$ is the estimated value of the coefficient of correlation.

the economic policies of the countries of the region in order to encourage member countries to maintain the fundamental macroeconomic balances and thus minimize the possibility of financial crises. Coordination of policies, including those on capital flows, is easier and more acceptable among peers than when it is imposed by a far-off institution which may be seen as hostile. A strengthened Latin American financial system would therefore strengthen the macroeconomic balances of its members and hence make them less vulnerable to contagion.

Greater convergence of economic policies, together with the existence of a regional financial fund with access to substantial resources, would favour regional exchange stability and make it possible to advance towards greater integration of the Latin American economies.

The weakness of domestic banking supervision has been one of the causes (although certainly not the only one) of national financial crises. Among other shortcomings, regulatory bodies have omitted—or been unable—to prevent local banks from taking out excessive debts in foreign currency and then lending those resources to bodies which do not have foreign currency incomes. A regional financial body could help to substantially raise the standards of prudential supervision of its members. As already noted, having suitable standards (and ensuring that they are respected)

TABLE 3

Latin America (10 countries): Coefficients of correlation between variations in terms of trade, 1981-1999^a

	Argentina	Bolivia	Brazil	Chile	Colombia
Bolivia	0.62				
Brazil	-0.14	-0.55			
Chile	0.01	-0.21	0.46		
Colombia	0.44	0.40	0.05	-0.01	
Costa Rica	-0.22	-0.39	0.51	0.17	0.46
Ecuador	0.70	0.89	-0.67	-0.21	0.31
Paraguay	0.22	0.05	0.72	0.26	0.17
Peru	0.15	-0.22	0.47	0.82	-0.21
Uruguay	0.10	-0.10	0.16	0.70	-0.25
Venezuela	0.61	0.84	-0.60	-0.10	0.08
	Costa Rica	Ecuador	Paraguay	Peru	Uruguay
Ecuador	-0.44				
Paraguay	0.10	-0.28			
Peru	-0.02	-0.15	0.25		
Uruguay	-0.13	0.17	0.16	0.53	
Venezuela	-0.67	0.91	-0.20	0.02	0.04

Source: ECLAC, 1999.

^a Coefficients significantly different from zero are shown in bold type.

could be made one of the prior conditions for having access to the contingency credit facility. The regional body could also institute periodic appraisals of national banking supervision and establish standards that could be adopted by all its members.

The existence of a regional fund would also make possible a fluid exchange of information about the

various countries' experience regarding policies for the prudential regulation of capital movements. This would facilitate progress towards regionally concerted policies on this important and delicate subject, which would help to ease the financial crises which, as already noted, tend to result from excessive inflows of foreign capital.

VII

The feasibility and size of an expanded regional fund

Is it feasible to expand regional financial cooperation in the way we have been suggesting in this study? Whether this is so or not will depend on the magnitude of national crises and the degree of co-variance between them. If all the countries of the region suffer balance of payments crises simultaneously through financial contagion (or through deterioration of the terms of trade), a regional fund could be non-viable from the financial point of view.

In order to answer the queries about the co-variance of national crises, an analysis was made, for pairs of countries, of the correlation between changes in capital flows (less foreign direct investment and official flows) in the period from 1978 to 1998 (table 4). The period was divided into two sub-periods, 1978-1987 and 1988-1998, in order to see how far co-variance has increased between capital flows to different countries. In table 4, the bilateral correlation coefficients which are significantly different from zero at 10% significance are shown in bold type.

This analysis showed that there is indeed considerable co-variance between capital flows to different Latin American countries, but this is not large enough to make a regional fund financially inviable. In 1988-1998, only 22 out of 55 coefficients of correlation were positive and significantly different from zero. Another conclusion which could back up the need for a regional fund is the increase over time in the number of high bilateral correlations: thus, positive correlations significantly different from zero increased from 11 to 22 between 1978-1987 and 1988-1998, whereas the number of negative and significant correlations remained unchanged at two.

In order to determine how big a regional fund should be, an analysis was also made of the annual

changes in private capital flows (excluding foreign direct investment) to the six largest countries of the region, except Mexico, over the period from 1991 to 1998. If there are annual outflows from all the countries simultaneously, it is unlikely that a regional fund would be able to cope with them. Table 5 shows that there is a tendency for both increases and decreases in foreign private capital to be correlated among the countries, but there is sufficient divergence among the individual situations to make a regional fund viable. Thus, for example, whereas in 1994 Argentina had a great need of finance due to the "tequila crisis", Brazil registered heavy inflows of capital. Exactly the opposite occurred in 1997-1998. The maximum amount of resources needed may be estimated as the sum of the negative figures in table 5. In those crisis years, that amount was between US\$ 25 and 30 billion, which a regional fund could certainly handle.

It is important to bear in mind that the existence of a regional fund with the capacity to deal with crises could result in a change of climate: stopping a crisis in one country could considerably reduce the probability that it would spread to other countries. In other words, the existence of the fund would reduce the co-variance of capital flows to the countries of the region.

If it is true that crises are sequential and that the existence of a big enough fund would reduce the probability of contagion for other countries of the region, then the fund should have sufficient resources to ensure that a vulnerable member country capable of giving rise to contagion should be able to cope with the non-renewal of its short-term debt. A fund that had, say, 15% of the reserves of the 11 countries shown in table 6 (some US\$ 20 billion in 1997, which was the

TABLE 4

Latin America (10 countries): Coefficients of correlation between net inflows of capital, 1978-1998^{ab}

1978-1998					
	Argentina	Bolivia	Brazil	Chile	Colombia
Bolivia	0.02				
Brazil	0.30	-0.20			
Chile	0.22	-0.49	0.41		
Colombia	0.50	-0.07	0.61	0.29	
Costa Rica	0.54	-0.07	0.38	0.17	0.13
Ecuador	0.27	-0.19	0.66	0.38	0.09
Paraguay	0.58	-0.01	0.51	0.34	0.37
Peru	0.58	-0.43	0.62	0.61	0.40
Uruguay	0.29	0.05	0.26	0.45	0.03
Venezuela	0.04	0.13	-0.09	0.16	-0.39
	Costa Rica	Ecuador	Paraguay	Peru	Uruguay
Ecuador	0.66				
Paraguay	0.47	0.45			
Peru	0.52	0.42	0.76		
Uruguay	0.27	0.32	0.38	0.30	
Venezuela	0.15	0.37	0.25	0.00	0.08
1978-1987					
	Argentina	Bolivia	Brazil	Chile	Colombia
Bolivia	-0.20				
Brazil	0.27	-0.23			
Chile	0.41	-0.57	0.39		
Colombia	-0.19	-0.29	0.42	0.46	
Costa Rica	0.67	0.26	0.42	0.11	-0.11
Ecuador	0.65	-0.05	0.75	0.35	0.07
Paraguay	0.36	0.00	0.42	0.58	0.19
Peru	0.32	-0.76	0.55	0.75	0.43
Uruguay	0.38	0.06	0.11	0.45	-0.37
Venezuela	0.71	0.29	0.13	0.17	-0.38
	Costa Rica	Ecuador	Paraguay	Peru	Uruguay
Ecuador	0.83				
Paraguay	0.30	0.44			
Peru	0.05	0.33	0.56		
Uruguay	0.13	0.30	0.36	0.04	
Venezuela	0.88	0.62	0.22	-0.08	0.43
1988-1998					
	Argentina	Bolivia	Brazil	Chile	Colombia
Bolivia	0.51				
Brazil	0.36	0.33			
Chile	0.33	0.47	0.44		
Colombia	0.60	0.18	0.88	0.33	
Costa Rica	0.65	0.06	0.13	-0.01	0.33
Ecuador	0.36	0.07	0.33	0.27	0.39
Paraguay	0.62	0.82	0.57	0.15	0.51
Peru	0.71	0.80	0.63	0.52	0.52
Uruguay	0.60	0.55	0.73	0.33	0.60
Venezuela	-0.10	0.38	-0.43	0.14	-0.41
	Costa Rica	Ecuador	Paraguay	Peru	Uruguay
Ecuador	-0.24				
Paraguay	0.13	0.30			
Peru	0.51	0.12	0.76		
Uruguay	0.57	0.17	0.67	0.92	
Venezuela	-0.56	-0.06	0.10	-0.22	-0.56

Source: IMF, 1999.

^a Excluding flows of foreign direct investment and official flows.

^b Bilateral coefficients of correlation significantly different from zero at 10% are shown in bold type.

TABLE 5

**Latin America: Changes in private capital flows^a
to six countries of the region, 1991-1998**
(Billions of dollars)

	Argentina	Brazil	Chile	Colombia	Peru	Venezuela	Total ^b
1991	5.6	0.7	-2.3	-0.6	-0.2	-12.8	-15.8
1992	3.9	9.0	1.6	0.6	1.1	1.4	0.0
1993	26.2	2.7	0.2	2.9	-0.5	-0.9	-1.4
1994	-21.6	31.5	0.1	0.2	0.5	-5.3	-26.9
1995	-11.6	-15.3	-1.6	1.1	0.1	1.3	-28.5
1996	8.7	1.7	1.2	0.0	-0.5	0.4	-0.5
1997	1.4	-18.4	-1.0	-3.2	2.3	-1.0	-23.6
1998	4.0	-20.9	-4.6	0.6	-2.7	0.8	28.2

Source: IMF, 1999.

^a Excluding foreign direct investment.

^b Total reduction in private finance.

TABLE 6

**Latin America (11 countries): International reserves,
short-term debt and money supply, 1997**
(Billions of dollars)

	International reserves	Short-term debt	Money supply (M1)	Money supply (M2)
Argentina	22.8	18.0	21.5	77.6
Bolivia	1.2	0.4	0.7	3.8
Brazil	52.0	36.2	47.3	236.5
Chile	17.7	9.9	7.7	33.6
Colombia	9.7	5.7	10.3	24.9
Costa Rica	1.3	0.5	1.5	4.0
Ecuador	2.2	2.1	1.7	6.7
Paraguay	0.7	0.5	0.9	2.9
Peru	11.3	6.8	5.7	16.8
Uruguay	1.7	1.9	1.1	8.6
Venezuela	15.2	4.4	11.4	19.0
<i>Total</i>	135.8	86.3		

Source: World Bank (1999) and IMF (1999).

last “normal” year for the region as a whole) could comfortably cover capital flight equal to the entire short-term debt of each country in the group in question except Brazil. In order to cover the possibility of simultaneous capital flight from more than one country, contingency credit lines like those suggested earlier in this article would give the fund even greater financial capacity.

The first line of defence against capital flight is a country’s own reserves. As may be seen from table 6, the Latin American countries are quite prudent in this respect, since in all of them the 1997 reserves more than covered their total short-term debt, which was not the case in the Asian countries in the last crisis. It must be borne in mind, however, that in a crisis capital flight

includes other components, such as the liquidation of foreign portfolio investments and the replacement, by domestic investors, of their local-currency assets with others in foreign currency.

In crisis situations, the maximum dimension of pressures on the balance of payments is determined by the amount of money. If the agents lose all confidence in an economy, they will try to convert a large proportion of their liquid assets into foreign exchange. Those liquid assets are determined by the stocks of local currency, which could be measured for this purpose as M1 (currency in circulation plus demand deposits) or M2 (M1 plus term deposits and savings accounts). The corresponding figures are shown in table 6, which

indicates that 15% of the reserves of the 11 countries in question would come to US\$ 20.4 billion. This means that all those countries, except Brazil and Argentina, could cope with capital flight equal to the whole of their M2 by using their own reserves (85% of the figures shown in table 6 under “international reserves” plus those of a fund set up with 15% of the reserves of the countries as a whole. Argentina, for its part, could

finance capital outflows equal to the whole of its M1 or over half of its M2. In other words, a fund with 15% of the reserves represents an important potential for discouraging speculative attacks against the currencies of the region. If, in addition, it could have other sources of finance like those suggested earlier, the proposed fund could play an important role in promoting the stability of the Latin American economies.

VIII

Conclusions

This article has argued in favour of the establishment of a regional fund which would help to fill a gap in the international financial architecture. Such a fund would be extremely useful for the countries of the region as an additional line of defense against international financial crises, which have become increasingly exogenous to national policies and will probably continue to affect the region even though its countries continue to improve the quality of their macroeconomic policies.

A regional fund is no substitute for macroeconomic prudence, of course. Its existence would rather be a means of helping the countries of the region to continue improving the quality of their macroeconomic policies. A fund with substantial resources for lending to countries that apply good policies would be a powerful incentive in that direction.

A regional fund could be conceived either as part of a thorough-going reform of the present financial structure or as a body that would fit into a system that would not undergo fundamental changes. Although the first scenario is the most favourable from the point of view of the new body's efficiency in protecting the countries of the region from the adverse effects of international financial disturbances, such a fund would in fact be even more necessary in the second scenario. In any case, as we have argued in the preceding section, a regional fund of the type described is not outside the financial capabilities of the Latin American countries in the present circumstances.

A regional fund like that proposed would have the additional mission -of great importance for the future development of the region- of helping to integrate the

regional economy through the promotion of exchange stability and the coordination of macroeconomic policies. In their policies to promote regional integration, so far the countries have given priority to progress in the harmonization of trade policies. The trade barriers between them have tended to go down significantly in the last decade, and the setbacks observed have almost always been related with financial disturbances. In some cases, governments have had to resort to trade protection in order to defend themselves from the effects of capital inflows which cause exchange rate appreciation and threaten internationally tradeable domestic activities. In others, capital flight has caused balance of payments crises which leave no alternative but to restrict trade flows. The biggest menace to the progress of regional integration is undoubtedly international financial instability, which has significantly increased exchange rate volatility and domestic instability in the countries of the region.

The institutional mechanism proposed here could soften the adverse effects of international financial instability on the national economies and also help the countries to progress towards economic integration. With each financial crisis that periodically hits the countries of the region, the advances in integration which have been obtained with so much effort are usually succeeded by partial setbacks. Greater stability of exchange rates and of the domestic economies would allow the Latin American countries to converge towards the long-desired trade integration: a dream that began four decades ago but has still not been realized.

(Original: Spanish)

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The Latin American *social agenda* in the year 2000

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Now that the 1990s have ended and a new millennium is dawning, the low rate of economic growth, the region's vulnerability to international financial instability and the limited progress made in terms of equity oblige us to reflect on the social agenda for the future. An important role in that agenda will continue to be played by the efforts to overcome poverty and indigence, conditioned to a large extent by the region's capacity for economic change and its dynamism in creating large numbers of jobs of higher quality in terms of productivity and income. At the same time, in view of the heavy burden of unfulfilled social needs that still persists, it is essential that social programmes should use their resources efficiently and –in order to be prepared for possible crises– safety nets should be established to cope with periods of recession. Those programmes must attach great importance to the creation of human capital, taking care to improve the present unsatisfactory distribution of education between the social strata, which is one of the symbols of Latin America's social shortcomings. Education alone, however, is not enough to overcome the lack of equity, improve income distribution and generate a situation of social mobility which will give sons and daughters better opportunities for material well-being and social status than their parents had. Economic change should take advantage of the better levels of education achieved by creating more jobs of higher productivity, for which purpose it will be necessary to increase the present investment coefficients and the procurement and dissemination of technical progress. A better mix of labour, capital and technical progress will lay the foundations for more inclusive and equalitarian societies.

I

Introduction

The vulnerability of most of the countries of the region to international financial instability, the low rates of economic growth, the limited progress made in terms of equity, and the dissatisfaction observable in public opinion have modified the coordinates of the economic and social debate under way in the region, bringing into question some of the principles on which the prevailing development models are based.

On the one hand, it has been proposed that changes should be made in the international financial architecture (ECLAC, 1998) in order to favour sustainable stability and facilitate the taking of timely decisions to forestall or handle crises (ECLAC, 1999a).

In the international debate, great concern has also been expressed for equity,¹ although it is also stressed that macroeconomic discipline should be maintained (Camdessus, 1996). It has been asserted that development is something more than adjustment, and that so far we have concentrated too much on economic aspects, without taking due account of the social, political, environmental and cultural aspects of society. We should therefore go beyond financial stabilization and address the problem of long-term growth with equity, which is the basis for human prosperity and progress (Wolfenson, 1998).

At the same time, in Europe a debate has arisen about the degree of inequality which is “tolerable” in those societies and the viable alternatives for developing (or maintaining) protection of the most vulnerable sectors (Giddens, 1998). In that connection, the idea of pursuing these objectives through a “Third Way” more

or less midway between the traditional options has gained considerable currency, at least in the media.²

In Latin America, for its part, the optimism of the early 1990s has been lost. The successive crises led to an economic growth rate below that of other eras. It may be recalled that in the early 1970s the regional product was growing at around 6% per year, but towards the end of that decade the growth rate had gone down to 1.5%, and it fell to zero with the crisis of the 1980s. In the first half of the 1990s there was an encouraging recovery, with growth reaching 3% and attaining a peak of 5.3% in 1997, only to fall back in 1998 to 2.5%. In 1999 growth was negative in most of South America, and it recovered only feebly in 2000. Another point of concern in the region is that this slow growth is not generating sufficient good-quality jobs to give employment to those entering the labour force, especially young people and women. This has been reflected in signs of dissatisfaction among the public, loss of interest for political activity in some cases, and criticisms of the way the political parties and governments operate.

In view of such a legacy of the 1990s, it is worth reflecting about the issues that form part of the social agenda in Latin America and will mark the first years of the new century.

¹ Good social policies are called for, because without them globalization and democracy would lose legitimacy. It is recommended that social safety nets should be established, that agrarian reform should be carried forward, that equality of opportunities should be promoted, and that extreme inequalities of income distribution should be reduced through fair transfers of income from the richest sectors to the neediest, from the healthy to the sick, and from those who have jobs to those who have not (Camdessus, 1996, p. 35).

² Various different approaches have been proposed. A broad group of world political leaders seem to coincide with the supporters of the “Third Way”, who seek to combine the social-democratic contributions of the period dubbed “the glorious thirties” with the recognized advantages of the market. There are social democrats who are reluctant to support these changes, however, while some analysts, who consider that “social-democratic ideas do not make sense [at present], because they correspond to the return to power of trade unionism, which is at present on the retreat all over the world” but at the same time feel that the new “social liberalism” represents a centre-right alliance between the State and economic forces, propose instead a “2½” alternative in which the State gives greater weight to social pressures (Touraine, 1998). Other sectors also seem disposed to adopt renewed perspectives, as in the United States, with the idea of “compassionate conservatism” (Olasky, 2000), which was adopted by one of the presidential candidates (one of whom wrote the foreword to the book in question), and in the region itself, with the efforts to construct a “reformist centre”. Mention should also be made of some points of coincidence which go beyond political traditions (Blair and Aznar, 2000).

II

The present social situation

1. Poverty and indigence

According to measurements made by ECLAC, the incidence of poverty in Latin America went down from 41% to 36% between 1990 and 1997, thus returning to a level similar to that prevailing before the debt crisis. Indigence evolved in a similar manner, going down from 18% to 15% over the same period (ECLAC, 1999b). The 1998-1999 crisis increased the proportion of poor people in some countries and caused a slackening in the favourable tendency previously observed in some others, so that the decade closed with nearly 38% of households under the poverty line and 16% in a state of indigence (ECLAC, 2000).

As a result, whereas the reduction in poverty in the first part of the 1990s made it possible to stabilize the number of poor persons, the impact of the subsequent crisis caused the number of poor to rise to nearly 220 million and the number of indigent persons to increase from 93.4 million to nearly 100 million (ECLAC, 2000).

Two conclusions may be drawn from what happened in the region in these years. Economic growth can be said to have had a positive impact on the reduction of poverty, although the degree of reduction depends on the particular growth profile, while the regressive impact of the episodes of recession on poverty reduction is also clear: one year of recession caused the loss of between 50 and 100% of the advances made in this respect in four or five years of growth.

2. Employment and unemployment

Towards the end of the 1990s, not only did growth slacken but there were also increases in open unemployment and in the percentage of non-permanent wage earners and the number of workers without employment contracts and without social security (ECLAC, 2000, pp. 49-53 and 95-102).

In 1999 the average rate of open unemployment in the region (8.7%) was the highest in the decade, even though the rate of participation in the labour force had gone down from 58.5% to 57.9%. Two different situations should be distinguished in this respect,

however: while Mexico and some Central American and Caribbean countries registered appreciable economic buoyancy and a decline in unemployment, the latter indicator increased in the South American countries, which had problems of economic stagnation. The phenomenon was particularly notable in Chile, where the unemployment rate rose from 6.4% in 1996 to 9.8% in 1999 (ECLAC, 2000, p. 95) and continued to rise in the year 2000, reaching 10.6%. A similar trend was observed in Argentina, although it was not so marked, since although the product went down by 3% unemployment only increased from 12.9% to 14.3%.

There were also significant changes in the organization of work, which was marked by an increase in precarious employment. Labour deregulation was further increased through the reduction of labour costs, more short-term hiring (temporary, seasonal or part-time work), the broadening of grounds for the termination of contracts, the reduction of severance payments, and the restriction of the right to strike, all with the aim of maintaining or increasing economic competitiveness at the international level.

There has thus been an increase in non-permanent employment, although to very varied levels ranging in 1997 from 9.5% in Costa Rica to 45.1% in Ecuador, with extreme rates of increase in Colombia, where it rose from 6.6% in 1980 to 20.0% in 1997. This type of temporary employment is most common in micro-enterprises and among persons under 30, women and people of low educational level (Martínez and Tokman, cited in ECLAC, 2000, p. 99).

There was also an increase in the number and proportion of those with jobs but without any employment contract. In 1996 the proportion of wage-earners in this situation ranged from 65% to 22%, depending on the country. Such precarious employment was naturally linked with lower wages and greater vulnerability and poverty.

A substantial proportion of workers did not have social security or health protection. There are notable differences between countries in this respect: over 60% of workers lack such protection in Bolivia and Paraguay, whereas almost all workers are covered in Uruguay (ECLAC, 2000, p. 101).

3. Income distribution

During the 1980s, governments centered their attention on economic growth and the relief of poverty, assuming that for this purpose it was sufficient to recover the macroeconomic balances, end inflation, do away with the presence of the State in certain areas and expand the spaces open for the private sector. Many of those who advocated these policies thought that in the long term the trickle-down effect would put an end to poverty. Improvement of income distribution was not an objective in itself because it was believed that measures to promote this could affect both economic growth and the possibility of reducing poverty through such growth.

Today, income distribution has gained political importance once more, both because economic growth does not generally seem to have led to better distribution and because the economic debate has taken up the question of income distribution once again, relating it with three important issues.

A first line of analysis has taken up once again the theory that more equalitarian income distribution promotes economic growth, in contrast with the argument that—at least in the first phases of the development process— income should be concentrated in certain groups that have the capacity to save and invest. Doubts have also been expressed as to whether the higher-income groups in the region have this capacity, in view of the propensity to consume that they usually show (ILPES, 1999, pp. 15-19).

A relation has also been traced between income distribution and poverty. The argument in this respect, which is of a mechanical nature, holds that there is now “unnecessary” poverty in Latin America (Berry, 1997), because if the income distribution of the early 1980s had been maintained, the increase in poverty as a result of the crisis would have been 50% smaller (Londoño and Szekely, 1997).

Finally, it is held that the reduction of inequalities increases the stability of democratic political systems, whereas concentration gives rise to greater risks, due to the reaction of losing groups seeking to improve their inferior position.

Income distribution in Latin America in the 1990s may be analysed through the following indicators:

- i) the percentage of households with an income below the average for the society in question rose from 67% to 75% between 1970 and 1990 and remained at that level throughout the 1990s. This indicates that the evolution of average income does not

- adequately reflect what is happening in three-quarters of the Latin American population;
- ii) the Gini coefficient indicates that between 1990 and 1997 inequality increased in seven countries and went down in only four (ECLAC, 1999b). It may be recalled that Latin America is the region with the worst income distribution in the world, although it should be noted that it is a heterogeneous set of nations which are very different from each other in this respect, with Brazil and Uruguay at the two extremes (ECLAC, 1998, pp. 216-217, table 23);
- iii) the ratio between the income of the richest 10% of the population and the poorest 40% increased between 1990 and 1997 in seven countries and went down in only four (ECLAC, 1999b, pp. 64 and 66).

It may be concluded, then, that even in the best of cases the form of economic growth that has prevailed in the region in recent years has done nothing to reduce the inequalities that have traditionally been characteristic of the area. However, “these problems are not a result of the present development model, since they were also typical of the preceding and even earlier models. They thus reflect fundamental problems of the economic and social structure which we should not try to conceal” (Ocampo, 2000, p. 125).

This tendency towards inequality does not seem to be peculiar to Latin America. It is also found even in the developed world, albeit with other levels of concentration. In the United States, for example, several analysts have noted that information technologies increase the employment and income opportunities for “symbolic analysts”, which is the term used to denote highly-qualified workers engaged in the production of non-material knowledge-intensive goods (Reich, 1993). In contrast, assembly-line workers are affected by the increasing requirement that they should have qualifications in informatics and the fact that companies are transferring their routine production processes to other countries (Thurow, 1992). Likewise, in the European Community notable differences have been observed between the incomes of the better-off sectors of the population, which are increasing significantly, and the employment possibilities, type of employment and wages of the bottom 40% of the population (Dahrendorf, 1996, p. 44).

These characteristics of the world economic system, which are due in part to the incorporation of new technologies, are compounded in Latin America by specific factors which explain the concentration of

income distribution and make it less easy to modify in the short term.

ECLAC (1998) identifies four factors which are particularly important in this connection:

- i) *Wealth*: The distribution of wealth in Latin America is even more concentrated than that of total income. On average, income from wealth stands at percentile 85 (ECLAC, 1998, figure 4), which means that 85% of the Latin American population have less access to wealth than the average level for society as a whole.
- ii) *Demography*: Lower-income households have more members (five or more persons on average) than households in the upper income levels.
- iii) *Employment*: Employment density –that is to say, the number of employed persons in relation to the total number of persons in the household– is particularly important for explaining what is happening with regard to income distribution. In some countries, the upper strata register values of this indicator which are twice those of the lower strata. In view of the importance of labour income in total household income, this disparity explains much of the high degree of income concentration. The distance between those in the first income distribution decile and those in the bottom 40% is also increased by the growing disparity between the wages paid in modern occupations and those paid in low-productivity jobs.
- iv) *Education*: Income distribution is also conditioned by education. Although the amount of schooling has increased over the last 25 or 30 years, so that the new generations have an average of three more years' schooling than their parents, there is still a high degree of concentration of educational capital.

4. Social expenditure: a neglected “window of opportunities”?

After the reduction in public social expenditure which took place in most of the countries in the 1980s, there was a significant increase in this expenditure during the 1990s. Thus, between 1990-1991 and 1996-1997 it grew by 38% for the region as a whole: twice as fast as the per capita product, and exceeding the historical peak levels in three-quarters of the countries. This tendency appears to have continued up to the end of the decade, although we will have to wait for the publication of the ECLAC *Social Panorama of Latin America 2000-2001* for the official figures.

However, full advantage has not been taken of this “window of opportunities”, which accompanies the “demographic bonus”³ enjoyed by the region. It is worth stressing that spending a lot does not necessarily mean spending well, so that one of the pending tasks is to increase the efficiency, efficacy and impact⁴ of such resources: a particularly important consideration in a region where the percentages of GDP devoted to public expenditure are markedly lower than those of the developed countries.

It should also be noted that the margin that governments have for continuing to expand their public social expenditure faster than their economic growth rates is increasingly small. Keeping up the present levels of public resources for social programmes is a current challenge.

5. Public dissatisfaction

In the early 1990s, Latin Americans were mainly concerned about the inflationary processes that were eroding their income, and governments that were successful in stabilizing the economy received support at the polls (Mora and Araujo, 1992). Only a few sectors (especially public-sector employees) reacted negatively to their relative losses of income and benefits (ECLAC, 1995). The rest of the population wagered on the future in the hope that they would eventually receive their share of the fruits of growth.

Today, however, uncertainty prevails. The economic and social situation already described has helped to dilute hopes and in many cases has brought to the surface the population's weariness with the ongoing adjustment. Opinion surveys carried out in 16 countries reveal that approximately 67% of those

³ The expression “demographic bonus” seeks to express the advantage that the Latin American region is enjoying because its population growth rates have slowed and there has therefore been an increase in the proportion of adults within the total population, which should in theory reduce the dependency rate (ECLAC/CELADE, 1996).

⁴ Efficiency measures the relation between the cost of a project and the products (goods or services) delivered by it. The objective of efficiency analysis is to find the alternative that minimizes the cost per unit of product. Efficacy reflects the extent to which the production targets of the project have been attained over a given period of time, independently of the costs incurred. The impact, for its part, expresses the size of the benefits received by the target population in line with the objectives of the project: for example, the percentage reduction of grade 1 and 2 malnutrition achieved in the target group by a project having this objective (see Cohen and Franco, 1992).

interviewed consider that the current distribution of wealth is unjust, and 61% consider that their country is not developing (ECLAC, 1998).

Obviously, those opinions are strongly based on the personal experience of those expressing them. Those who form part of the rising sectors or are emerging from a state of poverty do not feel the same as the members of currently impoverished middle-class sectors, who compare their present standard of living with that which they had in the past.

There are also generational differences. The present generation feel that they have fewer opportunities than the generation which preceded them or that which will follow them (*Latinobarómetro*, 2000, p. 11).

It is very common for young people to express dissatisfaction at the difficulties they face in finding a job in line with their aspirations. It may be noted that this perception does seem to have a strong basis in fact, especially as regards the evolution of the labour market and the difficulties micro-enterprises and small enterprises experience in operating properly.

There is a notable similarity between the percentage of dissatisfied young people (between 49% and 63%, according to surveys made in seven countries) and the percentage of persons who have not received an education which ensures them some degree of social mobility through proper integration into the labour market⁵ (between one-third and half). It could be said that these young people with insufficient educational capital become aware at an early age of how predetermined and limited the sequence of opportunities for greater well-being will be for them in the course of their working life (Gerstenfeld, 1998).

In Chile –where the economic reforms have matured more than in other places and high growth rates have been attained– there is growing concern over inequality, which has tended in this respect to take the place of the view of poverty as a lack of resources.

“This change means that the population is paying particular attention to the different rates at which the benefits of economic progress reach different sectors of our society” (Manzi and Catalán, 1998, p. 555). Those interviewed in the lower and middle sectors consider that the current levels of poverty and inequality are not in keeping with the growth achieved. They feel that this inconsistency is due to the dynamics of the system itself and to the policies of the social actors with decision-making power, whom they criticise for their lack of sensitivity. They also call for a more active role on the part of the State (*ibid.*, p. 532).

The perception of inequality and lack of opportunities causes citizens to gradually lose confidence in politicians and institutions and to abandon the political parties (Manzi and Catalán, 1998). They draw away from political activity, which they no longer see as a means for defending their group interests and helping to create a society where social distances are kept down to a reasonable level. They do, however, support democracy as the best system of government, although they do not feel a similar degree of satisfaction with the way it works, because of the high expectations that they had in the capacity of democracy to solve their problems. In fact, only 37% of Latin Americans are satisfied with the performance of democracy (*Latinobarómetro*, 2000, p. 6).

It must be acknowledged, however, that any process of development means sparking off various demands. Even when there is economic growth and social progress in the satisfaction of basic needs (drinking water, electricity, rural roads), opinion polls will not necessarily reflect satisfaction. Maslow’s theory that the satisfaction of some primary necessities means the immediate appearance of other strongly felt needs (Maslow, 1954) may go some way towards explaining the discontent felt on account of the appearance of new expectations and aspirations.

⁵ That is to say, an education longer than that of their parents (making allowance for “educational devaluation”) which enables them

to cross the minimum threshold for proper incorporation into the labour market.

III

Emerging social issues

In a situation like that described above, a fundamental element on the Latin American agenda in the coming decade will be the building of more equalitarian societies, which means incorporating large percentages of the population into the consumer society and creating channels that promote social mobility.

1. Integration into the consumer society

In Latin America, most households do not have sufficient income to reach a minimum level of mass consumption. This is a dimension not only of material well-being, but also of status and integration, which are increasingly prized by society. Even so, there are circles which keep on denouncing what they call “consumerism”, which they see as a departure from certain cultural patterns, due to the demonstration effect of adopting fashions felt to belong to other social strata and other countries.

In general, only two or three out of every ten urban households currently have a level of per capita income sufficiently high to bring them into the consumer society by Latin American standards.⁶ In rural areas the situation is even more unfavourable. In Uruguay, about half the households qualify for the consumer society, but in the other countries only a third are in this position. According to an optimistic hypothesis, only Argentina and Chile could join the group of Latin American countries with over half their households integrated into the consumer society between now and 2005 (Gerstenfeld, 1998).

It is probably the members of these urban households which are not poor but do not have sufficient income to enter the consumer society fully who are most responsible for the feeling of frustration recorded in surveys (Gerstenfeld, 1998).

⁶ In order to be integrated into consumer society, a household per capita income greater than three poverty lines is needed. At this point, the distribution displays a clear upward jump in the level of expenditure. It may be recalled that one poverty line naturally represents a situation of poverty, while having an income of up to two poverty lines represents a situation of vulnerability and a risk of suffering poverty at some stage in life.

Sustained economic growth is undoubtedly the means by which the broad masses could be integrated into consumer society.

2. Social mobility

A modern, open society with a concern for equity should be marked by smooth and easy social mobility. One way of ensuring that the social roles operate correctly is that there should be possibilities and incentives for rising to positions which are better paid or are of higher status. In traditional societies, in contrast, roles are assigned basically through principles of entitlement whereby these positions are reserved by birth.

In the first phases of development there is a kind of “structural” mobility under which new higher-level positions are rapidly created and filled by anyone who has the necessary training for carrying out these functions. In more advanced phases, mobility becomes a “circular” process: not so many new positions are generated, and change must take place through rotation: that is to say, through the departure of some of the occupants of higher positions (by retirement, death or termination) and their replacement by persons with suitable qualifications for the job (Pastore and Silva, 2000, p. 5).

Studies show that only two out of every four urban young people and only one out of every four rural young persons have had educational mobility. It may therefore be concluded that the probability of social mobility has remained practically unchanged since 1980 (ECLAC, 1998). The possibility of changing this pattern is closely linked with the educational system.

It should be noted here that a society based on merit – a “meritocracy” –, in which positions are occupied by those who have certain capabilities, may doom those who do not have those capabilities to exclusion and poverty. This justifies the argument that it is necessary to incorporate an element of solidarity to make up for this lack.

3. Towards more equalitarian societies

Great stress is usually laid on the economic aspects of inequality. Latin American experience shows that even in those countries which have managed to comply with

the recommendation to keep up growth rates of 6% per year, there is no improvement in income distribution, nor are there any differences with regard to the degree of public satisfaction over what is happening. There is therefore a clear “need to give special attention to economic and social policies which have a direct incidence on aspects of a distributive nature, especially in those areas where there is the greatest sensitivity over inequality (education, housing and health)” (Manzi and Catalán, 1998, p. 555). Likewise, the new intellectual concern with income distribution already referred to has identified relations which appear to show that greater equality in this respect is even preferable for securing higher growth.

While this aspect is very important, it should also be noted that the concern to build more equal societies goes beyond economic matters and material well-being. Other forms of equality, without which a good society cannot exist, are also important.

Such advances in the satisfaction of basic needs entail monetary costs which must be met by the beneficiaries, and this is difficult when there has not been an increase in the productivity of the backward sectors in question and there are no new employment options to support the advances made.

An equalitarian society goes beyond consensus on the most crucial economic elements, however. Firstly, equality is a prior requisite for the proper functioning of the market itself. This is so, for example, in the case of equality before the law, which, although enshrined in the Constitutions of Latin America, is far from prevailing in practice. The reforms being made in systems of justice represent an acknowledgement of the shortcomings which exist in the region in this respect. Another essential requisite is equality of opportunity, understood as the elimination of the disadvantages faced by some persons due to the existence of certain barriers or restrictions or the impossibility of gaining access to certain media. Equality of opportunity means doing away with the connections which exist between the possibilities of well-being and some personal characteristics which it is impossible or extremely difficult to change (sex or race, for example) or which derive from the fact of having been born into a family with certain attributes (socioeconomic level, caste, etc.).

In the final analysis, even when freedom is the main priority it is necessary to ensure that there is equality of freedom, that is to say, to display equal concern, at all levels, for all the persons involved (Sen, 1999, p. 7).

It is also necessary to promote equality of freedom of expression. In any country there are undoubtedly

many differing views on how to organize society, and all persons, communities and groups must be guaranteed the right to express their preferences and organize themselves to promote them within the democratic debate.

Many of these principles are of fundamental importance for the proper functioning of democracy. The principle of “one man, one vote” must be respected if democracy is to work. There must be equality of citizenship. Although we talk about the “political marketplace” we cannot permit the (economic) market to determine political decisions. We must ensure that “although people may have different weight and importance in the market as a function of what they own, they must all have the same weight and importance when it is time for them to exercise, as citizens, their civic and political, social and occupational, value-linked and ideological rights” (Hardy, 2000).

Equality of rights as citizens means that differences in personal status do not lead to privileges for some but exclusion for others.

In the field of society and culture, it is also necessary that there should be equality in diversity: that is to say, that individuals, communities and groups of different types should have the possibility of developing their own views of the different dimensions of human behaviour and thus be able to live their differential ways of life, resulting in cultural pluralism.

Growth also depends, however, on social policies insofar as these form the human capital which will be mobilized to permit the proper functioning of the posts needed in order to make the economic system work. Social policies also help to create the political conditions needed in order to give rise to the stability required for investment and the execution of productive projects.

4. Responsibility of public policies

Public policies will undoubtedly be one of the key instruments for tackling the social agenda of the end of the century. A good economic policy also has positive social effects. It creates suitable conditions for the generation of employment and good wages, and even when the jobs created are of low productivity and wages, as has mainly been the case in recent years, this allows a larger number of members of poor households to find employment, thus increasing the occupational density of households and hence also their per capita income. Economic growth also facilitates increased public spending, with its potential for improving equity and reducing poverty in the short and long term.

It should be borne in mind, however, that “the sensitivity of the region’s growth to international financial cycles continues to be as marked as ever, despite the growing sophistication of macroeconomic management” (Ocampo, 2000, p. 122). This makes it essential to try to reduce the impact of such cycles on the population in general and its less protected sectors in particular. Moreover, the growing segmentation of the labour market calls for policies designed to prevent relative prices from affecting the hiring of labour; to ensure ongoing training of labour and prepare workers to use new technologies, and to improve labour legislation and establish unemployment insurance schemes which provide workers with protection in periods of recession and of readaptation of production. Since the low-productivity sectors are made up of small and micro-enterprises, which provide employment for over half of all Latin American workers, efforts should be made to promote the introduction of new technology in them, by ensuring that they have access to credit and markets, and to provide them with support in the areas of information, product development, marketing channels and business management.

Policies in the fields of low-cost housing and community facilities are also vital for improving the living conditions of the people, raising the quality of health services and creating a suitable environment for schoolchildren to gain the fullest benefit from education, as well as helping to improve the distribution of wealth. Where the proportion of rural dwellers in the total population is still substantial, it is necessary to facilitate the market access of producers in distant regions by carrying out infrastructural programmes and improving access to land and water.

With regard to social policies, they obviously cannot be responsible for pursuing the objective of equity unaided. Social development is not entirely their exclusive responsibility: this task is shared with economic policy. Social policies have a direct and indirect influence on the reduction of poverty and improvement of living conditions through their three basic functions: investment in human capital, social compensation, and social integration or cohesion.

a) *Investment in human capital: education*

When the main production factor is knowledge, there are concrete reasons justifying the pursuit of greater equity, and it is no longer necessary to use only arguments of an ethical, philanthropic or solidarity-oriented nature. Countries cannot be competitive if they

do not have a properly trained and educated labour force capable of gaining access to technical progress and incorporating it in their everyday work. Competitiveness and equity may therefore be seen as objectives which can be pursued simultaneously and which mutually foster each other. Thus, from the aggregate point of view, social policy oriented towards investment in human capital becomes an essential prerequisite for economic growth. The same is true of the need to train the population in matters of health, so that they can carry out their productive functions properly.

Education is also of key importance for individuals. At the same time, however, it must be acknowledged that this is an inherited asset, especially in the case of high-quality education. Opportunities for well-being are transmitted from one generation to another (ECLAC, 1998), so that there is a link between the household of origin and the number of years of schooling, type of occupation and level of well-being that its new members will be able to attain in the course of their lives.

To begin with, the household of origin has a fundamental role to play in the advantage taken of schooling. There are various features of the household which are of influence in this respect: i) its socioeconomic level; ii) the educational climate prevailing in it, defined as the number of years of schooling possessed by its adult members; iii) the housing conditions (whether there is overcrowding or not), and iv) the form of organization of the family (single-parent or with both parents present; the type of union between the parents is also important).

The future of the new generations is thus defined at an early stage, establishing a big difference between the excluded (those whose education is insufficient to give them a chance of occupying well-paid jobs that will free them from poverty) and the integrated. Those who are in the excluded sectors will not attain adequate levels of living, and they will not be in a position to make a contribution to competitiveness either, because they will lack the knowledge and flexibility needed to incorporate technical progress into their forms of production.

In another link of the chain, educational capital is of key importance in terms of the occupational opportunities young people will have when they enter economically active life, because of two closely interlinked phenomena which must be taken into account in policy design: educational devaluation and the minimum educational threshold level.

Educational devaluation is the loss of importance suffered by certain educational levels as more and more

people reach them; it reflects the need to complete more and more years of formal education in order to gain access to a given occupation or obtain a similar level of wages to that enjoyed by the preceding generation.⁷ Experience shows that the lower the educational level, the greater the degree of devaluation.

The educational threshold, for its part, is the minimum number of years of education that must be completed at a given time in order to obtain a job which gives a high probability (90%) of being able to avoid poverty throughout the rest of one's life. In Latin America, this threshold stands in many cases at the level of 12 years' formal schooling (ECLAC, 1999b) and is only reached by a third of young people in urban areas and one-tenth in rural areas.

Finally, the occupation obtained links up with the opportunities of future well-being, as noted in the *Social Panorama of Latin America*. Those with less than eight years' schooling will only be able to obtain jobs that provide them with an income around two and a half poverty lines, which is not enough for a minimum level of well-being. At the other extreme, those with 12 or more years' education will be able to work as technicians, managers or owners of businesses, and in these occupations they will obtain incomes over four poverty lines. Those who are in an intermediate position (9-11 years' schooling) will work as salesmen or similar types of work and will receive incomes which at certain stages in their life cycle –when they have formed a family and their children are reaching adolescence–may not be sufficient to give them an adequate level of well-being (ECLAC, 1998).

From the point of view of society, the cost of untrained human resources which are not efficient enough for competitive production systems may be defined as: “the growth potential of the human capital endowment which is not realized because of the educational deficits which exist” (Cohen, 1996, p. 4).

Therefore, although educational reform policies which seek to reduce repetition of grades and dropping out and improve the quality of education are very important, they are not of themselves sufficient to overcome lack of equity. It is also necessary to take into account the out-of-school factors that affect educational performance and to make up for differences connected with the household of origin of students, if

it is desired to prevent the educational system from functioning as a mechanism that reproduces existing differences.

It should be emphasized that the improvement of education is not of itself enough to bring about changes in income distribution in the next ten years. As the rotation of workers in the labour force takes place at the rate of 2% or 3% per year, the occupational profile of 80% of those currently working will continue to apply to the labour market until the end of the next decade. No advantage will therefore be gained from the improvements being made in the educational system, which are designed to affect those who have not yet entered the labour market.

The distribution of access to health is also inequitable, although it must be acknowledged that progress has been made in reducing infant mortality, increasing life expectancy, etc. Nevertheless, there are now new demands which will make it necessary to broaden policies in this field and provide more modern and diversified services, not only in preventive activities. The reform processes carried out so far, in which the private sector plays a significantly greater role than in the past, have given rise to a large-scale debate on the best way of improving efficiency and meeting ever-increasing demands.

b) *Social compensation: safety nets*

The struggle to overcome poverty and indigence will continue to be a central issue, and growing importance is being assumed by social safety nets: that is to say, the sets of compensatory measures which increase income and other assets through targeted transfers and are specifically designed to maintain or increase the well-being of poor or vulnerable groups at times of economic transition (Graham, 1994). It is even believed that such measures can increase popular support for the economic transition process, provided there is adequate communication and the participation of those affected is promoted by strengthening their capacity for organization.

Safety nets must be stable, must form part of permanent institutional systems, have specialized staff, suitable mechanisms for determining eligibility, portfolios of projects and established practices for their evaluation, etc. If not, they will be unable to respond in a timely manner to the needs for protection at times of crisis (Cornia, 1999).

Since the 1980s, the protection of the poor at times of crisis has been based on emergency employment

⁷ This question was analysed in depth some years ago by Aldo E. Solari and is dealt with in various ECLAC studies. It has recently been taken up again in the press: see *La Tercera* (2000).

programmes, anti-poverty programmes and social emergency funds or social investment funds, through which it has been sought to complement the traditional social assistance programmes. It would also be desirable, however, to take measures which keep up employment, such as bringing forward planned investments in infrastructure or promoting public works in communities which have suffered natural disasters or unfavourable economic situations (Iglesias, forthcoming). The basic criterion for such programmes should be to carry them out in a counter-cyclical manner, expanding their coverage and benefits in periods of recession. It would therefore be necessary to identify those branches which should not suffer cuts or should actually be expanded in times of crisis.

c) *Social cohesion*

An integrated society is one in which the population behaves in accordance with socially accepted patterns and there is an equilibrium between cultural goals, the structure of opportunities for attaining them, and the formation of individual capabilities for taking advantage of such opportunities. There are of course always types of behaviour which are not in keeping with these patterns and can give rise to increases in social cohesion or, on the contrary, processes of disintegration usually linked with phenomena of exclusion: that is to say, circumstances in which society does not make available to individuals the proper means (opportunities) for attaining the goals imposed by the culture in question (ECLAC, 1997, chapter III, p. 73).

Concern for cohesion does not mean the pursuit of homogenization, since a modern society must respect people's right to their own cultural identity and must

value diversity, together with the contributions made by the creativity of each cultural group. Thus, while global objectives and rules are shared, there is still room for a wide range of other goals, both of individuals and of groups. This is particularly important in multiracial or multicultural societies.

The traditional problems of low levels of integration displayed by the region (poverty and other problems already referred to, racial discrimination, social segmentation, residential segregation) are now compounded by such new phenomena as various forms of violence, citizen insecurity, drug trafficking and corruption.

This set of situations weakens or destroys the links of shared belongingness, the acceptance of shared patterns of behaviour and the exercise of effective citizenship, while at the same time strengthening exclusive forms of particularism and generating lack of confidence in the public order.

The improvement of social integration is thus also linked to the recomposition of channels of social mobility in keeping with the changes under way, the application of a form of development whose benefits reach all levels of society, a public environment which recognizes and values diversity and promotes the strengthening of the actors of civil society, and a political system in which the demands and interests of all the actors are represented and negotiated.

The incorporation of those who are excluded through various types of discrimination (ethnic, sex-based, etc.) is a task that is still to be completed, in which affirmative action or positive discrimination are fundamental ways of progressing in the struggle to overcome different types of inequality due to family origin, race or sex.⁸

IV

Conclusions

On the social level, the situation in Latin America at the end of the twentieth century is not satisfactory. Although economic growth has been restored to some extent, it is not fast enough to improve the levels of living of the whole population. At the same time, while social policies have received very considerable resources, it will not be easy to keep up this social expenditure unless there is sustained economic growth,

and in any case there will have to be notable improvements in the efficiency of the way such policies

⁸ For example, by using positive discrimination or affirmative action to reduce differences and inequalities, although this solution is currently being questioned in some circles. Thus, President Fernando Henrique Cardoso has highlighted the resistance that exists in Brazil to a quota system for facilitating the access of negroes to education (see Cardoso, 1998, p. 328).

are applied, in their efficacy in reaching their objectives, and in the impact of the programmes on the beneficiary population.

The future agenda of the region will include the aspiration to build more inclusive and equalitarian societies, with increasing incorporation of hitherto excluded strata of the population into the consumer society and social mobility.

Emphasis must be placed on the importance of democracy and the quality thereof. This is a basic ingredient for a good society. Democracies of the illiterate are not true democracies and very easily open the way to clientism and populism. Societies with large numbers of excluded persons also provide fertile ground for violence and citizen insecurity and end up by affecting the functioning of democracy itself. They lead to a deterioration in the living conditions not only of the poor but also of the integrated sectors, who tend to

live in fortified bunkers and to feel insecure when moving around in their own cities, and they encourage the development of the private security industry.

One of the debates which is going on in Europe at present deals with the “two-thirds” society: that is to say, a society in which only two out of every three persons are integrated. In Latin America, however, “one-third” societies currently predominate. The challenge, then, is to create societies in which, as the title of a recent book says, “Everybody’s in” (Bustelo and Minujin, 1998). This is the challenge facing the region, which will only be authentically competitive if it simultaneously achieves human development.

As Dahrendorf (1996) says, “Simultaneously achieving growth, cohesion and liberty may be difficult; it may even mean ‘squaring the circle’, which is of course impossible to achieve in a completely perfect manner, but we can nevertheless come closer to it”.

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Education and development *in Brazil, 1995-2000*

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This article analyses the education policies applied in Brazil in the six-year period from 1995 through 2000. After noting the need to prepare citizens and the country to face the twenty-first century, it addresses the long-standing lag in Brazilian education and the general characteristics of the educational system of that country. It then describes the educational policy options adopted in the period in question, which were aimed primarily at the expanding the system while improving its quality, and analyses the special features of the programmes in the field of basic education (understood as the education given from the earliest stages up to the end of secondary education); compensatory programmes aimed at keeping students in school; special education; literacy training plans, and the education of young people and adults. Next, it looks at the training of teachers, secondary and techno-professional training, and higher education, as well as matters connected with the transparency of information on the educational system and the possibilities of evaluating the system, the financing of education, and the implementation of the corresponding constitutional rules. The article ends with an analysis of the challenges and prospects of education in Brazil, noting that the main challenge is the pursuit of increasingly high levels of quality at all levels of education: an objective which is intimately linked with the upgrading of teachers and the financing of the system.

I

Preparing citizens and the country for the twenty-first century

With a population of 165 million, Brazil is the fifth most populous country in the world, surpassed in this respect only by China, India, Russia and the United States. It is the fourth biggest in terms of area, and is among the ten largest economies in the world.

Its society and economy are diversified and complex, with enormous potential but also with serious problems inherited from the past. There is now a clear awareness in the country that investment in education is the most important way of tackling those problems and making the great hopes that its people have in the future come true.

Since it is aware of the strategic importance of education for incorporating the country in a global economy which is increasingly based on knowledge and innovation, Brazil has come to view education as a national priority. As well as taking measures to ensure the financing of this sector, over the last six years it has consistently applied a coherent set of policies at all levels of education.

These policies have as their background the awareness that the world is going through a great process of structural change in terms of its economic history, with all the social and political consequences that that implies. The form of production in Brazil has taken a great leap forward, which has had an enormous effect on consumption, employment, wages and, in particular, the productivity of labour.

The appearance of informatics revolutionized industrial production technology, making old

specialized skills obsolete and requiring a new type of worker, more versatile and better-equipped intellectually. The great leap forward in communications, furthered by the development of space technology, literally pulverized national barriers: countries could no longer keep themselves isolated in a world with instant access to information, and autochthonous national development processes were no longer viable.

In this world which is globalized and interdependent to a degree never before seen in universal history, the objectives of overcoming poverty and building firm foundations for democracy necessarily depend on the capacity for the appropriation and generation of scientific and technological knowledge, which is the rootstock and driving force of present-day capitalism, and on the consolidation of a body of citizens endowed with the necessary means for understanding, criticizing and influencing decisions affecting the course of those changes.

For education, there is a dual challenge: to train individuals and to prepare the country both for understanding a new world founded on completely reorganized bases, and for participating in that world. Making up for lost time, overcoming fundamental and essential shortcomings inherited from the past, and at the same time implementing the educational reforms demanded by the new society is a giant task which means that governments and societies must give clear priority to education.

II

The long-standing lags in Brazilian education

In spite of all the shortcomings and inequalities in its elitist and concentrative development model, Brazil nevertheless occupied second place among the countries with the greatest economic growth in the world between 1890 and 1980. It was the last country to abolish slavery, however (in 1889), and the Brazilian

agrarian model kept the great peasant masses –mostly descendants of slaves and indigenous peoples who had lost their own cultural characteristics– in a state of exclusion and ignorance.

The industrialization process –between 1930 and 1980– was marked by import substitution without much

attention to competitiveness or innovation. Exports came only from the sectors making intensive use of natural resources and cheap labour, and a high degree of income concentration existed side by side with increasing social exclusion.

Up to 1950, almost 70% of the population still lived in rural areas. In 1960, only 60% of children between 7 and 14 years of age went to school, and the rate of illiteracy was 40%. By 1997, however, 80% of all Brazilians were living in cities. This frenzied process of urbanization was accompanied up to the end of the 1980s by high rates of population growth, and the big cities, in particular, with their already deficient systems of urban infrastructure and services, had to receive a massive inflow of young people of rural origin who were almost completely devoid of the skills needed for production activities in the industrial economy.

By the mid-1990s, 89% of all children were attending school, and the rate of illiteracy had fallen to 16%. This was a considerable advance, although it was still insufficient to meet the demands of the new knowledge-based society, especially considering that only 50% of the children beginning the first grade of primary schooling completed the full eight grades and took an average of twelve years to do this, because of the very high rates of repetition and dropping out.

This dismal educational situation -even today the country still has a legacy of 15 million illiterates over the age of 14- was coherent with and even “functional” to the development model prevailing up to then, which was designed to serve a policy of protectionism and was capable of maintaining domestic balances thanks to protection from international competition. For this form of industrial development favoured by the elites, it was sufficient to have a segment of good-quality education covering all the levels (primary, secondary and university), without bothering to expand its coverage, since ensuring that the whole population received education was not a priority.

Within these limits, the country pursued this educational model with a certain degree of efficiency, since under it -especially between the 1960s and 1980s- the best post-graduate specialized study facilities of any of the developing countries developed and flourished.

Especially from the 1990s on, however, there was increasing pressure to provide better educational conditions for the population as a whole. This pressure came not only from young people and families seeking upward economic and social mobility but also from the economy itself, which was increasingly urbanized and complex and increasingly exposed to outside competition.

III

Features of the Brazilian educational system

A special feature of the Brazilian educational system is that it is extremely diversified and decentralized. Brazil is a federal republic, made up of 26 federative states and the Federal District. In turn, the federated states are subdivided into municipalities, of which there are currently some 6,000.

Except at the higher level, the educational system is predominantly public. There are currently 54.7 million students enrolled in the different levels of education. This figure represents nearly a third of the entire population and is practically equal to the combined total populations of Argentina, Chile and Uruguay. The public sector schools provide free education to 89% of the 52 million students in the basic educational segment (kindergarten, primary and secondary), which is equivalent to the total population of Venezuela and Peru together.

The new Law on the Guidelines and Bases for National Education, which was officially published in December 1996, redefined the roles and responsibilities of each of the educational systems (federal, state and municipal). By giving greater independence to the individual schools, making curricula more flexible, and promoting the improvement of teachers' qualifications -it lays down that by 2007 all the teachers in basic education must have university-level training- the new law provided a suitable environment for the implementation of significant changes in the country's educational system.

Compulsory primary education (grades 1 through 8), as well as day nurseries (0-3 years of age), preschool education (4-6 years of age) and secondary education have always been the responsibility of the states and municipalities. At these levels, the central government

plays a normative role, laying down the main lines of the system of redistribution and subsidiarity and providing assistance and subsidies in order to reduce social and regional inequalities. Only the institutions of higher education and the middle-level techno-professional schools are maintained directly by the Union.

The adoption of the Law on the Guidelines and Bases for National Education set in motion an extensive process of municipalization of primary education and state-level responsibility for secondary education. In 1997 there were 18 million students in state schools and 12 million in municipal ones, but in 1999 the municipal and state-level systems drew level, with 16

million students each. Secondary education, which expanded at an average rate of 14% between 1996 and 1999, has been increasingly concentrated in the state-level systems. Preliminary data from the 2000 school census show that the 5.4% increase in enrollment was accounted for mainly by the state system, which grew by 7.9%, whereas all the other systems decreased: -10.2% in the case of federal-level education, -4.9% at the municipal level, and -4.2% in the case of private education.

This evolution is in keeping with the Law on the Guidelines and Bases for National Education, which envisages the provision of secondary education by the states.

IV

The main options of the federal government's new educational policy

The whole of the federal government's efforts are currently concentrated on **expanding** educational opportunities while at the same time promoting **higher quality**, from the most basic areas of the educational system to its highest levels; these efforts are directed in particular towards the school-age population, but they also seek to provide opportunities for entry to those who did not have access to education at the corresponding age, in view of the right of all Brazilians to enjoy full citizenship and to have access to the development model necessary for the full exercise of that right.

In primary education, the most important objective was to enroll children between 7 and 14 and keep them in school thereafter, guaranteeing them high-quality education. The second objective of the government, after universal access, was to ensure the success of the schooling provided, as represented by the progress of students up to the completion of the last grade within the scheduled time: an objective which necessarily included improvement of the quality of education.

Mention should also be made, however, in addition to the priority given to the universal coverage of primary education, of the measures for the reform and diversification of secondary and techno-professional education, the training and upgrading of teachers, and the expansion and evaluation of higher education.

The quantitative and qualitative aspects of these policies were subjected to continuous control through reliable information and educational appraisal mechanisms, so that, after starting from scratch five years ago, Brazil now has an educational system comparable with those of the most highly developed countries.

In addition, complementary programmes of a compensatory nature –some of them among the most comprehensive in the world– have been prepared in order to overcome the past history of inequality in Brazilian society. Among these programmes are the provision of free school lunches and textbooks in primary education, the supplementation of the incomes of the poorest families with children in school, and educational loans for young people who reach the level of higher education. In addition, the programmes of accelerated learning, literacy training and education for young people and adults and of support for the educational systems of the Northern and Northeastern regions are also designed to make up for regional and income-related inequalities and to contribute to the great effort to promote social inclusion currently under way in Brazil.

The educational programme of the government, based on the pursuit of equality of opportunities, includes not only the principles of universal coverage, high quality and decentralization, but also community

participation in the running of schools and greater social control over public expenditure and its results. To this end, the traditional allocation of federal resources to the federated elements of the country through negotiated agreements has gradually been replaced by systems of automatic transfers based on transparent and universal criteria, while the bureaucratic follow-up and evaluation arrangements have been replaced by community participation in collegiate supervision and accounting control bodies.

1. Primary (“fundamental”) education

In five years there has been a big expansion in access to primary education. The proportion of children between 7 and 14 enrolled in school rose from 89% in 1994 to 96% in 1999, representing the incorporation of four million students into the system. Regional inequalities are also being reduced. Thus, in the Northeast region enrollment grew by almost 27%, compared with 13% for the country as a whole.

Contrary to what is usually assumed, it would appear that the public schools offering basic education have enough vacancies (naturally with adaptations to suit a different student profile) to absorb the entire population of children between 7 and 14 (corresponding to compulsory primary education) and 15 and 17 (corresponding to secondary education). According to the 1999 school census, Brazil had 44 million students enrolled in the public basic educational system, whereas the population aged between 7 and 17 was only 37 million. The difference is accounted for by repetition, which reaches very high levels in the earliest grades, and late entry into the system.

Although the age/grade distortion is still high—46.6% of all students could be in higher grades—Brazil is improving its performance in primary education.

Between 1994 and 1999, the number of students graduating from primary education soared from 1,588,000 to 2,383,000 - an increase of 50.1%. Over the same period, the number of students graduating from secondary education grew by 67.8%, from 915,000 to 1,535,000.

The promotion rate, which measures the number of students progressing from one grade to the next, rose from 65% in 1995 to 74% in 1998; the expectation of completing first grade increased to 63%, and the average time needed to complete all eight grades went down from 12 to 10 years. In 2000, enrollment in the primary cycle began to go down for the first time, but mainly in the first four grades, as it continues to grow

in the case of the fifth to eighth grades. More students are completing primary education than are entering it, which means that the age/grade distortion and the indexes of repetition are going down. This greater efficiency lightens the educational burden on the municipalities and increases the challenge to the states, which are responsible for ensuring the expansion of secondary education.

An important element in the improvement in the age/grade distortion is the accelerated learning programme. Through it, the federal government finances special classes for students having a serious lag in this respect, in order to help them to progress rapidly to the grade corresponding to their age. Between 1998 and 2000 over 3.5 million students took part in this programme, and most of them succeeded in advancing in their studies.

It should be repeated that the main problem in primary education is not quantitative but qualitative. In this respect, in addition to the formulation and diffusion of national parameters and curricular guidelines for all levels and forms of basic education (pre-school, primary and secondary education, together with special programmes for young people and adults and indigenous groups) and programmes such as “TV Escola” or “Proinfo”, which will be dealt with later, there are also the efforts made to improve and extend other programmes, such as those for the issue of school books and school libraries, in order to meet the challenge of raising the quality of primary education.

Primary school teachers were provided with more than 1.4 million copies of the curricular parameters and guidelines. In 1998, schools were issued with 20,000 sets of the “teacher’s library”, consisting of reference works on the historical, social and political formation of Brazil, and in 1999 a further 35,000 libraries of children’s and young people’s literature were delivered for use by primary school students.

Programmes of a compensatory nature, designed to correct the effects of the big social and income-related disparities affecting a large proportion of Brazilian families, also helped to create suitable conditions for the successful education of students from low-income families.

2. Compensatory programmes

The National School Nutrition Programme (PNAE), commonly known as the “school lunch programme”, provides during the 200 days of the school year at least one meal per day to the 36 million children in the

primary and pre-school levels of the public system and in private philanthropic educational establishments. The population thus served exceeds the total population of Canada and is equal to the combined population of Australia, Greece, New Zealand and Singapore. The coverage of the programme is practically universal: in 1999 it operated in 96.7% of all urban public schools and in 98.1% of the rural schools. Many school headmasters (75% of those in rural schools and 61% in urban schools) believe that the “school lunch” is the main meal of the day for most of their students.

The programme has been improved, expanded and completely decentralized. The present government has almost doubled the expenditure on these meals: between 1995 and the end of 1999 the country invested 3.6 billion reales in feeding primary school students. In 1999 alone the investment came to 903 million reales, representing 33% of the total budget authorized for the National Educational Development Fund (FNDE). The resources are sent directly to over 5,000 municipalities, where the community and the schools freely decide on the menu in line with local and regional eating habits and are responsible for controlling the quality of the food. Since 1999, the formation of a municipal school lunch council has been made an essential condition for the transfer of the resources to the municipalities.

The existing National School Book Programme (PNLD), through which the federal government acquires and distributes primary school textbooks, has been improved and expanded since 1995. The old programme left much to be desired, as it was limited to the first four grades, suffered from chronic problems of unpunctuality in the distribution of the books, and lacked arrangements for the evaluation of the contents of the books and the methodologies followed in accordance with appropriate national curricular guidelines.

As from 1996, the PNLD began to serve all first to eighth grade primary school students. Between 1994 and 2000, the FNDE (directly) or the states of São Paulo and Minas Gerais (autonomously) acquired 597 million school books, selected by the teachers from a catalogue of books evaluated by an independent commission of teachers. In 1999, 502 different works from 27 publishers were distributed to 170,000 schools all over Brazil.

A joint company formed by the Ministry of Education and the Brazilian Postal and Telegraph Company ensures that 100% of the books are delivered to the schools before classes begin, even in the most remote municipalities. The programme is designed on

the assumption that the books can be re-used for three years, to which end the publishers were required to improve the quality of the paper and binding, and an educational campaign was carried out among students and their families to encourage them to take care of this study material; the rate of return has been surprisingly high. According to an independent survey, 93.5% of school headmasters considered that their students “were happy to use the books” and approved of the choice of texts.

The most important and effective initiative for ensuring that children from low-income families stay in school is undoubtedly the National Guaranteed Minimum Income Programme (PGRM), better known as the “Every child in school” programme. Within the worldwide tendency towards the decentralization of resources and the targeting of attention, the programme provides monthly financial aid to deprived families (with a family income of less than half a minimum wage per member) with school-age children.

The PGRM is implemented by municipalities where the average family income is less than the average for the state in question, and those municipalities which are not in a position to cover the total cost of the programme may receive financial aid from the Union. In 2002 the aim is to cover the entire universe of over 3,000 municipalities eligible for participating in the scheme. At the end of 1999 the programme had already benefited over 500,000 families, representing almost a million children between 7 and 14, in over a thousand municipalities. The programme also helps in eradicating child labour and reducing the exodus of families to the big cities.

The Northeast Project was established in the light of the extremely unfavourable situation of education in that region of the country, which registers indicators far below the Brazilian averages. In addition to providing substantial resources for municipal and state education programmes, this project supports research to help formulate effective strategies to overcome educational shortcomings.

Between 1993 and 1998, the Northeast Project invested national and external resources (the latter came from a World Bank loan) amounting to nearly US\$ 500 million. It was reformulated in 1998 under the new name of Educational Strengthening Fund (Fundescola) and was also extended to the North and Centre-West regions.

The educational indicators in the Northeast and Northern regions have grown faster than the national average in both quantitative and qualitative terms. This

favourable evolution, which has become even more marked in recent years, shows that regional differences are rapidly being reduced. In those regions, primary education has grown by 27.2% since 1994, compared with 13% in the country as a whole, while enrollment in the fifth to eighth grades has grown by 49%, compared with a nationwide 27%. Over half of the students attending accelerated learning classes (50.6%) are in the Northeast region. In secondary education, while nationwide enrollment grew by 5.4% between 1999 and 2000 it increased by 11% in the Northeast and by 8.3% in the Northern region.

3. Infant education (0-6 years of age) and special education

Two advances are worthy of note in infant education: adoption of the concept that educational attention for children between 0 and 6 years of age is a first stage in basic education, and the expansion of enrollment at this level. The inclusion of day nurseries (0-3 years of age) in educational systems and the definition of the responsibility of municipalities for infant education complete the institutional changes made in this field. Pre-school enrollment (providing attention for children between 4 and 6 years of age) grew from 35.4% of that age group in 1990 to 50.4% in 1998. Another positive aspect is that although the indicators of coverage of pre-school education are still unsatisfactory, regional disparities are much smaller than at the other levels of education and the distribution of enrollments between rural and urban areas is better.

Improving the records of infant educational establishments (especially those that have day nurseries) is a difficult task, as many such establishments operate informally in connection with churches, associations and non-governmental organizations. In order to include this informal system of establishments in the statistics of the Ministry of Education, as from October 2000 the National Institute for Educational Studies and Research (INEP) carried out the first census of infant education, the data from which will be of vital importance for defining educational policies for the sector. The school census published each year by the INEP currently collects data on both day nurseries and pre-school establishments. A survey exclusively on infant education is planned, in order to expand the coverage of the information collected.

In the field of special education, analysis of the progress made in the 1990s shows that there has been a marked increase in the access to education of those with

special needs. This is the result of the efforts made to overcome both the idea and the practical application of segregation and to progress towards an "inclusive" form of education within the regular educational system, with respect for the diversity of students being the guiding principle in education. Between 1988 and 1998 there was an increase of 102.8% in the enrollment of students with special needs.

4. Literacy training, and education for young adults

The constant growth in the rate of school attendance throughout the country has been reducing illiteracy, raising the level of education of the population, and gradually reducing the marked regional disparities. The percentage of children between 7 and 14 who do not go to school, which stood at 16.2% in 1989, went down from 9.8% to 4.3% between 1995 and 1999.

In the 10-14 age group, in which children are expected to be at least able to read and write, the rate of illiteracy went down from 14.8% in 1989 to 9.9% in 1995 and 5.5% in 1999. The heavy inherited burden of illiteracy and low average educational level of the population, however, which was the result of past quantitative and qualitative shortcomings in primary education, makes it necessary to continue to tackle these serious deficiencies with specific programmes.

According to the Constitution, it is the duty of the State to further the free provision of education for all, including those who did not have access to it at the corresponding age. Various initiatives have therefore been implemented to provide literacy training for adults and secure the reincorporation into regular primary education of young people who had dropped out of school.

There is an increasing conviction, however, that the education of young people and adults (EYA) calls for special policies as well as curricula and methods specially adapted to the needs of young people and adult workers. Since 1994, the federal government has begun to invest in solutions of this type, with programmes for the production of suitable teaching material and the training of specialized teachers. Special importance has been attached to initiatives in the field of association and other successful efforts made by employers, by various civil organizations, by universities, and by the state and municipal departments of education.

As a result of these policies, already in 1998 the school census registered 2.8 million persons enrolled in courses for young people and adults, the great

majority of whom were completing their primary education.

In 2000, enrollment in all levels of EYA special education for young people and adults totalled 3.1 million. Following the same trends as in regular education, there was a small increase in the literacy training groups (3.7%) and in first to fourth grade education (2.3%), but a considerably larger expansion in fifth through eighth grade classes (9.9%). There was a particularly marked increase in secondary education, which grew by 33.3% compared with the previous year, involving 807,600 students. Compared with the 1995 census, the increase was 169.6%.

In order to tackle illiteracy in the 12-18 age group – a problem which is concentrated in the poorest municipalities of the country – an initiative called “Supportive Literacy Training”, which was a new project of the “Supportive Community” programme of the Office of the President of the Republic, was put into effect. This project, which was set up in January 1997 and operates in association with universities and private initiatives, had some 300,000 students in 866 municipalities as at December 1999, mostly in the Northern and Northeast regions.

5. Teacher training and the quality of education

Improving the quality of education is the main battle that the Ministry has begun to fight on various different fronts. Extensive reform of school curricula at all levels is under way. For the first time in the history of Brazilian education, the federal government has established national parameters for the curricula of all eight grades of primary education, as well as guidelines for infant education, and it has reformulated the whole system of teacher training. Parameters have also been laid down for the education of young people, adults, and indigenous groups. The latter is one of the most interesting aspects of the policies of the present government, since it seeks to make a clear effort to preserve and enhance the culture of indigenous groups.

One of the most innovative features of the parameters laid down for school curricula is their broad coverage, which goes far beyond the subjects making up the traditional curricula, since it includes subjects connected with the formation of citizens and deals with questions of ethics, citizenship and cultural diversity, as well as education in the fields of the environment, health, and sex.

For distance education, new programmes have been created, such as school television (“TV Escola”), in

order to provide sixty thousand schools all over the country with backup educational programmes, assistance for the work of the teachers, and ongoing teacher training. This school television, which is transmitted on a dedicated channel by satellite, provides three hours of high-quality programmes per day, repeated four times a day.

The National Educational Informatics Programme (PROINFO) has proved to be another important initiative. Under it, over 20,000 teachers have so far been trained in the use of computers in education. To date, the government has installed 30,000 computers and peripherals in over 2,000 schools in the 26 states and the Federal District, directly benefiting nearly 200,000 students. The programme aims to install 100,000 computers in 6,000 schools by 2001, thus reaching 7.5 million students. In 2000, through the establishment of the Universal Telecommunications Services Fund (FUST), the federal government will spend 300 million reales on connecting public schools to the Internet.

In order to raise the quality of primary education another great challenge must also be faced: that of training teachers. This means raising the status of teachers and improving their working conditions and salaries. The Fund for the Maintenance and Development of Primary Education and the Improvement of the Status of Teachers (FUNDEF) has begun to correct the salary problem by devoting a mandatory 60% of its resources to upgrading the qualifications and salaries of teachers. After a year of operation of this Fund, the nationwide average salary of teachers has increased by 13%, but in the case of teachers in the municipal education systems of the Northeast, where salaries were lower, the increase has amounted to 50%.

In addition to the increase in the number of teachers over the last five years –10% in primary education and 36% in secondary education– the school census reveals that they are now better qualified, since their level of training has improved considerably. Between 1994 and 1999, the proportion of teachers without full training –the so-called lay teachers– went down to 41% in primary education, the number of teachers with full secondary education increased by 8%, and the number with full higher education grew by 24%.

The Law on the Guidelines and Bases for National Education provides that by 2007 all teachers in basic education must have higher education. There are currently 600,000 teachers without such training in the country, of whom 95,000 do not even have the minimum qualifications required at present

(intermediate-level teachers' training). Almost 80% of the teachers in the first four grades of primary education will have to upgrade their qualifications, as will almost 25% of the teachers in the last four grades.

This will call for a major joint effort by all three levels of government in the coming years, as the task is enormous and the time available only short. Big changes are being made in the organization of the teacher training system. The idea of higher institutes of education and a career system for graduates of such institutes, the definition of special teachers' training programmes and the formulation of new guidelines for the curricula of teachers' training courses and university-level degrees in general are measures that are bound to have a strong impact in the short term.

At the same time, there is general agreement among specialists in education that no initial training, even of the best quality and at the highest level, is sufficient of itself for professional development. This means that it is essential to establish a system of ongoing permanent training for all teachers.

The government is investing more and more resources in distance training courses in order to make it possible to upgrade the qualifications of working teachers. Some states, with the support of universities, are also carrying out effective in-service training programmes for thousands of teachers in their respective school systems.

The "TV Escola" school television programme, which is transmitted on a dedicated channel by satellite, promotes the upgrading of teachers by providing systematic support for their classroom activities. When it installed the programme, the government trained 200,000 teachers in its use, and there are now 56,506 schools equipped to receive three hours of the programme each day. The programme has been on the air for three years now and serves nearly a million teachers and 28 million students.

6. Secondary and techno-professional education

The growth rate of the number of enrollments in secondary education has soared by 11.5% in 1999 and 57% between 1994 and 1999. In the Northeast region the growth has been even faster: 62%.

The impressive expansion of enrollments in secondary education is due to three main factors: there are more students completing their primary education; more students are now completing it at an earlier age and are therefore in a position to continue with their studies, and there has been an increase in the demand

from young people for better schooling to meet the demands of an increasingly competitive labour market. Supplementary secondary education (education of young people and adults over 18) grew by 169% between 1995 and 2000.

Secondary and techno-professional education is undergoing profound reforms. Previously, secondary education had no identity of its own and was divorced from the requirements of the modern world, so that it was not fulfilling the functions demanded of it. What was required was that it should teach students to learn on their own, provide them with guidance on practical everyday matters and their future working careers, and prepare them for the exercise of citizenship and democracy. It should also be able to train young people in the use of new technologies and ways of producing goods, services and knowledge.

The first step in the reform of secondary education was of a structural nature: secondary education was separated from techno-professional training. These areas of education now operate independently, and the latter is now complementary to the former. This will facilitate the achievement of another of the government's great goals in education: the attainment of universal coverage of secondary education too.

In addition to these structural changes in secondary education, the Ministry has also made changes in the areas of teaching itself and the curricula. At the teaching level, the new form of secondary education will associate knowledge with the practical life of students, providing them with guidance on their future and not merely being a preparatory stage for future entry into higher education.

The national curricular guidelines laid down for secondary education are compulsory for all the schools in the country. After their definition, the Ministry prepared the corresponding curricular parameters and a set of guidelines and recommendations for supporting the work of teachers under this new concept of secondary education.

The curricula have been made more flexible: 75% of their content is in line with a common national base, while the remaining 25% is defined by the schools themselves in the light of local economic and social characteristics or the interests of the school community. Through this innovation, students now have greater freedom to design their own curricula.

In addition to these changes in secondary education, the Ministry has also embarked on the reform of techno-professional education, as provided for in the Law on the Guidelines and Bases for National

Education. That area of education is now divided into three independent levels: basic (independent of whatever previous schooling the students have), technical (simultaneous with or subsequent to secondary education), and technological (of a higher level, subsequent to secondary education). The secondary-level, post-secondary and higher courses in this area were previously given in full-time schools with rigid curricular structures linked with very clearly-defined occupations and aimed primarily at young people.

Today, however, as well as being separate from the secondary cycle, techno-professional education offers courses that meet the needs of local and regional labour markets. The authorities are promoting the diversification of post-secondary techno-professional education, both technical and higher-level, to give broad flexibility to the curricula and freedom for young people and adults to enter and leave the educational system several times. The organization of the curricula in modules allows students to take various short courses at different times in their lives and allows for flexible contents which take account of the students' preferences. With this restructuring, techno-professional education will be able to effectively train students to work in various different occupations. Furthermore, it will only attract young people who really do want to work as middle-level professionals.

Through the Brazilian Support Service for Micro and Small-scale Enterprises (SEBRAE), 10,000 technical education teachers are being trained to give their students a basic knowledge of business management, thus preparing students to work on their own account, if they so desire, or open a small enterprise after completing their training.

The Techno-Professional Expansion Programme (PROEP), which is financed by the Ministries of Education and Labour with support from the Inter-American Development Bank (IDB), is spending US\$ 500 million on the re-equipment of public technical schools and the establishment of a network of community techno-professional schools in association with municipalities, trade unions and civil organizations.

7. Higher education

Although the Brazilian higher education system is quite small for the size of the country and displays enormous differences in quality, it has never been a serious impediment to Brazilian development.

The percentage of the population with completed higher education among adults over 25 is similar to the

levels for countries such as Austria, Chile, Italy and Uruguay and is higher than in China, India, Indonesia and Turkey.

In 1997, 7% of the population between 25 and 34 years of age had higher education. In the 35-44 age group the percentage rose to 9%, while in the 45-54 and 55-64 age groups the percentages went down to 8% and 5% respectively. The indicators for Italy for each of these age groups are similar to these figures: 8% (25-34), 11% (35-44), 8% (45-54) and 5% (55-64).

In higher educational policy the challenge to be faced –ensuring the expansion and diversification of the system while maintaining or improving its quality– was very clear in view of the big increase in the rates of completion of secondary education and the demands of an increasingly sophisticated and segmented labour market.

Expansion of this area of education recovered in quantitative terms from 1994 on, after a long period in which the number of students remained unchanged. In the four years from 1994 the enrollment in higher education grew more in absolute terms than in the previous 14 years, with 424,000 new enrollments.

Thus, in 1998 there were 2.1 million students in higher education: 28% more than in 1994. The total number of graduates now represents 9% of the population aged 21 or over (7% in the case of men and 11% in that of women).

With regard to diversification, the curricula of the higher courses are being reformed in two aspects: their structure is more flexible, thus permitting partial certification of short courses, and the establishment of minimum curricula for each course has been abandoned and replaced with curricular guidelines for each area of study.

As far as quality is concerned, up to 1995 the expansion of the system was only subject to *ex ante* bureaucratic controls, without there being any system of evaluation that enabled the accreditation of institutions to be linked to judgements on their performance and quality.

The legislation on the accreditation of courses and institutions has been substantially modified, and evaluation of performance as the main mechanism for accreditation and re-accreditation has been institutionalized. An innovative system of final examinations, which must be taken by all students in order to graduate, has been established as an indirect means of evaluating the performance of the courses in question. The results of these examinations, together with the evaluation of the operating conditions carried

out by specialist commissions appointed by the Ministry, enable society to know which institutions and courses have the best performance. As well as making this information more democratically available, favouring social supervision and control and highlighting shortcomings, these results serve as the basis on which the Ministry decides whether or not to renew the accreditation of institutions and courses.

Since the creation of this integral system of evaluation, there has been greater freedom for the private sector to expand its activities in the field of higher education, subject to the fulfillment of established patterns of quality under the supervision and systematic evaluation of the Ministry of Education. Significant expansion of higher educational activities towards the interior of the country and correction of regional imbalances have been observed. Thus, almost one-third of the increase in the number of vacancies in private-sector institutions has been in the Northern, Northeast and Centre-West regions.

Since much of the expansion in the supply of higher education is taking place and will continue to take place in the private sector, the government has concerned itself with improving the support mechanisms to help students from low-income families to have access to higher education.

The new Student Finance Programme (FIES), which was set up in 1999, provided loans to more than 80,000 students enrolled in institutions all over the country in its first six months of operation. This is 173% more than the last selection process made in 1997 by the former educational credit system, and in 1999 the resources used for this purpose exceeded 150 million reals.

In public higher education, which is free of charge, measures were taken to increase the productivity of the system, which had one of the lowest student/professor ratios in the world. Under the present government, the resources devoted to higher education by the federal public system have increased by 28%, and efforts have been made to use them in the most transparent and efficient manner. Federal resources are now distributed to the public universities according to the number of students and graduates, and a system of remuneration of the professors linked to their academic performance has been introduced.

Consequently, the expansion of higher education now includes an important new feature: the public system has recovered its dynamism. The number of undergraduate students grew by 17% between 1994 and 1999, while the number of postgraduate students also increased significantly: between 1995 and 1998 the

number of students studying for masters' degrees rose from 43,000 to 51,000, and those studying for doctorates increased from 16,000 to 27,000. This means that Brazil is training 13,000 graduates with masters' degrees and 4,000 with doctorates each year.

Investment is being made both in human resources and in physical equipment and installations. The average level of qualifications of the faculty members has improved, since the proportion with doctorates rose from 22% to 29%. Priority has been given to undergraduate education, and over 100 million reals has been spent on libraries, computers and information infrastructure. International tenders were invited for the supply of US\$ 300 million of laboratory equipment for undergraduate education and university hospitals, and this equipment is already being delivered to public higher educational institutions.

8. Information and evaluation

Under the present government, there has been a veritable revolution in terms of educational information and evaluation. The high quality of the studies carried out has made them an indispensable instrument for the planning and execution of the public policies of the Ministry of Education. Thanks to them, the government is not only spending more on education but is using these resources more effectively.

The starting point for this was the conversion of the National Institute for Educational Studies and Research (INEP) into an autonomous body with its own resources. In this capacity, the INEP has taken over responsibility for the entire system for the collection, evaluation and storage of information on all aspects of education in the country.

The System for the Evaluation of Basic Education (SAEB), which studies the performance of primary and secondary school students, is recognized as one of the most sophisticated in the world in matters of the evaluation of school performance.

The National Secondary Education Examination (ENEM), which was held for the third time in 2000, is becoming firmly established as an important instrument for evaluating the performance of students and schools. In that year, 350,000 students took the examination, which is already accepted by 130 institutions as valid proof of eligibility to enter higher education, either alone or in conjunction with the traditional entrance examination.

As from 2001, enrollment for this examination will be free of charge for all students of public schools. The

aim is to pressure the federal universities to accept the examination: at present, out of over 50 federal universities in Brazil, only 7 accept it as one of the forms of entry. It is expected that out of a total of 1.8 million students graduating from secondary education in 2001, some 900,000 will be enrolled for the ENEM.

In higher education, the National Degree Course Examination (“Provão”) has also been gaining acceptance after four years of application; it now covers 18 higher education courses and serves to evaluate 2,889 course modules through an examination taken by 214,000 students in the country (70% of the total number of undergraduate students). This national examination, which is essential for evaluating the

quality of undergraduate courses in higher education, is playing a notable part in improving the level of higher educational institutions.

The quality of the work done by INEP over the last five years has won international respect. Thanks to the advances made in systems of evaluation and information, Brazil now takes part in international comparative studies such as the *World Educational Indicators* (WEI), prepared by UNESCO in conjunction with the OECD, and the *PISA 2000* study of the Organization for Economic Cooperation and Development (OECD), which make possible a precise diagnostic study of the situation of Brazil compared with the other countries.

V

Public resources for education

Brazilian legislation provides for a regular flow of public resources to education. Brazil's public expenditure on education, as a proportion of GDP, is one of the highest among the countries participating in the WEI project and is equal to the average of the OECD countries.

In 1997, public expenditure on education came to 37 billion reals. This was equivalent to 4.8% of the country's GDP: more than in Argentina (3.7%), Chile (3.2%), Philippines (3.0%), Mexico (4.6%), Malaysia (4.4%), Thailand (4.3%) and Uruguay (2.6%), and comparable to that of Spain (4.8%) and the average of the OECD countries (4.9%).

Total expenditure in that year was 43.3 billion reals, made up of 8.6 billion from the Union (19.8%), 21 billion from the states (49.8%) and 13.1 billion from the municipalities (30.4%). The federal government provides 62% of the resources invested in higher education and plays an important supporting role in primary and secondary education.

In that same year, expenditure on staff costs absorbed 57.6% of the direct resources provided by the three levels of government. This proportion is tending to increase because of the policies for the training and upgrading of the teaching staff. Between 1994 and 1999 there was an increase of 45.3% in the number of teachers with full higher-level training and a reduction of 65.8% in the number of lay teachers (i.e., without secondary-level qualifications).

The 1988 Constitution lays down that the states and municipalities must devote at least 25% of their tax revenue to education, and of that amount at least 60% must be spent on primary education. At the level of the Union, the corresponding minimum is 18% of tax revenue.

Primary education also receives supplementary resources from the “education wage”, a social contribution equal to 2.5% of their payroll that enterprises must make for this purpose. One-third of these resources goes to a federal fund, the FNDE, which prepares support programmes devoted exclusively to the state and municipal primary educational systems, while two-thirds goes directly to the states where the tax is collected. In 1998, the resources allocated by the three levels of government exclusively to primary education amounted to 18.3 billion reals.

If it had not been for the faulty distribution of the existing resources, plus their faulty application, the available resources would have been enough to maintain an educational system of much better quality and coverage than that which actually existed in the country up to 1995.

The faulty distribution was due to the big differences in revenue collection capacity between the richer and poorer states and municipalities. The former did not devote the mandatory 25% of their revenue to compulsory primary education or infant education: they invested a considerable part of those resources in secondary education, and even in some cases in higher

education. In the poorer municipalities, for their part, especially in the Northeast, the resources available were not sufficient to provide good-quality education. In many such localities the average expenditure per student per year was less than 100 reales, and teachers' wages did not even amount to the official minimum wage. There was therefore no relation between the resources available and the number of students served by the different educational systems.

The forms of faulty application of resources ranged from the use of resources that were supposed to be for primary education for other levels of education, and even the straightforward diversion of resources to other

uses, so that they were lost in the nooks and crannies of bureaucracy before they ever arrived at the schools, both because of the lack of a clear definition of "expenditure on education" and because of the lack of accounting and administrative controls.

It was in order to correct such distortions and ensure the implementation of the objectives of the new Law on the Guidelines and Bases for National Education that in 1996 the present government proposed and approved Constitutional Amendment No. 14 which set up a Fund for the Maintenance and Development of Primary Education and the Improvement of the Status of Teachers (FUNDEF).

VI

The Fund for the Maintenance and Development of Primary Education and the Improvement of the Status of Teachers (FUNDEF)

Constitutional Amendment No. 14, which set up FUNDEF, laid down that for ten years from the date of its promulgation states and municipalities must assign to primary education no less than 60% of the resources already earmarked for education under the 1988 Constitution. Although FUNDEF does not cover all the taxes collected by states and municipalities, this commitment applies to all the revenues making up the budgets of those levels of government.

The resources previously earmarked for education in general –without there being any clear definition of what should be considered as expenditure on education– were not necessarily allocated in line with the real priorities defined for the country: primary education, an increase in the number of students, better pay for teachers, and a level of resources which would improve the quality of the schools in the poorest regions.

FUNDEF, which was set up in 1998 in all the units of the federation for a period of ten years, is an administrative fund (that is to say, it does not generate new resources but simply distributes the existing resources differently) extending to all the main sources of state and municipal revenue.

Before this fund was set up, the way tax income was distributed between states and municipalities bore no relation to the division of educational burdens

between the state and municipal educational systems. This further exaggerated the inequalities between the richest and poorest municipalities in each state and did nothing to combat the traditional regional imbalances in the country.

With the creation of FUNDEF, the redistribution between each state and its component municipalities of the resources making up the fund takes place automatically, according to the number of students enrolled in the respective primary education systems.

With the new definition –now endowed with the force of law– of what can be included in expenditure on education, the amounts redistributed by the fund are deposited in a special bank account, thus notably improving public control over their use.

The resources received by state or municipal educational systems in the account in question must be allocated in line with the following requirements:

- i) a minimum of 60% must be used for the payment of teachers actually working in primary education, although part of those resources may be used for the upgrading of lay teachers up to 2001;
- ii) the remaining 40% must be used for actions defined by the law as corresponding to the upkeep and development of education: construction,

expansion, completion or remodelling of schools, acquisition of teaching material and equipment, miscellaneous services, and payment of pensions.

The federal government undertakes to make up the amounts provided when the resources distributed by the fund in a state do not reach a certain minimum level per student which is determined annually and is currently 333 reales per student/year in the first four grades of primary education and 349.65 reales in the last four grades.

In 1998, which was the first year of operation of the fund, almost 13.3 billion reales was distributed to the compulsory primary education system. In 2000, the projected income of the fund was 17 billion reales, to be distributed as follows: Southern region, 2.5 billion reales; Southeast, 8 billion; Centre-West, 1.1 billion; Northeast, 4 billion, and Northern region, 1.4 billion. The poorest states, which did not reach the minimum expenditure per student, were to receive supplementary amounts: 511.6 million reales for the Northeast and 122.6 million for the Northern region. In the other regions the states exceed the minimum expenditure per student.

The constitutional amendment under which the fund was set up also provided for the establishment of

councils made up of members of civil society at the various levels of government in order to keep a check on the expenditure made.

In the light of recent complaints of irregularities in the allocation of FUNDEF's resources (failure to allocate 60% of the resources to primary education; financing of activities not considered to correspond to the upkeep and development of education) in some 5.5% of the municipalities, the government decided to permanently do away with the banking secrecy of the accounts of all the prefectures and state governments in which educational resources are deposited. It also brought legal actions in the official auditing bodies and public prosecutors' offices of the states where irregularities were reported, which has already led to the dismissal of five prefects and more than 100 official investigations in 20 states.

In addition to the members of the above-mentioned supervisory councils, local members of parliament, mayors, and members of the public prosecutor's office and of the official auditing bodies now have free access to the statements of accounts of the fund. FUNDEF is thus an innovative example of a transparent social policy which links together the three levels of government and promotes the participation of civil society in supervising the way the funds are used.

VII

Other sources of finance

1. International resources

Foreign loans can be important means for carrying out special projects, provided the regular financing of the system is not dependent on such resources. In this respect, international cooperation has been very important for Brazil, in the form of technical assistance and the financing of studies and projects. The Inter-American Development Bank (IDB) and the World Bank are both important sources for the financing of projects fundamentally designed to improve the quality of education and the equity of the educational system.

The main project supported with resources from the World Bank is the Northeast Project, aimed at the poorest areas of the country, which has now been reformulated and expanded under the name of FUNDESCOLA to cover also the Northern and Centre-West

regions of the country. The IDB, for its part, is providing support for the important Techno-Professional Expansion Programme (PROEP) which will cost US\$ 500 million, including resources from the Ministries of Education and Labour; it is also contributing to programmes such as the International Virtual Education Network (RIVED), which brings together specialists from Brazil, Venezuela and Colombia to promote the development of computer programmes to support the teaching of mathematics and science in public schools.

In conjunction with domestic resources, including resources from the states, the IDB will also finance half of the US\$ 500 million to be spent on the innovative PROMED-Escola Jovem project, the aim of which is to provide schools with the necessary conditions for the full application of the reforms in secondary school curricula. PROMED is aimed above all at the creation of

school spaces intended specifically for young people, through the construction, expansion and improvement of physical facilities and the installation of libraries, science laboratories and information processing equipment. The programme will also stimulate active participation by young people, providing for the incorporation of projects to be developed by the students themselves in any area –science, arts, sport, community initiatives– of the regular activities of schools.

2. Association with the community

The main objective of the extensive programme of association with the community being developed by the Ministry of Education –*Acorda, Brasil! Está na hora da Escola!*– is to foster within the country a climate of commitment to education, and especially primary education. For example, a housewife who turns her house into an enrollment centre; a student's father who paints or repairs his child's school; a renowned artist who takes part free of charge in school promotion campaigns, or a retired teacher who gives classes, likewise free of charge, to students who need to make up for lost time: there are thousands of actions whose value cannot be measured in monetary terms.

As well as encouraging spontaneous collaboration between the state and the community in order to solve educational problems, however, the programme also seeks to build formal associations with the social agents.

Up to September 1998 it had organized 121 such associations, involving investments of almost 25 million reals and benefitting some 20 million students in public schools all over Brazil, for the purpose of carrying out educational projects, donating teaching material and equipment, contributing advertising space and training teachers.

As the community gradually adopts a more proactive approach to schooling, there is an increasing number of enterprises, organs of communication, foundations and non-governmental organizations, state and municipal governments, business associations and financial institutions which collaborate with education, even though they may not be formal “partners” of the government. Thus, for example, one financial institution itself maintains 36 schools in 23 states offering pre-school, primary, secondary, complementary and techno-professional education to nearly 95,000 students, with an investment of 80 million reals per year.

Donations of computer equipment, television sets, educational videos, encyclopedias, contests and prizes, out-of-school sporting and artistic activities, participation in parents' associations and school councils, and supervision of programmes and of the allocation of public funds are all forms of participation which are on the increase and are helping to create the social capital which is both a prerequisite for and a consequence of the silent revolution that Brazil is carrying out in education.

VIII

Challenges and future prospects

The current great challenge for Brazilian education is no longer the achievement of universal primary education or the elimination of illiteracy, but rather the quest for ever-improving indices of quality at all levels: an objective which is intimately associated with the upgrading of the teaching staff.

Between 1991 and 1998 there was a reduction in the number of illiterates in absolute terms, from 19.2 million to 15.2 million, and there was a particularly rapid reduction in the rates of illiteracy among the younger groups benefitted by the increased coverage of the school system. Brazil has succeeded in providing universal access to primary education, expanding the coverage of secondary and higher education, and raising teachers' qualifications.

Much more is needed, however: it is necessary to apply the reforms in curricula to the full, increase the number of teachers with higher education, expand enrollments in secondary education while improving its quality, and increase the average number of years of schooling of the population. It is no longer enough to ensure universal coverage of eight-year primary education: in order to be able to exercise full citizenship and live a productive life it is essential to have at least twelve years' schooling.

The speed at which Brazil has managed to expand the coverage of secondary education is probably unparalleled in any other country. However, the net enrollment ratio (33.4% of the population between 15

and 17) is still considered to be low, even though it grew by 57% between 1994 and 1999.

The challenge of training and upgrading teachers for the new stage of expansion of secondary and techno-professional education is enormous. It will be necessary to make use of new technologies, with a growing combination of in-school and distance education, and to develop computer programmes, television programmes, interactive learning modules by Internet, and new technologies in which the teacher acts in the classroom as a kind of versatile monitor who uses the resources of distance education while at the same time learning and upgrading his skills himself.

The universities are preparing to take the lead in this process by organizing themselves into virtual education networks. The "Uni-Rede" is a consortium set up in January 2000, made up of 65 public, federal and state universities which cover the entire country by Internet and cable television in order to meet the demand for public higher education throughout the country. Each institution will produce programmes in the areas in which it is most competent, and these programmes will be transmitted and shared. The first programme will offer undergraduate degrees in areas defined according to national, regional and local needs. The training of working teachers to meet the higher training requirements laid down in the Law on the Guidelines and Bases for National Education is one of the priority objectives of the Uni-Rede, which aims to serve 100,000 students per year, bringing educational content and teaching resources prepared by the best universities of Brazil to the furthest-flung corners of the country.

The tendency to combine distance education with traditional in-school education is increasingly marked not only in the field of undergraduate studies but also in higher education as a whole. The universities will be able to have access to compact versions of courses from

the best world centres: courses prepared, for example, by a Nobel prizewinner in macroeconomics or the best world specialist in a particular type of surgery, and, within their own faculties, by professors trained to work with these methods and pass them on to their students. This is nothing like the old model of distance education, in which students downloaded material from the Internet at night and then did their homework at home. That is not much of a system: the important thing in the future will be the combination of in-school study with the new resources of technology.

Financing education is of course a big problem all over the world. Brazil's public expenditure on education, as a proportion of GDP, is one of the highest of all the countries participating in the UNESCO/OECD project and is similar to the average for the OECD countries as a whole. The government's efforts to achieve fiscal balance have not had a significant effect on its investments in education. Great progress has been made in improving productivity within the system, but the increases being achieved are now only marginal.

Brazil will have to continue to resort to international finance to ensure the expansion and improvement of the physical system of educational establishments on the one hand and the intensive use of the most advanced in-school and distance educational technologies on the other. It would be highly desirable, not only for Brazil but also for all borrower countries, that these loans should not be counted within the limits on indebtedness that form part of the objectives of fiscal adjustment programmes.

The prospects for the national educational system are very promising. Great progress has been made, and the country is much better than it was, but there is still a long way to go.

(Original: Portuguese)

Educational reform *in Chile*

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This article analyses the reforms put into effect in the mid-1990s with the aim of setting in motion a process of profound changes in pre-school, basic and secondary education in Chile, the main changes made, and some of the achievements and difficulties of this process as seen at the present day. It begins by describing the initial context of the reforms, in which, as the objectives of full coverage of the educational system had been largely achieved, the new objective addressed was to improve the quality of education with equity. It also makes reference to the institutional changes which had taken place in the organization of education: the consolidation of the system of subsidies and the transfer of educational establishments to the municipalities in the 1980s, and the change in teachers' working conditions in the 1990s. It then summarizes the main initiatives taken to improve education in the 1990s. The central part of the article deals with the four main pillars of the educational reform process: programmes to improve and modernize teaching methods; the professional development of teachers and the incentives offered for this; the reform of educational curricula, and the introduction of full-day rather than half-day classes. It concludes with an appraisal of the achievements made and the difficulties encountered; among the first are the high priority given to education within the increased allocation of public and private resources, the emphasis on equity in the measures taken to improve education, and the continuity of the policies followed throughout the 1990s; among the second are the relatively poor results still obtained by most pupils and the learning gap that those results imply.

I

The initial context

In the mid-1960s, the main aim of the reforms was to expand the coverage of basic education (which was also lengthened from 6 to 8 years) in order to make it universal, and to increase the coverage of 4-year secondary education.

In Chile, the proposed objectives in terms of coverage were largely achieved. It can be seen from table 1 that not only was basic education made universal but also secondary education now covers the great majority of young people between 15 and 18. The present objectives are therefore to improve the quality and equity of education by ensuring that the opportunity of having a good education is extended in particular to children from lower-income families.

However, improving the quality of education has two dimensions: on the one hand it is necessary to make good the deficits revealed when expanding the coverage, and on the other it is necessary to take on the new challenges raised by the information society, with all its changes and new demands on the education system. The inherited deficits in the system are due to the fact that part of the expansion of coverage was carried out without having sufficient resources, and this was compounded by the sharp cuts made in the resources provided for public expenditure on Chilean education during the 1980s.

Secondary education –which has grown most rapidly– is also the area where there has been the

TABLE 1

Chile: Increase in the coverage of education, 1960-1990
(Percentages)

Year	Illiteracy (among those over 10)	Pre-school education	Basic education	Secondary education	Higher education (20-24 years)	Number of students (thousands)
1960	17.6	2	80	14	4	2 257
1970	10.2	4	93	50	9	2 254
1982	8.3	12	95	65	11	3 162a
1990	5.4	18	95	78	20	3 269

Source: National Institute of Statistics (INE), population censuses.

^a Data for 1980.

most serious shortage of resources. At the beginning of the 1960s, the amount invested per student was equivalent to 15% of the per capita product, but 30 years later this proportion had gone down to 10%. Table 2 shows the expenditure on education in the 1980s and reveals that even during the economic recovery in the second half of that decade public expenditure on education continued to go down. All this redounded in inferior working conditions for teachers and insufficient resources to provide good-quality education. As a result of the reduction in public resources, the purchasing power of teachers' pay shrank so much that there was a decline in the number of young people interested in university-level teachers' training courses, there was a deterioration in the school infrastructure, and there was a shortage of schoolbooks and materials.

TABLE 2

Chile: Expenditure by the Ministry of Education (MINEDUC), 1980-1990

(In pesos of the year 2000)

Year	Expenditure by MINEDUC (billions of pesos)	Subsidized enrollment (thousands of students)	Monthly subsidy per student (pesos)
1982	736.1	2 331.4	13 188
1983	682.6	2 391.9	11 334
1984	664.6	2 458.6	10 647
1985	663.9	2 497.5	10 001
1986	603.8	2 529.0	11 189
1987	555.3	2 740.2	10 504
1988	574.6	2 746.9	10 621
1989	560.8	2 709.5	10 639
1990	534.7	2 692.1	10 103

Source: Ministry of Education (1999).

II

Institutional changes

In the institutional field, two very important changes in the organization of the educational system had occurred in the early 1980s and remain in effect today. On the one hand, a system of educational subsidies for financing private education was improved and consolidated, and on the other, all the educational establishments belonging to the central government were transferred to the municipalities. A decentralized system for the management of education was thus established in which the Ministry of Education (MINEDUC) pays a monthly subsidy for every student who attends classes in a municipal or private school chosen by his parents.

This system of subsidies, which shares some elements with what is known as the voucher system in other contexts, has a long-standing tradition behind it in Chile. Ever since the nineteenth century private schools providing education free of charge have received assistance from the government. As from 1951, when Bernardo Leighton was Minister of Education, it was laid down that the amount of the subsidy for such schools would be equal to half the amount paid by the State in respect of each pupil in public schools. Thus, subsidized free private schools received a certain amount of money per pupil from the State, obtaining the rest of the resources they needed from other sources. In reality, however, the size of the subsidy for private schools varied considerably over the next three decades and was rarely enough to cover a significant proportion of their costs. As from 1980, the amount of money paid per pupil attending classes was set at a uniform level, regardless of whether the beneficiary establishments were municipal schools or subsidized private schools.

The improvement in the size of the subsidy and the regularity with which it was paid were reflected in a big increase in the number of private schools during the 1980s. In terms of the number of students enrolled, subsidized private education expanded from 402,000 students in 1980 to 960,000 in 1990, while enrollment in municipal schools went down from 2,260,000 to 1,700,000 over the same period. During the 1990s the level of enrollment in municipal schools has stabilized and registered a slight increase in the number of students, but enrollment in private schools continues to display the most dynamic growth.

The main institutional change in the 1990s concerned the working conditions of teachers. In 1991 the Statute on Educational Professionals, better known as the Teachers' Statute, was adopted and it removed teachers from the provisions of the general labour code covering private-sector workers and brought them under a set of special rules in keeping with their employment conditions, including a better pay scale, bonuses and allowances, and greater employment stability.

It was not easy to arrive at this set of rules, and indeed the 1991 regulations were modified in 1995 to make them more flexible. Teachers' needs and aspirations in terms of increased pay had to be reconciled with the fiscal resources available, and the increase in pay was therefore gradual. It was also necessary to reconcile and harmonize the administrative decentralization arrangements and subsidies (the amount paid per student attending classes) with the new rules on staff costs, which were independent of the size of the student body.

III

Measures to improve education

Since 1990, when democracy was restored, the governments of the Democratic Coalition have gradually been putting into practice a set of measures designed to reverse the crisis situation of the educational system, to promote innovation

in education, and to create a new climate in schools and colleges, thus preparing the ground for the reform process begun a few years later. Some of the most outstanding measures are described below:

1. The programme to improve the quality of basic schools in poor areas (the P-900 programme)

This programme is designed to give support to the 10% of schools with the worst performance and the greatest needs, so that first-cycle pupils (up to fourth grade) will obtain a mastery of the basic cultural skills: reading, writing and elementary mathematics.

Using the principle of positive discrimination, the P-900 programme (which began in 1990 and is still in operation) has given rise to actions to create the most suitable context for the work of both teachers and students, by improving the teaching and learning processes as well as school management. Under this programme, teaching material is supplied and technical assistance in the form of workshops for teachers and support for students by young monitors is provided. Two years ago the programme was expanded to cover the whole of basic education. The Ministry of Education has signed three-year agreements with each school for the design of a strategy to enable them to overcome their problems. After that period, an evaluation of their management must be made. So far, the P-900 programme has involved 2,361 establishments with over half a million students, almost 20,000 teachers and 15,000 young monitors, at an annual cost per student of around US\$ 20.

2. Programme for Improving the Quality and Equity of Basic Education (the basic MECE programme)

The basic MECE programme, aimed at pre-school and basic education, was begun in the early 1990s. Under it, the supply of school books in basic education was substantially expanded, the distribution of classroom libraries (under which each classroom receives some 70 books to stimulate the habit of reading) was begun, and funds were earmarked for increasing the coverage of pre-school education and introducing non-traditional forms of education in that area.

This programme was carried out between 1992 and 1997 with the support of a US\$ 170 million World Bank loan, and since then it has been maintained –and even expanded– with national resources and has been made part of the regular activities of the Ministry. The basic MECE programme represented an increase in the investment in infrastructure and teaching materials, as well as innovations in education. In a similar manner, the Weblinks programme and the Educational Improvement Projects (PME) were also begun, as we shall see below.

3. The Weblinks programme

This was originally a pilot project for an inter-school computer network involving the installation of leading-edge information technology in marginal rural and urban schools. Subsequently, it was extended to all establishments.

Today, all high schools have a computer laboratory. Half of them –accounting for nearly 90% of the total enrollment– have been connected to the network since the year 2000. Between three and eleven computers, with the respective software, have been installed in each school, together with between one and three printers (depending on the size of the school).

Since 1999, under an agreement with the Telefónica CTC Chile telephone company, some 5,200 schools enjoy free access to and use of the Internet for ten years. At the same time, 55,000 teachers (54% of the total number in the country) have received special training. Indeed, the Weblinks programme has devoted the equivalent of 20% of its investment in equipment (which comes to US\$ 80 million) to the training of teachers in this field.

4. Educational Improvement Projects (PME)

A fund was set up at the beginning of the 1990s for these projects, which are aimed not only at further improving basic and secondary education but also at strengthening the autonomy of basic and secondary schools in teaching matters. This novel initiative has become an important challenge for teachers and school managers. Each educational community defines its own project on the basis of its own particular diagnosis. The teaching team designs the most appropriate actions for its students and lays down objectives, deadlines and evaluation strategies, all this being aimed at dealing with problem situations and promoting innovations in teaching or management.

In order to obtain finance, the PMEs compete with each other in provincial-level contests which evaluate their technical quality, their impact on learning, and the level of socio-educational risk of the establishment. When selected, the schools receive the corresponding funds and an educational aid package which provides them with the tools, equipment and basic inputs (television set, VCR, image projector, etc.) to enable them to carry out their programmes, which usually last between two and three years. The amount allocated for each project ranges from US\$ 4,000 to US\$ 28,000, depending on the number of students enrolled and whether the school is of primary or secondary level.

Teaching material has also been allocated, to the value of nearly US\$ 1,900 per school.

This initiative has become a valuable experiment in the decentralization of teaching. In support of it, the Ministry has given schools and colleges the possibility of managing the funds they receive directly. Thanks to this possibility, the management teams feel more responsible for the project; they obtain the materials and resources promptly; they are publicly accountable for them to their teachers, students, parents and authorities, and in many cases they manage to obtain other contributions from the community, thus optimizing the direct financing received from the Ministry of Education.

Interesting and frequent examples of PMES are school radio stations, newspapers and even television news programmes developed by teachers in conjunction with their students in order to strengthen their language and communicational capacity. One rural school in Central Chile installed a meteorological station to support the teaching of mathematics: this helped the teacher to train his students in the use of decimals, which they were finding it hard to learn. Another school organized beekeeping, while others have developed hydroponic cultivation, among many other initiatives.

5. Programme for Improving the Quality and Equity of Basic Rural Education (the rural MECE programme)

A special programme called the rural MECE programme has also been developed and is aimed at over 3,000 small, isolated and scholastically incomplete schools teaching children up to sixth grade in combined classes. These multi-grade schools, which have one, two or up to three teachers, required special teaching arrangements enabling them to work simultaneously with children of different grades and to incorporate educational elements peculiar to a rural setting, as urban practices were not applicable in many respects.

This programme has provided students with textbooks and material which are specially designed for their specific situation and also make possible differential progress, according to the learning capacity of each pupil, in a combined group or class. Micro-coordination centres have been set up so that teachers from nearby localities can meet periodically to analyse the innovations made in each establishment and follow

up these initiatives. In this way, the rural MECE programme seeks to overcome the professional isolation of rural schoolteachers and adapt the supply of courses to the needs of multi-grade rural schools and their respective rural environments. These micro-centres are a foretaste of the type of school that the educational reform process is trying to promote all over the country: a non-bureaucratic, self-managed school which is flexible and open to its environment. They anticipate the learning community into which each teaching team in the country should develop, that is to say, a creative group which, in that capacity, evaluates and discusses the best teaching strategies for its students.

Rural schools are a natural meeting point for families. The rural MECE programme envisages various strategies for bringing parents, and especially mothers, into closer contact with the education of their children. In recent years, in areas where there is no formal pre-school education, the programme "Know Your Child" has been introduced: a project in the hands of the mothers themselves. Its aim, as well as providing attention for children between 4 and 6, is to link up families with the educational project of the local school, to generate an alliance in this way for the benefit of all the children, and to keep this alliance in being all the time that the children are in school.

All these programmes (P-900, Weblinks, the basic, secondary and rural MECE programmes and the PMES), which were begun in the early 1990s, are still in operation and have gradually been improved and enriched during the second half of the decade on the basis of the experience gained. The P-900 programme has expanded its coverage in terms of the grades and subjects it supports; textbooks have increased in both quality and quantity, and teachers are now even given the chance to choose which of them to use; classroom libraries now extend up to eighth grade, and the material in them is now being renovated; the "second generation" PMES are pursuing more demanding teaching objectives, and so forth.

Taken together, these initiatives have improved the conditions of subsidized education, have furthered the renovation of teaching practices, have provided an incentive for collective work by teachers, and have made possible the decentralization of education, better school management, and more and better refresher training for teachers.

IV

The four pillars of the educational reform process

In the midst of all these initiatives and advances in the educational system, in 1994, at the beginning of his term of office, President Frei set up the National Commission for the Modernization of Education, made up of 18 distinguished professionals and academics from various fields of activity and political backgrounds. Its mission was to make a diagnostic study of the educational system –including its shortcomings and limitations–, identify the challenges that Chile must face in the coming years, and put forward suitable proposals for meeting them. The report of the Commission thus became an important point of reference for the changes to be made later.

In May 1996, President Frei called into being an educational reform process which, while reasserting the initiatives and programmes under way, added others to make up an integrated set of changes.

1. Programmes for educational improvement and innovation

This set of programmes includes all the programmes which have been adopted over time in order to provide schools with teaching material and promote innovation, such as the supply of textbooks and other material and the various measures taken under the MECE programmes already referred to. In addition, it includes the Montegrando Project, which is to set up a network of top-level high schools to lead the way in the reform of education, which will later spread all over the country.

2. Professional development of teachers

No educational reform can be successful unless it provides for energetic support for teachers. The present reform provides for the improvement of teachers' working conditions and training, both in the case of teachers who are already working and those who are still on their initial training courses.

In Chile, 95% of all teachers have completed specialized studies: 78% are graduates of universities or university-level professional training institutes, while 17% come from the teachers' training system. Their average age is 43: 12% are under 30, while 11% are over 55. The great majority (70%) are women.

The improvement in teachers' pay has been gradual but systematic and substantial, as may be seen from table 3. Innovative forms of incentives for obtaining better results have been introduced, such as:

a) *Improvement of working conditions*

i) *Special allowances for outstanding performance.*

These are quarterly bonuses for teachers in the schools (one-quarter of the total) which obtained better results, in recognition of the work of the teaching teams which made the schools work well and helped their students to learn better.

In order to determine which establishments deserve these bonuses, the National System for Evaluating the Performance of Subsidized Educational Establishments (SNED) was set up and evaluates every two years the whole of the subsidized schools and colleges. In order for the process to be fair, the comparisons are made between schools of similar types. First, the schools are divided into homogeneous groups on the basis of the socio-economic vulnerability of their students, the level and form of education given in the schools, their size, and whether or not they are in rural areas. The schools in each group are then compared with each other: i.e.,

TABLE 3

Chile: Teachers' pay for a 44 hour week (monthly average over a year)

(In 1999 average pesos)

Year	Municipal sector		Subsidized private sector
	Average	Minimum	Minimum
1990	243 138	134 251	69 047
1991	260 398	162 097	150 667
1992	304 402	180 105	173 354
1993	342 277	190 617	176 958
1994	389 270	221 192	197 833
1995	428 380	244 095	239 039
1996	459 854	268 310	267 151
1997	502 544	294 345	293 074
1998	528 488	320 789	320 789
1999a	547 794	338 408	338 408
2000a	566 503	356 717	356 717

Source: Ministry of Education, Planning and Budget Division.

^a Estimate.

the comparison is only between establishments with similar characteristics. Finally, six indicators are determined for them: effectiveness, effort to improve, initiative, improvement of teachers' working conditions, equality of opportunities, and integration of teachers and parents. This process takes into account not only the level attained in comparison with the rest of the group, but also, and especially, the progress made in all the indicators.

This system of measurement has gradually been perfected to make it more objective and thus reward the most important results pursued in the establishments in question. The size of the bonuses awarded for outstanding performance has also gradually been increased.

ii) *Special allowances for work in difficult conditions.* These allowances aim to compensate teachers who work in places considered as difficult because of their geographical location (difficult access, particularly bad climate, etc.), marginality, extreme poverty, urban insecurity or the like. They consist of a variable percentage of the national basic salary, with a maximum of 30%. In each region, the size of the bonus corresponding to each establishment is determined every two years. The regions have a limited amount of resources to distribute among their schools in respect of these allowances, and determine with special attention which of them need this incentive most.

iii) *Awards for excellence in teaching.* As another means of recognizing the importance of teachers' work, in 1997 all the schools in the country were invited for the first time to elect from among their teaching staff the teacher most worthy of distinction for the excellence of his or her educational work. The idea was not that the Ministry of Education, the government or the municipalities should make this selection: instead, each establishment should do so. This is a significant award which, in addition to the honour it represents, also involves a substantial economic reward: over 10 months of the 1999 average salary.

b) *Refresher courses for teachers*

In this respect, the reform process includes a wide and varied range of initiatives such as the following:

i) *Fundamental upgrading courses.* The introduction of the new programmes of studies was preceded by what were known as fundamental upgrading courses. The objective is that all teachers should prepare themselves for the implementation of the new curricula. Introductory and upgrading courses were offered in

various matters specially required by teachers, with special courses for head teachers.

In collaboration with universities and other accredited academic institutions, the Ministry of Education has offered these upgrading courses totally free of charge. The respective classes are held during the summer months and are complemented with various actions that teachers must carry out in their own schools in the course of the year.

ii) *Internships and diploma courses.* Training scholarships are offered in connection with practically all the initiatives in the reform process, but the most novel measure has probably been the possibility of attending courses abroad. This programme, which started in 1996, includes internships and diploma courses (according to whether they last two or five months), and has helped to give our teachers and our educational system the possibility of familiarization with international advances.

iii) *Weblinks.* Suitable training for teachers is of fundamental importance for the use of information technology as a teaching tool. For this purpose, the Ministry set up the Technical Assistance Network, made up of 30 university institutions which offer training to 20 teachers from each school entering the Weblinks project. This training is given in the teachers' own schools and comprises two yearly stages involving a total of 92 hours of attendance. In the last four years, over 55,000 teachers have completed this training.

iv) *Programme to Strengthen Initial Teacher Training.* In order to achieve higher quality in the upper-level studies of future teachers, a special programme of scholarships was set up for talented young people training to be teachers, together with a fund offering resources to be awarded by competition to universities and institutes for financing projects to improve four-year teachers' training courses. Working networks have been established among the institutions, and new links have been forged with the educational system and its component schools; in addition, improvements have been made in the infrastructure of faculties of education and their libraries, and greater use is being made of multimedia facilities.

In the last three years, an increase has been observed in the number of applicants for teachers' training courses, who also have better academic qualifications than in previous years. This is clear proof that the set of reform initiatives, including the higher priority given to education on the public agenda, has succeeded in reversing the negative trends of previous years. Increasing numbers of young people are now deciding that they want to be teachers.

3. Reform of curricula

This reform has three main objectives. First, to update the aims and content of basic and secondary education, in view of the fact that the existing study plans and programmes had been prepared in the early 1980s. Second, to promote high-quality education incorporating the most recent advances in teaching. Third, to comply with the provisions of the Constitutional Organic Law on Education, which, in addition to formally expressing the general goals and graduation profiles for the two cycles, laid down new procedures for establishing school curricula, based on decentralization. This means that schools have a substantial degree of freedom to define their own study plans and programmes.

The reform of curricula involves two stages. Initially it was necessary to agree on a global framework and then to prepare the study programmes. The general framework must incorporate certain basic objectives in respect of ethical training, personal growth and self-assertion, the person and his environment, and the development of the ability to think.

The general curricular framework for basic education was approved early in 1996, after which the study programmes for the first and second stages of basic education were prepared and came into effect the following year. The new curricular framework for secondary education was also approved and began to be applied as from 1999. In the year 2002, all levels of education will be subject to the new study programmes. As already noted, the implementation of these changes in curricula calls for the corresponding training of teachers and the renewal of school books.

New bases for pre-school education are also being prepared, and in 2002 a new curriculum will come into effect which will replace that used for over three decades.

Special mention should be made of the participative yet highly professional way in which the new curricula have been prepared. This is one of the key functions of the Ministry of Education, which now guides, leads and regulates the educational system, without direct responsibility for running the schools, as in the past. For this purpose, it set up the Curricula and Evaluation Unit, to be responsible for the preparation, updating and evaluation of curricula, which prepared a first draft curricular framework for submission to a group of outside experts. A national consultation was then held among all teachers and even secondary school students. After that, a panel of specially invited foreign experts

was organized to analyse the draft and compare it with the standards of the countries with the best school results. Finally, the proposed framework was submitted to the Supreme Council for Education for its final approval.

The actual study programmes can be prepared by the schools themselves, although the great majority of them—as was expected—have initially used the curricula prepared by Curricula Unit of the Ministry of Education.

4. Full-day classes

This was the most important initiative in the programme announced by President Frei in May 1996. According to the prior diagnostic studies, it was obvious that high-quality education called for more hours of study than those being fulfilled by schoolchildren in Chile. The great majority of them attended classes for only half the day, because in order to expand enrollment the school facilities were being used in two shifts.

The concern to increase the time spent in school had already been reflected in several measures taken in previous years, under which the school year had been increased from 37 to 40 weeks. In 1995 an educational support subsidy was established to enable pupils who so required to receive extra hours of teaching during the last months of the year.

This initiative to introduce full-day classes means that in basic education the weekly number of hours of classes goes up from 30 to 38, while in secondary education it rises to 42 hours. In other words, taken

TABLE 4
Chile: Monthly subsidy per student, according to type of education
(In February 2000 pesos)

	Half-day classes	Full-day classes
Basic education, grades 1 - 6	17 899	24 076
Basic education, grades 7 and 8	19 438	24 175
Special basic education	59 027	73 154
Secondary agricultural techno-professional training, grades 1 - 4	32 213	39 261
Secondary industrial techno-professional training, grades 1 - 4	25 098	30 581
Secondary commercial techno-professional training, grades 1 - 4	22 498	28 854

Source: Ministry of Education, Planning and Budget Division.

over the whole 12 years of schooling, the larger number of hours per week are equivalent to over two more years of schooling compared with the half-day system.

International studies soundly endorse the positive effect of more hours of schooling on the quality of education. Indeed, in the preparation of the reform special attention was paid (among other sources) to the influential study *Prisoners of Time* made in the United States by the National Education Commission on Time and Learning and a review of 130 studies on this subject made by The Brookings Institution, which concludes that 97% of the studies in question bear out the assertion that there is a highly robust link between longer time in school and the achievement of better results.

V

Achievements and difficulties

A process of profound changes like the educational reform programme described here is a complex process whose effects can only be appreciated after some time. This is particularly true when the reforms are still in course of application and will only be fully in effect around the year 2005. Nevertheless, some elements already stand out and offer valuable experience for other processes of change.

Clearly, one of the achievements of these years has been the higher priority given to education in the public agenda and in the allocation of public and private resources, and the continuity of the policies applied throughout the 1990s.

The considerable increase in resources may be seen from table 5. Between 1990 and 1999, public expenditure on education increased by 150% in real terms. The priority given to the educational reform process in the allocation of public resources was clearly shown when, in spite of the fiscal restrictions in 1998-2000 associated with the effects of the Asian crisis, public expenditure in this area continued to increase and the investments originally scheduled for the reform process were not affected.

In the 1990s, the subsidies given and the expenditure per student more than doubled: the subsidies went up from 10,143 pesos in 1990 to 24,000 pesos in 2000 (in pesos of the latter year). Such a substantial increase in the subsidy per student for primary and secondary education was possible because

The expansion of full-day classes not only means increasing the number of hours for which teachers are hired, for which purpose it is necessary to increase the monthly subsidy, but also expanding the school facilities in the great majority of the country's schools, which involves heavy investments for at least five years. Table 4 shows the increases in the subsidies paid, which have been increased by approximately a third because of the extension of the school day.

So far, over half the schools (although only a smaller proportion of students) are already giving full-day classes. The remainder are building facilities or preparing projects for their incorporation into this system in the coming years.

not only was overall public expenditure on education increased, but also this expenditure was concentrated on basic and secondary education, with only a small increase in expenditure on university education. Furthermore, within basic and secondary education there was a proportionally larger increase in the resources aimed at students from lower-income families.

It may be seen from table 5 that the private contribution to education grew even more than that of the public sector, registering an increase of 170% in real terms during the decade and representing nearly 3% of the gross domestic product. This significant increase was due to the contributions made by families to the cost of higher education and a growing contribution to subsidized education through the co-financing system. This was naturally made possible by the rapid growth of the economy during these years.

Most of the larger resources went to improve the working conditions of teachers (see table 3 above).

This increased private contribution to the financing of education helped the State to concentrate its resources on less well-off families. In practically all programmes priority was given to the neediest families, in keeping with the greater equity pursued by the reforms.

The strategy of greater equity in the educational improvement initiatives of the early 1990s and the reforms announced in 1996 always sought to give

TABLE 5

Chile: Total expenditure on education, as a percentage of GDP^a

	1990	1991	1992	1993	1994	1995	1996	1997 ^b	1998 ^b
Public expenditure on education/central government expenditure	11,9	12,0	12,8	13,0	13,5	14,3	14,9	15,5	16,1
Public expenditure on education/GDP	2,6	2,7	2,9	3,0	3,1	3,1	3,4	3,5	3,9
Private expenditure on education/GDP	1,8	1,9	2,0	2,2	2,5	2,5	2,8	2,9	3,1
Total expenditure on education/GDP	4,4	4,6	4,9	5,3	5,6	5,6	6,2	6,4	7,0

Source: Ministry of Education, Planning and Budget Division.

^a Gross domestic product.

^b The figures for 1997 and 1998 are provisional. Public expenditure on education comprises central government expenditure on this item, plus municipal contributions to education.

priority to the students with the greatest needs. It began with the 900-P programme, which gave priority to the 10% of schools with the lowest performance, and went on to increase the school subsidies to give special support to rural education, students in special schools, pupils requiring support classes to avoid repetition and possible dropping out from the system, and students in boarding schools. Moreover, almost without exception new programmes were begun in the poorest schools: this was so, for example, in the case of the provision of computer training and the introduction of full-day classes, where the first schools to extend the school day were precisely those serving the poorest children. Likewise, the programmes to increase school meal coverage, school health programmes, the provision of textbooks and materials and the expansion of pre-school enrollment were all aimed at securing greater equity. Similarly, in the programmes operating on a competitive basis, such as applications for PMES, for the Montegrando Project for secondary education, or for refresher courses for teachers, one of the selection criteria has always been the level of poverty and needs of the schools in question.

When families have been required to help pay for the education of their children, systems of scholarships and (in the case of higher education) loans have been established in order to prevent this requirement from becoming a factor of exclusion.

Apart from the importance of the bigger resources made available for achieving the advances made in the reform process, another basic factor has been the continuity of the policies applied during these years. This has been aided by the continued existence of the Coalition government, the building of consensus in respect of the reform proposals, and the continuity of the high-level staff of the Ministry of Education. This

continuity is worth stressing, because in Latin America there is generally a high degree of policy instability, with frequent changes of ministers. This is particularly undesirable in an activity such as education, which by its very nature is a long-term project.

As regards the achievements in terms of learning, two aspects are worthy of note. Firstly, repetition and dropping out have been reduced, so that a growing proportion of young people are completing their secondary education. Within secondary education, the rate of repetition has been reduced from over 12% in 1990 to 8% at the end of the decade and the dropout rate has been brought down from 7.5% to 5%. The same evolution is to be seen in basic education, with the rates dropping from 7.8% to 3.5% and from 2.3% to 1.5%, respectively. These rates had remained practically unchanged during the 1980s. This success in keeping children in school and increasing the proportion of students who pass on to the next grade is undoubtedly an important achievement.

With regard to scholastic achievement proper, Chile has the great advantage of having the System for Measuring the Quality of Education (SIMCE), which has been carrying out periodical nationwide tests since the late 1980s. According to the results of these tests, the average improvement in results is still insufficient. There has, however, been significant progress in the case of the poorest schools.

Notwithstanding the positive impact represented by this progress, however, the poor results obtained by the vast majority of students in comparison with international standards are worthy of note. Over 60% of the pupils in Chilean schools fail to reach the levels considered desirable for the eighth grade. Likewise, the results in the international mathematics and science tests held in 1998 under the Third International Mathematics

and Science Study (TIMSS) reflect a poor showing by the eighth grade students of Chile, whose results were among the lowest of the 38 participating countries. Thus, 95% of the Chilean schoolchildren turned in a performance below the average registered by children of the countries with the best results, such as South Korea and Singapore.

All this confirms the importance of the efforts which have been made as part of the educational reform process and at the same time highlights the need to heighten them in order to narrow the learning gap thus revealed, although this will necessarily take several years.

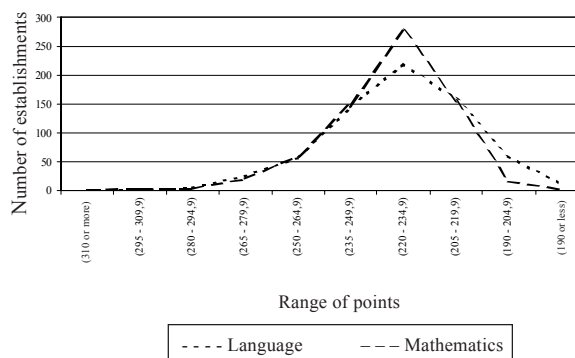
There are various aspects of the reform process which must be strengthened in order to ensure improvements in quality, which are by definition harder to attain than increases in coverage (see the proposals in Arellano, 2000).

At this point, I should like to emphasize an aspect which seems to me to be specially important when the objective is higher quality and there is decentralization. This is emphasis on the results and on the need for ongoing evaluation. In practice, very great differences are to be observed between the results of different schools attended by children of similar social and cultural backgrounds. The figure shows this dispersion in the results of the establishments attended by children from the poorest 40% of the population. In spite of their unfulfilled needs, 13% of those children obtained results which were better than the national average.

Greater emphasis needs to be placed on the results and on the adaptation of teaching practices and the learning environment in order to bring them closer to those of the schools which, despite their lack of resources, managed to enable their pupils to learn and

FIGURE

Establishments in the fourth and fifth quintiles of the socio-economic scale, in order of SIMCE ranking in second half of 1998



Source: Estimates by the author on the basis of Ministry of Education, results of the System for Measuring the Quality of Education (SIMCE).

develop their capabilities, as indispensable means for overcoming the shortcomings of the school system.

Above all, it is necessary to persevere with the efforts made in these years. Improvements in the quality of education are not achieved in a short period of time, and this is proved by the results of the last international TIMSS tests: of the countries which repeated the mathematics and science examinations after four years, practically none of them display any substantial change in the average performance of their students. A sustained effort lasting ten to fifteen years is needed in order to attain the levels of quality that our educational system needs in order to prepare our children better to meet the demanding challenges of the knowledge society.

(Original: Spanish)

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Social protection

for the poor in

Latin America

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Confronted with recurrent macroeconomic shocks, governments in Latin America and the Caribbean have increasingly been concerned about establishing or strengthening systems of social protection and safety net programmes. The goal of these programmes is to help mitigate the impact of shocks on the poor before they occur, and to help the poor cope with the shocks once they have occurred. In this paper, we focus on publicly funded or mandated safety nets functioning as risk-coping mechanisms. The paper reviews the characteristics of a good safety net, in comparison with the main types of safety nets currently in place, and finds in general that no single programme meets all of the criteria in terms of efficiency and effectiveness, although some are better than others. Finally, what has been the actual record in terms of protecting the poor through targeted public spending during crises? The paper finds that because of fiscal constraints during a crisis, social spending is often pro-cyclical when ideally it should be counter-cyclical. Ironically enough, social protection spending itself does not appear to be protected.

I

The context: persistent poverty and vulnerability to macroeconomic shocks

The Latin American and Caribbean region has been plagued by macroeconomic shocks over the last twenty years, with serious consequences for the poor (see Glewwe and Hall, 1998; Lustig (ed.), 1995; Lustig, 1999; Ganuza, Taylor and Morley, 1998). Such shocks are so-called “covariant” shocks (Holzmann and Jorgensen, 1999) which affect the real incomes of a large share of the population, typically through a reduction in both real hourly wages (via inflation) and the number of hours worked (via unemployment or underemployment). Beyond these income effects, which may vanish once growth resumes, macroeconomic shocks may also have longer-term consequences. For example, the reduction in the quantity and quality of public health care due to budgetary cuts during a crisis may induce irreparable damage. Also, when coping with a crisis, parents may send their children to work in order to compensate for their own loss of income. If there is substitution between child labour and schooling, and if the children do not return to school at a later stage, they will incur long-term wage losses due to their lower endowment with human capital (Wodon and Siaens, 2000). All this may help explain why De Janvry and Sadoulet (1999) find evidence that the increase in poverty that follows a macroeconomic shock may be larger than the subsequent reduction in poverty with growth.

There are signs that the reforms enacted in many countries of the region in the 1990s have been bearing at least some fruits. Wodon (2000a) estimates that in 1996, slightly more than one-third of the population of the region (36.7%) was poor (i.e., not able to cover

their basic food and non-food needs), and one out of every six persons (16.1%) was extremely poor (i.e., not able to cover even their basic food needs). This represents some progress compared with 1992, when the incidences of poverty and extreme poverty were both higher. However, the absolute number of the poor has not been reduced to the same extent, due to population growth. Moreover, if the comparison is made with 1986 instead of 1992, the numbers of the poor and extreme poor in 1996 have risen considerably (see Lustig and Arias (forthcoming) for a survey of poverty estimates). Projections of further poverty reduction between 1996 and 1998 using elasticities of poverty reduction to growth and actual levels of growth observed in the region suggest only limited gains in percentage terms, with the numbers of the poor and extremely poor remaining constant.¹

In addition to high levels of poverty, Latin American households are affected by instability of income and employment. While the level of instability is often thought to be linked with the current trends towards globalization, De Ferranti, Perry and others (2000) show that instability has not grown over time, and it is no worse in Latin America than in other developing regions. Still, there is much more instability in Latin America than in the OECD countries, and openness may have resulted in a widening of wage differentials between more and less skilled workers.² Moreover, while the current changes in labour markets should ultimately bring net positive aggregate gains, they may induce idiosyncratic (i.e., household-specific) shocks for individuals who lose their jobs at a time when the region has not yet fully developed systems of social protection.

□ This paper was prepared for the XII Seminario Regional de Política Fiscal held in Chile in January 2000. It is based in part on the last chapter of a regional study on poverty and policy (Wodon, 2000a) completed with funding from the Regional Office for Latin America and the Caribbean of the World Bank (Chief Economist, Guillermo Perry). The authors are grateful to Ana-María Arriagada, Judy Baker, Charles Griffin, Margaret Grosh, Kathy Lindert and William Maloney for the valuable discussions held with them. The views expressed in this paper are those of the authors, and do not necessarily represent those of the World Bank, its Executive Directors, or the countries they represent.

¹ The region has performed better in terms of non-monetary indicators of well-being, with improvements for adult illiteracy, infant mortality, life expectancy, gross secondary school enrollment, and access to safe water.

² There is no convincing body of empirical evidence on many of these issues. Lustig and Arias (forthcoming) argue for example that there have been widening returns to skills, but Gill (1999) suggests that the empirical evidence is still very much mixed. See for example Fajnzylber and Maloney (1999).

TABLE 1

**Latin America and the Caribbean: Number of poor
and extremely poor, 1986-1998**

Year	Population (millions)	Percentage of population in a state of poverty	Number of poor (millions)	Percentage of population in a state of extreme poverty	Number of extremely poor (millions)
1986	407.38	33.75	137.49	13.32	54.26
1989	430.98	38.26	164.89	17.59	75.81
1992	454.65	39.65	180.27	18.65	84.79
1995	478.21	36.92	176.56	15.94	76.23
1996	486.06	36.74	178.58	16.10	78.26
1998	501.87	35.83	179.84	15.55	78.05

Source: Wodon (2000a). Poverty numbers for 1998 are based on projections, not surveys.

TABLE 2

**Latin America and the Caribbean: Subjective perceptions
of changes in living standards
(Percentages)**

	Better	Same	Worse	No reply
Taking everything into consideration, would you say that your parents lived better, the same, or worse than how you live today?	61.2	22.0	14.4	2.4
And regarding your children, do you believe that they will live better, the same, or worse than how you live today?	46.1	20.7	22.0	11.2

Source: 1999 poll by the *Wall Street Journal*, quoted by Rodrick (1999).

In these circumstances, it should not be surprising that there is some degree of malaise in the region. While average levels of real per capita income have risen in the majority of Latin American and Caribbean countries in the 1990s, this may not yet have been translated into improvements in subjective perceptions of welfare. Table 2 presents the results of a 1999 opinion survey conducted by the *Wall Street Journal* in fourteen Latin American and Caribbean countries. Almost two-thirds of the respondents believe that their parents had a better life than they do, and less than half believe that their children will have a better life than themselves. This pessimism probably reflects both a feeling of economic insecurity and the relative Latin American and Caribbean lack of progress in reducing poverty observed over the last two decades and documented above.

There are no easy answers to the difficulties and uncertainties faced by poor households in Latin America and the Caribbean. Macroeconomic policies promoting stable and broad-based economic growth certainly help in reducing poverty, but they are not enough. Governments in the region have increasingly been concerned about establishing or strengthening systems of social protection and safety net programmes that help mitigate the potential impact of economic shocks before they occur and help the poor to cope with these shocks after they have occurred. In this paper, we focus on publicly funded or mandated safety nets functioning

as risk-coping mechanisms. What are the characteristics of good public safety nets? What are the main types of safety nets currently in place in the countries of the region? Which programmes should be protected or expanded during economic crises? Finally, what has been the actual record in terms of protecting the poor through targeted public spending during crises? This paper provides tentative answers to these questions. Section II below introduces the reader to the main concepts used in the literature on social protection and safety nets within the context of the various ways in which households are affected by, and respond to shocks. Section III presents the main types of programmes currently in place, with their respective strengths and limitations. Section IV uses data on seven Latin American countries to assess the actual record in protecting the poor through safety nets during crises. Finally, section V contains a brief conclusion.³

³ Several authors have recently reviewed the literature on social protection, safety nets, and crises. They include Klugman (1999) for safety nets, Dar and Tzannatos (1999) on active labour market programmes, Karni (1999) on unemployment insurance, and Ezenenari and Subbarao (1999) on social assistance. The Inter-American Development Bank (in February 1999) and the World Bank (in June 1999) have held conferences on these topics. For a discussion of social protection within the context of globalization, see also De Ferranti, Perry and others (2000).

II

The goal: designing good safety nets and social protection systems

A recent World Bank paper on social protection strategy (World Bank, 1999; see also Holzmann and Jorgensen, 1999) places social protection in the context of social risk management. It divides social risk management strategies into three types: risk reduction, risk mitigation and risk coping. Risk reduction covers macroeconomic management, regulations, and institutional development policies that help prevent crises from occurring. While these prevention policies are important, they are too general to be part of the social protection system, which consists mainly of mitigation and coping strategies. Risk mitigation strategies are put in place before a shock, to reduce its impact once it occurs. They include for example income diversification and insurance mechanisms, both formal and informal. Risk coping strategies, for their part, are implemented after a shock to deal with the impacts of the shock not covered by risk mitigation policies. Table 3, taken from Gill (1999), provides an overview of some of the main government and private sector policies.

In this paper, we focus on publicly provided or mandated instruments for assisting private individuals in coping with shocks (the bottom cell in the middle column of table 3). This does not mean that we do not take into account private coping strategies⁴. There are of course linkages between private and public coping strategies (see for example Ezemenari, 1997, for

transfers). As mentioned in the introduction, some private short-term strategies may have permanent effects that make it difficult to reduce poverty in the longer term. This is the case when the nutrition of certain family members suffers. It is also the case if children are removed from school and are put to work⁵. In more general terms, publicly funded or mandated social protection programmes and safety nets represent an attempt to protect the poor against the risks that arise from shocks, whether the shocks are foreign or domestically induced, and whether they are covariant or idiosyncratic. As already mentioned, an economic crisis produces a covariant shock, whereby many people are affected at the same time. But even in normal times, households can be affected by idiosyncratic shocks such as death, illness or loss of employment. One should differentiate between the social safety nets which should be in place at all times to deal with idiosyncratic shocks, and the programmes which are specifically designed to help large numbers of poor people suffering from temporary adverse covariant shocks (World Bank, 1999).

There are usually more mechanisms available for coping with idiosyncratic than for covariant shocks, and the fiscal implications of the two types of shocks are clearly different. However, even among the programmes

⁴ To cope with the income losses induced by shocks, the poor adopt a wide variety of strategies. These may include moving from formal to informal sector employment; working longer hours and/or working at a second job; promoting the labour force participation of additional family members such as spouses and children; selling (or consuming in the case of farmers) productive and other assets, including stocks; migrating temporarily or permanently in order to search for employment opportunities; reducing consumption patterns, including restricting the food intake of family members, taking children out of school to reduce education expenditures, or postponing health care expenditures; relocating and/or restructuring households, for example by having several families living under one roof; and drawing on outside help both in kind and in cash, including support from local communities, friends and relatives, and private institutions such as NGOs (this in turn highlights the role of social capital). An interesting paper about the gender dimension of these strategies is Cunningham (1998).

⁵ Although the substitution effects between work and schooling are likely to be partial due to the possibility for the parents to reduce the time devoted by the children to leisure (Ravallion and Wodon, 2000a), it has been estimated that on average, for six Latin American countries, the reduction in the probability of going to school when a child is performing paid work varies from 21% to 67% depending on the sample (Wodon and Siaens, 2000; the estimates include controls for a wide range of other variables affecting the decision to go to school and/or to work, so that they are net marginal effects). This substitution between work and schooling reduces the human capital endowment of working children to the extent that working children may expect on average a loss of about 7% of their discounted lifetime earnings when they are put to work, even after taking into account their positive earnings when working as children and the higher level of experience accumulated because of work at an early age. Clearly, the magnitude of the long-term losses due to child labour calls for the design of programmes that help parents keep their children in school, especially during economic crises.

TABLE 3

Latin America and the Caribbean: Classification of government and private risk management measures

Nature of measure	Government	Private sector
<i>Mainly prevention</i> (risk-reducing)	Macroeconomic policies	Infrastructure investments
Regulatory	Financial regulations	Human capital investments
Taxpayer-funded	Infrastructure investments	Portfolio diversification
Universal	Labour-related regulations	
	Human capital investments	
<i>Mainly insurance</i> (risk-mitigating)	Unemployment insurance	Individual savings
Inter-temporal transfers	Severance funds	Sale of assets (e.g. land)
Premium-funded	Job protection statutes	Labour force participation
Non-poor and poor	Public works guarantees	
<i>Mainly assistance</i> (risk-coping)	Public works programmes	Inter-household transfers
Within-period transfers	Means-tested cash transfers	Community solidarity
Taxpayer-funded	Conditional cash transfers	Support from NGOs
Targeted: focus on poor	Commodity transfers	Public-private partnerships

Source: Gill (1999).

designed to deal with covariant shocks, one can identify a number of alternatives. These include:

- Emergency employment programmes involving public works, often using labour-intensive methods, commonly called “workfare”;
- Social funds which establish special programmes, usually in rural areas, for financing small-scale public works identified by local community groups;
- Nutrition and food interventions, particularly those targeted at vulnerable groups such as children and pregnant women. These may take many forms, including food distribution, food stamps, and food served in schools or community kitchens;
- Systems of direct cash grants targeted at the poorest, which may be conditioned on favourable behaviour (such as school attendance and/or visits to health centres);
- Other instruments, such as pensions and unemployment insurance, including systems of mandatory severance payments upon termination.

Another way of organizing the discussion is to look at the programmes in terms of the age groups they serve, in view of the fact that the different age groups have different needs.⁶ People in the youngest age groups are generally at greater nutritional risk than other groups,

⁶ This idea was suggested by Ana María Arriagada. See Appendix for details.

while for adults, the principal problem may be one of employment. For the elderly, the critical problems are maintaining sufficient income to meet basic needs, and adequate health care access.

Within Latin America and the Caribbean, almost all the countries currently have some mix of the above programmes in varying degrees. However, very few if any of the programmes completely fulfill the criteria of an ideal safety net, which should have the following characteristics:⁷

- It should be based on a sound analysis of who is likely to be affected the most by crises, and what kinds of coping mechanisms are normally used by those affected;
- It should provide sufficient coverage of the population to be reached, particularly the most vulnerable and excluded groups;
- It should be well targeted on the poor, with clear eligibility and termination rules, so that access is simple and predictable;
- It should be supervised by well-functioning institutions already in place;
- It should be counter-cyclical (i.e., it should receive more funding when there is an economic crisis), and in some cases it should be implemented automatically according to pre-agreed triggers, such as a rise above a given level of unemployment or poverty;

⁷ For a fuller discussion of the criteria see Grosh (1995).

- It should be fiscally sustainable;
- It should be able to provide benefits quickly, with as large as possible a share of the costs being spent on net increases in incomes;
- It should complement, not substitute for, private safety net programmes and other social protection mechanisms;
- It should be scaled back when the crisis is over.

III

The tools: types of safety nets and social protection programmes

1. “Workfare” programmes

These programmes provide employment through specifically designed public works projects. The classic example is “Trabajar” in Argentina. In this programme, projects are identified by local governments, NGOs and community groups, and can provide employment for no more than 100 days per participant. Project proposals are reviewed by a regional committee, and projects with higher poverty and employment impacts are specially favoured⁸. Workers hired by the project are paid by the government, specifically the Ministry of Labour. The other costs are financed by local authorities. Examples of eligible projects include the construction or repair of schools, health facilities, basic sanitation facilities, small roads and bridges, community kitchens and centres, and small dams and canals⁹

⁸ In a recent reform of the “Trabajar” programme, several steps were taken to improve its performance. The focus of the reform was placed on increasing community participation and funding in the choice of the projects to be financed. “Trabajar” now works in collaboration with local community groups, NGOs and municipalities which present projects for selection. Projects must first be approved for technical feasibility. Next, they are selected on a points basis. More points are awarded to projects which are located in poorer areas, yield larger public benefits, are sponsored by well-regarded community groups or NGOs, and reduce labour costs below the minimum wage. These new features have improved targeting both at the geographic and individual levels. The involvement of local groups has also improved the quality of monitoring and feedback for the projects.

⁹ These activities are fairly similar to those financed by social funds (see below). One of the differences between a social fund project and a workfare project is that the workfare project is likely to be supervised by local authorities, rather than by independent agencies, and execution is typically not contracted to the private sector, but is carried out by the sponsoring agency, which can include local and provincial governments, private groups, and national

The projects financed by “Trabajar” are limited to poor areas as identified by a poverty map. Moreover, wages are set to be no higher than 90% of the prevailing market wage, so that the workers have an incentive to return to private sector jobs when these are available. Thus, the programme involves self-targeting as well as geographic targeting. Overall, targeting of the poor under “Trabajar II” (the second round of the project) has been reported to be quite good, with 75% of the funds reaching the bottom 20% of the income distribution, and 40% reaching the bottom 5%. However, the supply of jobs in the programme depends on budgetary allocations as well as the ability of local communities to identify viable projects. As good as it is, “Trabajar” has provided employment to no more than 1% or 2% of the labour force, at a time when unemployment has ranged from 13% to 18% of that force.

Large “workfare” programmes were also implemented by the government of Chile during the period 1975-1988. The objective of these programmes was to absorb workers displaced from the public sector, and to reduce unemployment during the adjustment period. As in the case of “Trabajar”, these programmes provided employment in emergency public works, including maintenance and repairs to roads and schools, construction of parks, forestry projects, etc. The programmes were administered by municipalities, and were gradually built up to a peak in 1983, when they employed about 13% of the total work force (over 500,000 workers), while the unemployment rate stood

organizations. Another difference is that workfare programmes have the generation of employment and income as their priority, while social funds focus more on the quality of the infrastructure produced.

at 17%. The programmes were gradually reduced as private sector employment increased, and finally phased out completely in 1988. The two largest programmes offered manual labour at very low wages, to ensure self-targeting. Most of the workers were unskilled, and they received one-fourth of the then current minimum wage (about one-half of the market wage). A quarter of the participants were women. However, while the programme was considered successful in terms of reducing poverty and the social impact of unemployment, the quality of the public works produced was notably low, particularly as the programme expanded in size. In addition, it is not clear that all the workers in the programme would have been unemployed without the programme. An evaluation found that 32% of the participants had no work experience prior to participating in the programme, and 46% had retired voluntarily before joining the programme. Many of those with no experience were women who went to work for the first time (University of Chile, 1992).

The advantages of workfare programmes include their ability to expand quickly during a crisis, once the basic mechanisms have been established, and to reach the poor through area targeting and, within poor areas, through self-targeting thanks to the low wages. But a problem with these programmes is that the cost of generating one dollar in additional income for the poor through public works is typically large, in the range of three dollars or more. To understand why, the measure of cost effectiveness and its decomposition proposed in Box 1 are useful.

The measure of cost effectiveness used is the share of total programme costs which reaches the poor through net increases in earnings. Modifying slightly the formula provided in Ravallion (1999), as indicated in Box 1, this share can be seen as a function of four key parameters: the proportionate wage gain, the targeting performance, the wage share, and the budget leverage. A reasonable value for the proportionate wage gain may be 0.5, because workfare wages are low and the poor typically find some other way to generate resources, for example through part-time informal employment, when they do not have access to the programmes. Because of the self-selection involved and the priorities given to poor areas, targeting performance may be good, at about 0.8. The wage share can often be obtained from administrative records by multiplying the number of work days created by the programme by the wage rate, and dividing this amount by the total cost of the programme. In many cases, the wage share

will not exceed 0.7. Finally, when the programme is almost entirely financed by the central government (even though project selection may be done at the local level), the budget leverage is equal to one (in the case of “Trabajar” there is budget leverage, but while this saves money for the central government, it still has to be paid by local governments). The measure of cost effectiveness is obtained by multiplying the various parameters¹⁰. It thus typically costs three or more dollars to the national or federal government to transfer one dollar to the poor in additional wages.

The notion that it costs three or more dollars to transfer one dollar of income to the poor through workfare could be challenged, in that the benefits could be higher for two reasons¹¹:

First, the method presented in Box 1 does not take into account the benefits of the public works themselves, which can be substantial if the workers are put to good use. The problem, however, is that these benefits will be enjoyed during the whole life of the infrastructure built, while what the poor need in times of crisis is immediate income support. If the poor have high discount rates (which they do in general, but especially in times of crisis when their resources do not provide for basic subsistence), the discounted value of the benefits generated by the public works may be quite low. Moreover, since the emphasis is on job creation rather than investments, there may be a bias towards “make work” or prestige projects which may not be very valuable. This may be particularly true in a crisis, when a rapid expansion of the programme exhausts the backlog of viable projects.

Second, the method presented in Box 1 assumes that only the net proportionate wage gain must be taken into account for measuring the programme’s impact. But in periods of high unemployment, it could be argued that at least part of the difference between the public works wage and what the programme participant would have earned by himself without the programme will be available as earnings for another worker who does not participate in the programme and who is also

¹⁰ In our illustrative examples, this measure would be equal to $0.5 \times 0.8 \times 0.7 = 0.28$, in which case the total cost of generating one dollar in net additional wage earnings for programme participants is $1/0.28 = 3.6$ dollars. For an example of the econometric methods that can be used to measure with some precision the net wage benefit of workfare programmes using household surveys (i.e. the parameter NWB/W), see Jalan and Ravallion (1998).

¹¹ For a fuller discussion of these points, see Wodon (2000b) and Maloney (2000).

Box 1
MEASURING THE COST-EFFECTIVENESS OF PUBLIC WORKS

In the spirit of Ravallion (1999), let us assume that without public works, an individual has a probability F^* of finding employment at market wage W^* . Expected earnings are F^*W^* . With public works, the individual earns the public works wage W . If the individual can continue to search for private or self-employment while participating in public works, with probability F of finding such employment, the expected wage with public works is $FW^*+(1-F)W$. The net wage benefit from the programme for the worker is $NWB = (1-F)W - (F^* - F)W^*$. If the worker gets unemployment benefits or a subsistence allowance S , the wage benefit is reduced to $NWB = (1-F)W - (F^* - F)W^* - (1-F^*)S$. If the programme costs G to the government per worker employed, a measure of cost-effectiveness is the share of public expenditures transferred to workers as wage gain NWB/G . This measure can be decomposed as follows:

$$\frac{NWB}{G} = \frac{C}{G} \frac{(W+L)}{C} \frac{W}{(W+L)} \frac{NWB}{W}$$

budget wage
leverage share
targeting performance
proportionate wage gain

The determinants of cost-effectiveness are a) the leverage ratio C/G , where C is the total cost per worker including community funding; b) the wage share $(W+L)/C$, where W stands for wages paid to the poor and L stands for leakage due to wages paid to the non-poor; c) the targeting performance $W/(W+L)$ which is the percentage of wages reaching the poor; and d) the proportionate wage gain NWB/W . This model can be extended to take into account the benefits of the infrastructure built by public works, but these benefits are not as immediate (see Wodon, 2000b, for a model and a discussion).

underemployed. At the extreme, the whole wage rate could be taken into account in the cost-benefit analysis, which would greatly enhance the cost-effectiveness of such programmes.

On the other hand, arguments could also be put forward to argue that the net transfers to the poor are lower than predicted by the decomposition in Box 1. For example:

First, since workers are paid by local authorities, the opportunities for corruption and political bias are more pronounced. With “Trabajar”, there remains some evidence of political influences in the choice of participants and gender discrimination (few women are selected in some areas).

Second, the poorest communities may not always be well positioned to submit proposals for projects and/or to contribute to non-wage costs. In this case, the targeting performance of the programme may suffer, because the contribution of geographic targeting to overall targeting performance will be reduced.

Apart from Argentina and Chile, the experience of Mexico is also valuable for the assessment of the strengths and limitations of workfare programmes. In

Mexico’s rural areas the Programa de Empleo Temporal (PET) provides off-season temporary employment below the minimum wage through public works. Employment is for up to 88 working days at 90% of the minimum wage. In 1999, 93 million work days and one million jobs were to be created. PET is an example of a programme which functions in normal times rather than only during crises, although it is restricted to certain periods of the year only. As expected, the projects are labour-intensive. Examples include irrigating land, paving roads, clearing land, improving housing, and installing water and sewerage systems. The data suggest good targeting, with the participants being poor and needing the temporary jobs more than non-participants because they do not benefit from occupations that keep them employed all year long. Yet, the programme does not reach the smallest (and probably poorest) rural communities. On average, PET communities are almost twice as large as non-PET communities. PET communities have better access than non-PET communities to electricity (74% versus 60%), public phones (33% versus 19%), pre-school education (81% versus 67%), primary schools (89% versus 82%), and tele-secondary

schools (distance education) (22% versus 11%). Part of the problem may be due to the higher (e.g., administrative) cost of reaching very small rural communities.

One might also consider job training programmes as a safety net, particularly if they can be modified during times of crisis. In Mexico, the Probecat programme was implemented in 1986 as a response to the growth in unemployment that followed the 1982 debt crisis and the subsequent structural adjustment policies. Today, the programme provides training for close to 500,000 beneficiaries per year in urban areas. A new evaluation of the programme suggests, however, that it does not have a statistically significant impact on employment and wages (Wodon and Minowa, 1999; see Revenga, Riboud and Tan, 1994, and STPS, 1998, for previous evaluations). These disappointing results are not very surprising, because most retraining programmes in OECD countries have been found to have limited impacts. One reason for this may be that the training is provided for too short a period of time (a few months) to provide skills valuable in the long run. Some job training programmes may in fact function as safety nets by providing temporary relief for the unemployed with a self-targeting mechanism not unlike that of public works programmes, since participants typically receive only the minimum wage. It is probably better to choose one goal or the other (training versus social protection), rather than trying to meet both goals with a single programme.

2. Social investment funds

Social investment funds (SIFs) were the original World Bank response to the social aspects of adjustment programmes, and some of the earliest funds (e.g., Bolivia's Emergency Social Fund created in 1991) were designed primarily to provide employment (Jorgensen, Grosh and Schacter, 1992). In fact, SIFs were started in part to avoid the problems associated with emergency public works (workfare) programmes. Yet almost all SIFs now have evolved into programmes designed to provide small-scale social infrastructure, particularly in rural and poor areas, using projects generated and executed at the local level. Therefore, social funds are not safety nets *per se*. Note that unlike workfare programmes, some social funds also finance programmes that do not involve construction or maintenance, such as nutrition programmes, technical assistance and micro-credit. When construction work is involved, it is not rare to see social funds using skilled

manpower paid at market wages. This is because the quality of the infrastructure built is considered to be more important than the provision of employment for the poor. This is the case with the Honduras social fund, which originated from the transformation of an employment generation programme in the early 1990s but does not consider the objective of employment creation as its main priority nowadays. On the other hand, most social funds are usually targeted to poor areas through the use of a poverty map (or, in some cases, through the use of a map of unmet basic needs).

While both workfare and social fund programmes build projects in the public sector, there are important differences. The social fund finances the material and labour costs of a project, although some local labour may be donated as a community contribution. This varies across SIFs and countries. A workfare programme generally finances the labour cost of a project at the national or federal level, and asks that local governments or agencies provide for the material costs. Thus, there is a clear incentive in workfare programmes for the local agency to find labour-intensive methods of construction and choose labour-intensive projects. Since SIF projects are bid out to the private sector, often the most modern and capital-intensive construction methods are used, although in some cases social funds specify minimum employment levels to be attained in their operations.

Most social funds are agencies which are independent of the ministries -often attached to the Office of the country's President- which review and fund projects submitted by NGOs, local governments and other sponsoring agents. Their strong points include local community involvement and the ability to respond to local perceptions of needs, especially in rural areas where normal government expenditures often do not reach the poor. Social funds also have a better ability to avoid corruption and "make-work" projects. But they are not very good at providing safety nets, and they do not normally expand during a crisis to provide more employment. In fact, the amount of employment and income generation provided by social funds has historically been low. For instance, a review of social funds found that 10 major social funds provided employment on average equal to only 4% of the labour force (Goodman, Morley and others, 1997). Likewise, the monetary contribution in terms of wages was judged to be small, as well as the poverty reduction impact coming from the projects themselves. Social funds are better at improving the supply of health, education, and basic infrastructure services, with in some cases impacts

on outcomes such as school enrollment rates, age-for-grade, or the incidence of illnesses (recent evaluations using household-level data include Pradhan, Rawlings and Ridder, 1998, for Bolivia, and ESA Consultores, 1999, for Honduras).

Still, one of the clear advantages of social funds is that they have strong organizations with relatively good systems for project management and monitoring. These organizations can be used in times of crisis for the delivery of social safety nets. The existing social fund in Honduras, for instance, has proven highly valuable in directing emergency assistance to local villages after Hurricane Mitch. One possibility therefore is to work with social investment funds to modify their operations during a crisis, as for example by putting more emphasis on labour-intensive projects and by having the fund involved in new, hard-hit areas. It is thus a good idea to identify labour-intensive projects in advance of a potential crisis, so that they will be ready for funding should a crisis come about.

3. Nutrition and food programmes

Nutrition and food programmes take a variety of forms. Subbarao, Bonnerjee and others (1997) have identified about thirty countries using food policies with redistributive aims. In these countries, price subsidies are used as often as feeding programmes and “food-for-work” requirements, and much more often than food quantity rationing and food stamps. In fact, many workfare programmes now providing wages in cash initially started as food-for-work programmes. As for direct feeding programmes, these provide food to needy recipients, through direct delivery of unprepared foods from a programme warehouse, delivery of prepared food from a community kitchen, or the provision of a lunch or breakfast for children in school¹². Evaluations of nutrition programmes generally indicate that there is only a small, marginal improvement in nutrition compared to the case where the family receives an equivalent cash grant. This is because families may substitute free food for their own purchases, and largely use the savings for other purposes. However, even if a food programme is roughly equivalent in effect to a cash grant, there are fewer possibilities of diversion of funds, since food is less likely to be misappropriated than cash.

¹² School feeding programmes are especially popular in Latin America. See for example Phillips, Sáenz and others (1995) on Honduras, Dall’Acqua (1991) on Brazil, and Jacoby, Cueto and Politt (1996) on Peru.

In addition, food is more likely to go to women, and be used to improve the welfare of the family, while cash is more likely to be used by men for lower-priority activities. An intermediate alternative between cash and food is the issue of food stamps. Food stamps have the added benefit of not requiring a complicated system of storage and transport of food, while making use of the already existing private food distribution network. In Honduras, the food stamp programme used to also cover medicines and school books. In Jamaica, the food stamp programme was introduced in place of general food subsidies, and has proven effective in raising the incomes of the poor (Grosh, 1992).

A common way of targeting food programmes is by linking distribution to a health programme, particularly maternal and child health care. In this way, the food serves as an incentive to attend the programme, and nutrition education can help improve the use of the food given out. As already mentioned, giving food to women also lessens the possibilities of it being diverted for sale in the market. Food programmes can also be designed to be self-targeted, if the food products given out are those consumed by the poor and not by the middle class. Alternatively, food distribution can take place at centres located in poor neighbourhoods. Such approaches can reduce the administrative burden of targeting programmes, but they increase the possibility of leakage to the non-poor. School lunch and breakfast programmes are also difficult to target at the individual level if it is desired to avoid stigmatizing some students within the school as being “poor.” In many countries, schools from poor areas are targeted, but completely untargeted national programmes are also common. One benefit of these programmes is the incentive given to keep the children in school in order to have them fed, and the fact that they improve their learning abilities while in school (see Wodon and Siaens, 1999a, for an evaluation of the Mexican school breakfast programme). From a nutritional point of view, however, the prime beneficiaries of the programmes may be other members of the family, if the children are not fed at home because the parents know that they will receive a school lunch.

Food subsidies are another way to help the poor by reducing the cost of their consumption bundle (Besley and Kanbur, 1988). Means-tested food subsidies tend to be more effective than other subsidies in reducing inequality and improving welfare. For Mexico, for example, Wodon and Siaens (1999b) suggest that universal subsidies do not perform well for the reduction of inequality and the improvement of

welfare. They compare three programmes: the now defunct universal subsidy for tortillas, a programme providing one kilogramme of free tortillas for households with income below two minimum wages, and a subsidized milk programme, also means-tested. Their main findings were as follows:

- Food subsidies are better than non-food subsidies. Subsidies for basic consumption goods such as tortillas reduced inequality, especially in urban areas, and more so than subsidies for utilities such as water and electricity. However, food subsidies generate price distortions and they are costly. Furthermore, a universal subsidy for tortillas is less effective than would be a similar generalized subsidy for the ingredients needed for making tortillas, such as corn flour.
- Within food subsidies, means-tested subsidies are better than universal subsidies. The marginal impact on inequality and welfare achieved with the universal tortilla subsidies does not come close to the welfare gains achieved with the means-tested subsidies.

Still, food subsidies may not represent a sound and cost-effective investment for poverty reduction. Food subsidies and distribution systems can have negative incentive effects on the supply of labour (Sahn and Alderman, 1995). They can be badly targeted, with high leakage to the non-poor (Grosh, 1994; Cornia and Stewart, 1995). And, while self-targeting can be achieved to some extent by subsidizing goods consumed in larger quantities by the poor than by the non-poor, this is no panacea (Tuck and Lindert, 1996). There has therefore been a tendency to reduce funding for food subsidies in favour of other programmes, for example in Mexico (Levy and Dávila, 1998).

4. Conditional cash transfers

Since food is fungible with money, one could argue that cash grants are the simplest and most direct way of providing safety net assistance. The use of cash grants also avoids the utility losses associated with in-kind support. In developed countries, and some advanced Latin American countries, cash payments to selected households are slowly becoming more common. Unconditional cash payments and similar forms of social assistance are usually targeted to women with dependent children, the disabled, the aged, and those unable to work. However, the problems of targeting and controlling cash payments make this approach

difficult in poorer countries that lack good administrative arrangements. For instance, in Bolivia the Bonosol programme gave adult citizens an annual cash grant equal to four weeks' pay at the minimum wage. The attractiveness of the grant and the lack of screening or identification mechanisms resulted in widespread abuses, however, including double payments and payments to non-Bolivians.

An attractive alternative is to link cash grants to school attendance or other desirable behaviour. This system has been introduced in various degrees in such countries as Brazil (Bolsa Escola), Argentina (Beca Secundaria), Mexico (Progresas), and Honduras (PRAF), among others¹³. These programmes are not safety nets properly speaking, or at least they were not originally designed to function as compensatory safety nets during crises. Yet the programmes do provide valuable benefits which households can rely upon during crises, and these benefits can be increased during a recession if need be. In other words, as was the case with job training programmes and social investment funds, existing programmes providing conditional cash transfers can be expanded and modified to serve as safety nets during a crisis. In general, however, school-related grants will offer only a partial response to crisis situations, if only because the programmes are targeted at families with children already in school, so that some of the poorest who cannot afford to send their children to school are excluded from the programmes' coverage.

School-based conditional cash transfer programmes reduce the opportunity cost for poor parents of keeping their children in school. This opportunity cost is essentially the loss of child wages or of the value for the parents of the domestic work done by the children, which cannot be enjoyed when the children go to school. In many cases, this opportunity cost of schooling is difficult to estimate, and it is by no means obvious that the grants must necessarily be equal to the opportunity cost in order to persuade parents to send their children to school (Ravallion and Wodon, 2000a). Indeed, it is reasonable to think that the parents have an intrinsic interest in having their children go to school, either for altruistic

¹³ A rigorous evaluation of Mexico's Progresas scheme is being prepared by the Progresas staff with support from the International Food Policy Research Institute. Preliminary results are available in Progresas (1999). The International Food Policy Research Institute is also going to help in the evaluation of Honduras's Family Allowance Programme (PRAF), with a design combining demand- and supply-side interventions.

motives, or for the future benefits that intergenerational transfers provide once the children reach adulthood. In some countries, however, the level of conditional grants appears to be high. In the case of Progresa in Mexico, for example, in order to justify the relatively high level of the Progresa grants it has been argued that apart from providing incentives to accumulate human capital, they also improve the families' overall quality of life. Yet there may be more cost-effective ways of improving the quality of life of the programme's beneficiaries. On the other hand, as shown by Wodon, González, and Siaens (2000), when the value of the grants is low, demand-side schooling interventions may exclude the poorest. More work is needed to measure the many trade-offs involved.

At what level of schooling should the grants be provided? This will depend on the characteristics of the country. In Brazil and Argentina, the programmes focus on secondary school students, since these are the children who are more likely to be pulled out of school during a crisis. In Honduras, the programme focuses on the first four years of primary school. In Mexico, the programme covers the end of primary schooling and the lower secondary school cycle. In Venezuela, the programme covers primary school children. In some cases, these programmes are tied not only to attendance but also to school performance, including passing on to the next grade. While this may provide valuable incentives, one has to make sure that such conditions do not exclude the poorest children, who may have more difficulties in succeeding at school.

How should the grants be targeted? The experience of Progresa is interesting (Skoufias, Davis and Behrman, 2000). The programme uses a three-stage targeting mechanism. First, poor rural localities are selected for participation. Next, poor families are selected within participating communities, using a multivariate discriminant analysis. Third, local communities may review Progresa's selection and reclassify poor families as non-poor and vice versa. This targeting mechanism is basically sound, and the results appear to be good. One concern is that the level of community involvement remains marginal. The targeting process is centralized in part due to the desire to avoid political interference in the choice of beneficiaries. Nevertheless, more efforts could be made to promote the role of communities in targeting. Another related question relates to the need for targeting within poor communities. The higher the proportion of the poor in a community, the less the need to target within that community, especially if targeting is costly

not so much administratively but rather in terms of social cohesion (those who do not get into the programme may envy those who benefit from it). In Honduras, where the PRAF programme is being modified in part on the basis of Progresa's experience, it has been decided to provide support to all the families residing in the poor communities that participate¹⁴.

Conditional cash transfer programmes can also be used to promote good health practices, including the consultation of local health providers. This is again the case with Mexico's Progresa scheme, where eligible families receive a transfer (both in cash and in kind through a nutritional supplement) for health purposes apart from the transfers related to schooling. In other words, Progresa aims at providing coordinated intervention for education, health and nutrition, in the hope that the impact of the whole programme will be larger than that of its individual parts. Of course, with Progresa as with the other programmes, in maximizing the impact of the school- and/or health-based interventions it is important to take care of supply-side issues. For example, Progresa has been successful in raising school enrollment and attendance at health care centres, but this has led to tensions on the supply side. Steps have been taken to coordinate Progresa's action with that of other ministries, such as those of education and health, but more may be needed to optimize demand- and supply-side interventions.

5. Unemployment insurance and other programmes

Unemployment insurance is common in Europe and North America, but relatively rare in Latin America, partly because of its high cost. On the other hand, the current labour legislation in many Latin American and Caribbean countries mandates a severance payment on termination which is a function of the number of years worked. Normally, this is about one month's salary for every year of service, up to some maximum. This may be supplemented by an unemployment insurance scheme (as in Argentina and Brazil for formal-sector workers) in which monthly contributions from payrolls and/or the employer entitle workers to a monthly payment over a limited time horizon, with the payment set low enough to reduce disincentive effects. But since the formal sector in many countries is less than half of

¹⁴ It is important, when feasible, to use distributional weights in the evaluation of the targeting of social programmes and other interventions. For such an analysis, see for example Ravallion and Wodon (2000b), and Wodon and Yitzhaki (2000).

the total work force, the coverage of unemployment insurance/severance payments is far from complete, and the exclusion of the informal and rural sectors means that these mechanisms miss those areas which contain many of the poor. Moving from a severance pay system to an unemployment insurance system could be beneficial if it reduces labour costs. However, unemployment insurance can also create moral hazard problems by subsidizing unemployment (as compared to workfare programmes, which subsidize employment). One important element here is to ensure that unemployment benefits are not so generous as to discourage the search for work. For this, both the level of the payments and the length of time workers can receive benefits must be monitored (for a review of OECD experience with labour market rigidities and unemployment insurance, see Nickell, 1997).

An alternative frequently mentioned is a system of Unemployment Insurance Savings Accounts (UISAs), under which workers would receive no “reward” upon losing their jobs, and they would suffer no “penalty” for finding a new job quickly. Each employed worker would make a fixed mandatory minimum contribution to his/her UISA each month, and additional voluntary contributions above the mandatory minimum levels would be permitted. Upon becoming unemployed, an individual worker would be entitled to withdraw a fixed maximum amount per month from his or her UISA (smaller withdrawals would also be permitted). When the individual’s UISA balance falls to zero, or is seriously depleted, he/she would be entitled to unemployment assistance. The unemployment assistance would be financed through a tax levied on all wage earners. When

workers retire with a positive balance in their UISA, they would be able to use that balance to top-up their pensions. Overall, the workers themselves would play a much larger role in financing their own support during periods of unemployment. The main advantage of UISAs is that they tend to set the incentives right, without creating distortions in the behaviour of employers and firms, since the funds taken out by an unemployed individual from his/her UISA directly reduce the individual’s personal wealth by an equal amount, so that individuals fully internalize the cost of unemployment compensation. UISA systems are not without risks, and special interventions are likely to be needed to protect those workers who are younger, poorer and less well educated. For Chile, Castro-Fernández and Wodon (2000) suggest that although the redistributive impact per dollar spent on unemployment benefits of a UISA-based system would probably be smaller than the redistributive impact of Chile’s current unemployment assistance system, the complementary unemployment assistance component of the system would still be highly redistributive, and it would probably have a much better coverage because the value of the benefits would be higher.

Finally, it is worth mentioning that there are several other types of social protection programmes that exist, including pensions for the elderly. Because many of the poor belong to the informal sector, they do not have access to the pensions provided by social security systems (likewise, those in the informal sector often lack access to other State-organized benefits such as low-income housing). For a discussion of pension issues for the poor, see Holzmann and Packard (1999).

IV

The constraints: fiscal space and administrative capacity

1. Are social protection programmes counter-cyclical?

Good social protection programmes should expand during an economic crisis as unemployment grows and income levels decline. In other words, the programmes should be counter-cyclical: i.e., rising when the economy falls. In some countries, the system of safety nets is supported by automatic entitlements that force the public sector to spend more on those who need it. For instance, unemployment causes an increase in the numbers eligible for unemployment benefits, and declining incomes can increase the number of households eligible to receive cash or food assistance. But in most Latin American countries, there are no such automatic triggers. This is partly because the need to have counter-cyclical social protection programmes can conflict with the need to impose fiscal austerity during a recession. An economic crisis, whether domestically or externally induced, leads to a drop in output and consequently a fall in government revenues. But during a crisis, governments are reluctant to raise taxes, so maintaining high expenditure levels can lead to large budget deficits.

Let us consider the data presented in table 4. Both Argentina and Mexico suffered adverse shocks in 1995 (Mexico was first, Argentina followed). Per capita GDP in Argentina decreased by 5.32% between 1994 and 1995, while it went down by 4.93% in Mexico between 1994 and 1996. The share of GDP devoted to targeted social spending decreased a little in both countries, while the poverty rate increased, leading to an increase in the total number of poor people. The targeted spending per poor person decreased much more than per capita GDP, yielding an elasticity to growth (in this case to a recession) of targeted spending per poor person of about five in the two countries. During this recession, spending for the poor was thus highly pro-cyclical, whereas ideally it should have been counter-cyclical in order to protect the poor from the adverse macroeconomic shock.

The data in table 4 are based on one period in two countries only and on a number of assumptions for both the estimation of poverty and the categorization of social spending. It may be misleading to conclude that social protection declines in all countries during a crisis. Unfortunately, beyond point estimates of the elasticities of targeted spending to growth such as those presented

TABLE 4

Argentina and Mexico: Targeted public spending per poor person, 1994-1996

	Real per capita GDP (1994 = 100)	Share of targeted social spending in GDP (%)	Poverty rate (%)	Number of poor people (million)	Targeted spending per poor person (1994 = 100)
Argentina					
1994	100	1.24	21.6	7.5	100
1995	94.68	1.21	27.2	9.6	63.12
% change	-5.32%				-27.88%
Mexico					
1994	100	1.36	46.95	42.04	100
1996	95.07	1.23	60.93	56.51	67.30
% change	-4.93%				-23.70%

Source: Wodon, Hicks and others (1999). The data for the two countries are not strictly comparable. Hence it should not be inferred that social protection spending is more pro-cyclical in one country than in the other. Note also that the Government of Mexico has made a substantial effort to increase targeted funding for the poor in recent years, for example by providing funding for Progresá. This is not reflected in the table.

in table 4, the extent to which Latin American and Caribbean countries have provided counter-cyclical social protection is a question which has received surprisingly little attention. One problem is that the data on budget expenditures do not typically identify social protection or safety nets as a separate activity. Social protection programmes are scattered over various sectors such as health, education, social security, and welfare. However, data are available in some countries.

Wodon, Hicks and others (1999) use data for seven countries (Argentina, Bolivia, Chile, Costa Rica, Dominican Republic, Mexico and Panama) to test for the business cycle properties of targeted and social spending in Latin America. They first propose a theoretical model to analyse how targeted public spending for the poor may be affected by booms and busts. A government is said to be “pro-poor” if it gives reasonable weight to the poor in its social welfare function, if it considers a minimum level of basic needs that must be satisfied for the poor, if over time it raises this level of basic needs faster than GDP during a period of growth, and if it does not reduce the level of minimum basic needs during a temporary recession. If a government is pro-poor according to the above definition, the elasticity of targeted public spending to growth will be positive and larger than one during booms, and smaller than one during recessions. If the government is not pro-poor, the model predicts that the elasticity of targeted spending will always be smaller than or equal to one. The existence of an asymmetry between booms and busts in the elasticity to growth of targeted public spending for the poor when the government is pro-poor is then tested with the panel data on public expenditures. The results in table 5 suggest that governments are to some extent pro-poor and pro-social, because targeted and social expenditures are rising faster than GDP and total government spending during booms. While this is encouraging, the fact remains that during recessions, targeted spending is *not* protected. It decreases slightly faster than GDP (although the elasticities are not statistically different from one in table 5 in the case of a recession). Thus, even though governments can be considered as being pro-poor, targeted and social spending remain highly pro-cyclical. The evidence suggests that social protection programmes, instead of expanding quickly during a crisis, are actually contracting, in many cases as rapidly as other types of public spending¹⁵.

¹⁵ Ravallion (2000) finds somewhat similar evidence with data for Argentina.

TABLE 5

Latin America (seven countries): Estimated elasticities of expenditures with respect to changes in GDP

	Growth ^a	Recession
Total government spending	0.971	1.003
Social sectors spending	1.475*	1.128
Social protection spending	1.999*	1.391

Source: Adapted from Wodon, Hicks and others (1999). Sample of 7 countries, with 97 observations.

^a * denotes an elasticity statistically different from one at the 5% level.

The impact of a recession on targeted spending on the poor is even more negative than table 5 suggests. It can be shown that in Latin America, a one percentage point decrease in per capita GDP leads to at least a two percentage point decrease in targeted public spending per poor person. Half of this impact is due to the reduction in per capita GDP itself, which reduces spending even when the share of targeted spending with respect to GDP remains constant (the fact that the share remains constant is evidenced by the unit elasticity in table 5). The other half of the impact comes from the increase in poverty due to the crisis: i.e., the available targeted public spending must be shared among a larger number of poor people.

The fact that targeted programmes for the poor are not well protected may be surprising, given that these programmes represent only a small proportion of GDP (typically 2% or less) and a small proportion of total spending as well. One reason for the lack of protection for targeted spending may be related to the lack of bargaining power of the poor. Another reason why expenditure protection may be difficult during an economic and fiscal crisis is that the country must honour its debt service and a number of mandatory entitlement programmes, with consequently low levels of discretionary resources. In other words, if 30% of the budget is protected because of its safety net and poverty aspects, and 50% is for debt service and other programmes that cannot be cut, a 10% reduction in overall spending would produce a 50% cut in the remaining sectors. Given that the remaining sectors might include such sensitive areas as defence, justice and administration, this may not be a feasible solution, thereby forcing the government to abandon the idea of protecting funding for key social protection programmes. One message from this discussion is that prevention before a crisis is crucial, because during the crisis, it will always be difficult to protect the poor.

2. How can one select the programmes to be protected or expanded during a crisis?

The objective during a crisis should be first to agree that key programmes that benefit the poor will not be cut back even though total government expenditures may be reduced. Next comes the difficult question of which specific programmes should be protected or even expanded. It is tempting to put on the list almost all programmes in basic health, education and nutrition. But not all programmes in the social sectors are equally effective in reducing poverty, and some programmes producing long-term benefits for the poor may be deferrable. In deciding which programmes to keep and expand during a crisis, an important criterion should be the cost-effectiveness of the programme in quickly channeling income or its equivalent in kind to the poor. As suggested in the case of workfare programmes, the cost-effectiveness of programmes depends on a number of parameters. Knowing these parameters beforehand helps in making a selection. Comparison of the cost-effectiveness of alternative safety nets in smoothing consumption patterns for the poor via income generation, in-kind commodity distribution or commodity subsidies is one area where additional analytical work should clearly be done.

One element of a viable strategy -actually, one of the key parameters of the cost-effectiveness of safety nets- is the protection of programmes that have good targeting mechanisms for reaching the poor. Untargeted or universal welfare programmes are often fiscally impossible to sustain, particularly during a crisis. It is true that targeting beneficiaries by complicated means testing (i.e., intensive questioning over income and wealth) can be costly and not very reliable. This is why many World Bank-funded programmes have relied on geographic targeting, even though this can lead to substantial leakage. An alternative approach is the *proxy means test*, whereby likely recipients are interviewed and respond to questions concerning their living conditions, such as the type of housing in which they live, the availability of drinking water, the types of appliances possessed by the household, etc. Wodon (1997) has shown that these indicators are powerful means for avoiding the two types of errors that can be committed in targeting, namely identifying as poor a non-poor household, and as non-poor a poor household. For any given budget, good targeting also helps to improve coverage among the poor (i.e., what percentage of the poor actually receive programme benefits), which is an important advantage in Latin America, where coverage has often been low.

Variants of means-testing systems have been used, among others, for the CAS (Social Action Committee) cards in Chile, SISBEN (Beneficiary Identification System) in Colombia, SISFAM (Beneficiary Family Identification System) in Argentina, and Progresas in Mexico. In practice, people who apply for assistance are interviewed, and their score on the questionnaire determines their eligibility. The weights for the various indicators included in the questionnaire are based on estimated econometric relationships between the poverty status of a representative sample of households and their indicators. Grosh (1994) has estimated that the cost of targeting through proxy means testing or geographic targeting (definition of poor areas) need not be much higher than the cost of universal distribution (a reasonable mark-up would be 3% to 8%), while producing substantial benefits. In a sample of untargeted programmes, only 33% of the benefits accrued to the lowest 40% of the population, whereas in targeted programmes 72% of their benefits reached that population.

Beyond the need to protect the consumption of the poor during a crisis, it is also clear that some existing health and education programmes not necessarily targeted to the poor should be preserved. It is possible that the demand for these programmes might go up if, for example, the losses in income due to unemployment or underemployment cause people to shift from private providers and private health insurance to public programmes. Likewise in the field of health, some programmes not targeted on the poor should be maintained because there are large externalities involved. This would be so, for example, in the cases of disease surveillance, immunization campaigns, malaria control, AIDS prevention, etc. Preserving access to basic (primary and lower secondary) education is not a short-term safety net issue but, as discussed earlier, it does reduce the costs of a crisis over the longer term by avoiding cuts in education spending for the poor that eventually lead to a reduction in human capital, and thereby lead to lower productivity and income.

In order to be able to protect all the above programmes, it will be necessary to identify some programmes that can be reduced, put on hold, or eliminated. For example, some of the worse cases of misspent social spending in Latin America have been large subsidized housing programmes for the middle class, which are often mandated through earmarked taxes. While it may be impossible for a government to change these programmes quickly without major legislative or even constitutional authority, in some

cases the need to reallocate spending due to an emergency or a crisis may facilitate fundamental changes. Other candidates for expenditure reduction may include subsidies, such as below-cost pricing for non-poor groups, for such services as electricity, water or urban transport. Better cost recovery for higher education (e.g., at the university level) and for some health care services may also help. Table 6 (the idea for which came from a discussion with K. Lindert) gives a generic ranking based on common practice and observation, although the priorities may change depending on the country.

3. Additional implementation issues

There are several additional issues which must be considered when implementing safety nets. First, establishing new institutions that work effectively at the national level is difficult. Most social funds, for instance, take 2 to 3 years to get up and running at a level that reaches a substantial number of poor people. Under the pressure of time, it is much easier to work with existing institutions by providing them with support that enables them to expand their operations during a crisis. It is also often possible to expand safety net programmes that have already started on a pilot basis and that have been evaluated and proven effective. As a corollary, it might be useful to experiment with new programmes every now and then on a pilot basis, in order to evaluate their strengths and weaknesses and their ability to be expanded in case of need. Also, as indicated earlier, it may be possible to use existing in-

stitutions running programmes for job training, social funds, or transfers for the distribution of emergency assistance when needed.

Second, not all governments possess the same capacity to administer programmes. In some countries, a simple programme that is not well targeted might be a better choice than a more complicated programme. Safety net programmes need to strike a balance between administrative capacity, fiscal sustainability, political acceptability, the scope of the intervention, and targeting efficiency. An additional problem is the relationship between the federal and provincial-level governments. The staff of multilateral development banks have traditionally established a dialogue with federal authorities, but a large part of social spending takes place at the provincial level. It may be necessary to agree to additional support from the federal budget for state, provincial or municipal budgets during a crisis if safety net programmes are operated locally. However, while decentralization has a number of advantages, it is not necessarily pro-poor, so that serious monitoring of sub-national authorities is needed.

Third, one problem encountered in many countries is the proliferation of small programmes throughout various parts of the government. Nutrition programmes, for instance, are found in the ministries of health, education, social development and agriculture, as well as in autonomous agencies belonging to the Office of the President. Training programmes are run by the ministries of education, labour and economic development. It is important to seek some sort of inter-ministerial coordination in order to avoid overlaps and

TABLE 6

Priorities in protecting programmes during crises: a possible hierarchy

	Health	Education	Social protection/others
High priority	Immunizations Disease control AIDS prevention Pregnancy care and early child development	Means-tested stipends School breakfasts in poor areas Special programmes for indigenous populations	Workfare programmes Means-tested pensions for the elderly Means-tested nutrition supplements
Moderate priority	Primary health care posts and centres Basic care in hospitals	Basic education (primary and lower secondary) Scholarships for poor students at universities	Unemployment insurance Social security Social funds Job training Food subsidies
Low priority	Advanced curative care in hospitals	Free/low-cost university education for non-poor Research budgets	Subsidized housing Subsidies for infrastructure services

duplication. In the longer term, it may be possible to combine or consolidate programmes, and to eliminate the programmes that are least effective. As mentioned earlier, a crisis can help in reorienting social budgets.

Fourth, in monitoring expenditure levels it is preferable in principle to use actual expenditures, rather than the amounts budgeted. However, actual expenditure levels are difficult to monitor in many countries because of the long lag involved in receiving

the information. By the time it is known that actual expenditures have fallen, or that the available credits have not been used, it may be too late. To avoid non-intentional budget cuts due to lags in spending, it is important, after budget allocations have been made, to try to ensure that the budgets are set operationally and maintained at adequate levels, with continuous monitoring of the outlays in order to confirm that the plans are effectively being carried out.

V

Conclusions

Economic shocks may lead to a decline in real income caused by loss of employment, a situation of underemployment, or a shift to less lucrative employment. Real wages may also be reduced by high levels of inflation. Changes in relative prices may have negative effects. The poor may also lose their access to essential public services for health, nutrition and education as a result of reduced government real spending. They may lose the value of their financial assets (however meagre) if these are not protected from bankruptcy by the financial system or by the public social security system. Or they may simply have to sell their assets. In all these potential effects and in many others, the poor are more vulnerable than the non-poor because their income may fall far more quickly below bare subsistence levels.

It is common practice to recommend that governments should protect key social protection programmes during a crisis and expand the social safety net. However, with fiscal resources shrinking at a time when the number of poor are increasing, it may be extremely difficult to do this. Still, one would hope at least that high-priority programmes will be less subject to cuts than other programmes. This is feasible because social safety nets represent only a small part of existing budgets. Yet this does not appear to be the case at present. Rather than being counter-cyclical, safety nets are as pro-cyclical as other types of public expenditures, and in some cases may actually be more pro-cyclical. Ironically, social protection expenditures are not themselves protected.

Assuming that there is an agreement to protect the poor from budget cuts during a crisis, the question becomes: which programmes should be protected? There are no easy answers to this question, and the

answer is bound to be country-specific. Still, one important criterion for the selection of the programmes to protect or expand is their ability to quickly provide income support or its equivalent in kind for the poor. Workfare schemes may help, but policy-makers should be aware that it typically costs more than three dollars to generate one additional dollar in net earnings for the poor through these programmes. Some nutrition and food programmes may also be effective, provided they are well targeted, which is not always the case. Good targeting is one of the key parameters of the cost-effectiveness of safety nets. Also, existing social programmes which are not safety nets proper (e.g., job training programmes, social funds, and conditional stipends for school attendance in poor areas) can prove to be valuable delivery mechanisms for emergency assistance when there is limited administrative capacity in the country. Apart from compensating the poor for the likely loss of market-based income which occurs during a crisis, it is also necessary for the government to protect some universal programmes. These would include primary health care and education, as well as health programmes with large externalities. But the most difficult task of all is to identify those programmes that can be reduced, put on hold, or eliminated. Candidates in this respect may include subsidized housing, other subsidies for commodities not consumed mainly by the poor, some social security programmes, and spending on higher education and advanced curative care. While it is often difficult politically to reform these programmes, the need to act during a crisis may facilitate the necessary fundamental changes.

(Original: English)

APPENDIX

**Main risks by age group, and role of
social protection in addressing those risks**

Age group	Main risks	Roles of other sectors	Role of social protection: insurance	Role of social protection: assistance
0-4	– Stunted child development	– Primary health care services – Pre-school centres	—	– Early child development
5-14	– Low education quality – Late entry to school – Late age by grade	– Quality education – Earlier entry – Reduced repetition	— —	– Scholarships and schooling incentives
15-24	– Low secondary school completion rates – Teen pregnancy – Venereal diseases	– Access to/quality of secondary education – Remedial education – Reproductive health	— —	– Scholarships and schooling incentives
25-64	– Low income (unemployment/underemployment)	– Labour-intensive growth (with emphasis on SMEs) – Labour market reforms	– Unemployment insurance	– “Workfare” projects – Cash transfers – Job training – Job search assistance
65+	– Low income (no pension, no assets)		– Social security (contributory pensions)	– Income transfer (non-contributory pensions)
All groups	– Low access to and quality of health care – Low housing quality – Low access to basic infrastructure – Insecure tenancy – Risk of flooding	– Better provision of health services – Affordable housing – Investments in basic infrastructure – Titling programmes	– Health insurance	– Housing subsidies – Relocation to safe areas

Source: Adapted from Arriagada (1999).

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Old and new forms *of citizenship*

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This article holds that ensuring the full sway of economic, social and cultural rights makes it possible to advance towards greater equality of opportunities, both for attaining well-being and for asserting differences in the field of identity. This development of the effective use of rights must be complemented with new forms of citizenship connected with the possibility of interaction with the media and greater participation in the knowledge-based society. Only in this way does it seem feasible to give an ethical foundation to social and development policies which have been deprived of ideological bases. In this state of affairs it is necessary to build a political culture which transcends the merely formal nature of procedures and translates political action into forms of communication between different actors. The cultural construct of democratic citizenship necessarily involves such a pact or contract, which must provide space for the voices of a broad range of social actors and must have a real capability to prescribe forms of reciprocity and recognition in such diverse areas as access to justice, to social services, to informed political debate, and to the expression of opinions in the communication media.

I

Citizenship in these new times

Citizenship is a concept and practice which is constantly changing. In the course of the twentieth century, its content has been linked to liberal-democratic, social-democratic and republican conceptions. In the first case, citizenship is linked to first and second generation rights: first civil and then political. Civil rights refer to the freedoms inherent in a State of Law (freedom of opinion, expression and association) and seek to protect individual independence against possible coercion by the State or one of its institutions. Political rights concern the right of every citizen to vote and be represented in the political system by the executive and legislative powers or to participate directly in that system.

In the social-democratic conception, rights also extend to those of the third generation: economic, social and cultural rights. Basically, these include the right to work, to health, to education, to a decent income, to a suitable dwelling, and to respect for citizens' cultural identity. Finally, in the republican conception, citizenship is associated with mechanisms and feelings of belongingness of the individual to a community or nation and the participation of citizens in public affairs and in the definition of societal projects.

Now that the old century is ending and a new one is beginning, many people feel that citizenship is being rethought, rewritten and reinscribed in new spaces, without giving up its historical content. The rights that have been won (first civil and political, then economic, social and cultural) have not lost their importance nor are taken for granted. Indeed, the enjoyment of these rights is not complete: the current world order has been accompanied by greater enjoyment of civil rights but many problems for making effective use of economic and social rights. Nevertheless, the impact of postmodernism in the cultural field, of globalization in the political field, and of the information revolution in the field of technology together make up a new setting for citizenship.¹

The impact of globalization on citizenship takes place at at least two very different levels. The first is of

a political and cultural nature, and is reflected in the increasing worldwide spread of a certain sensitivity to democratic values and respect for human rights, sometimes associated with what are termed "politically correct" attitudes. This new global climate is governed by respect for the rules of a State of Law and tolerance for cultural and ethnic differences. Its values spread among the citizens within countries and are also reflected in agreements signed by the bulk of the international community. Citizens' civil, cultural and political rights are seen as being protected not only by the State but also by a kind of "global supervision" under which violations of those rights are reported, denounced and censured.

At the level of trade and financial globalization, the disappearance of frontiers and the growing vulnerability of national economies to external movements ride roughshod over the idea of the sovereignty of the Nation-State, with adverse consequences for the exercise of citizenship and, in particular, social and economic rights. A crisis in Southeast Asia, a devaluation in Russia or a rise in interest rates in the United States can affect the levels of investment and the money supply of the Latin American economies, adversely affecting the jobs and standard of living of many citizens of distant countries, without the Nation-State being able to do much to offset these effects. Who can a citizen turn to in order to seek redress because his social rights have suddenly been affected by a "financial event" which took place very far from his country, which is not at all clear to him, and which neither he nor his country can do anything to influence? In order to try to defend themselves against the effects of globalization, citizens must associate at the global level with organizations which mobilize mass support, hit the headlines, and make an impact on global public opinion. A recent example was the campaign of "global" non-governmental organizations (NGOs) against the Seattle meeting of the World Trade Organization.

In the post-modern era, the new form of citizenship is marked by decentralization and the differential self-assertion of issues, partly in response to the inherent tendencies of globalization itself, such as the weakening of Nation-States and the greater social differentiation

¹ This distinction, like the views expressed below in this respect, is based on Hopenhayn (2000).

that is tending to take place worldwide as a result of the new model of production. With regard to decentralization, citizens' actions do not converge on a single focal point (the State, the political system, or the nation, as its territorial expression) but are scattered over a multitude of fields of action, spaces for the negotiation of conflicts, territorial areas and interlocutors. The citizen ceases to be a mere depositary of rights promoted by the State of Law or the State as a society and instead becomes an individual who, insofar as his rights permit, seeks participation in areas of empowerment which are defined according to his capacity for action and also his instrumental appraisal of which area is most favourable for the demand he is trying to make. And in proportion as the role of individual consumption (both material and symbolic) grows in importance in the life of society, the sense of belonging shifts from the Nation-State to a wide variety of fields in the production of such a sense and the interaction of individuals. The republican idea of citizenship reappears, but not so much in the field of political participation as in a great variety of forms of association or communication at the citizen's social level which do not necessarily converge on the public or State spheres.

The second level –the differentiation of individuals– means that citizenship increasingly involves the issue of the assertion of differences and the promotion of diversity. Because of this, many fields of cultural self-assertion which were previously covered exclusively in private negotiations and were considered to concern the inner feelings of the individuals in question are now matters for society as a whole, are the subject of outward-looking discussion, and form part of the political and public treatment of associated demands. Thus, for example, matters which were once deemed by people in general to be outside the sphere of work and territorial concerns and were seen as belonging rather to a subjective sphere, now form part of politics and are part of the fight for rights and commitments: differences of sex, race, sexual practices, drug consumption, religious minorities, ancient and postmodern tribal cultures, etc. All these have gone beyond their core area of belonging and have spread into a public dialogue which seeks to change public opinion, reverse the stigma affecting some groups, and increase tolerance.

The impact of the information revolution is transforming Fordist societies into information-based societies, production societies into societies based on knowledge and information and the world of work into

a world of communication: in short, transforming discipline-based logics into network-based approaches. All this spreads unevenly among and within countries. However, we are living our different historical periods in a more and more synchronous manner, so that in Latin America too the exercise and concept of citizenship are affected by the "information society". In a world which is more and more decentralized and based on networks, in which demands depend less on the political system processing them and more on the acts of communication flowing through multiple networks, the exercise of citizenship is spreading to everyday practices which are half political and half cultural, relating to communication with distant interlocutors, the use of information to gain personal or group benefits, the redefinition of the consumer (of goods and of symbols) as an agent giving voice to his rights and preferences, and the use of the media to become an actor interacting with other actors.²

Here too, the greater dispersion of the citizens' acts and demands in the new information age leads to greater differentiation of their demands. It is no longer indispensable to seek a political party to channel demands which, according to traditional political logic, should be grouped together under great common denominators. It is possible to voice demands and wave flags in micro-groups connected with a world audience by Internet, telephone, e-mail or any other medium travelling from the local to the global level at the speed of light and free from censure. Information enables us to know where in the world there are opposite numbers who can join together with their peers in our countries and unite forces in the concert of global voices. This also makes it possible to seek those who can fill our demands and locate spaces where our demands can be heard with the desired effect. In no time it is possible to project a local rite into a political reflection on what a multiracial State or nation means.

All these processes suffer from conflicts and unevenness. Postmodernism, globalization and the information revolution are neither aseptic nor even-minded. The promise held out by long-distance interaction and unlimited information are in contrast with the social exclusion, loss of cohesion and inequality that exist in our national societies, which are phenomena that the new production patterns not only do not reduce but may even increase. Social and

² Although networks can be either "disciplinary" or "emancipatory", depending on whether they operate in a hierarchical or horizontal manner.

economic rights are more difficult to translate into real commitments between the State and society, especially in view of the threatened breakdown of the Welfare State in Europe (and its partial replicas in Latin America), the social costs of the fiscal adjustment, and an unprecedented labour crisis (higher unemployment and/or bigger wage gaps).

At the same time, globalization brings with it a greater awareness of the differences between cultural identities, either because those differences are aired in the communication media, incorporated in the new political climate spread by transnational NGOs and reflected in growing waves of immigration or because there are cultures which react violently to the spread of "world culture" and give rise to new types of regional conflicts which flood the television screens of the whole world. Thus, the political visibility of cultural assertion and the right to be different is increased, while the demands for the fuller exercise of social and economic rights come up against limited labour markets, more competitive economies and less mutually supportive societies.

In society at large, old cultural problems become matters of citizenship: matters for discussion, for the processing of differences, for claiming rights and, ultimately, for demanding the attention of the central authorities. Because of the new social movements, or because the cultural industry now amplifies voices that were previously not represented in the spheres of decision-making, change now takes place through the political or public actions of actors who are not presenting the traditional demands for higher wages or bigger social benefits but are instead expressing their concerns in fields which are symbolic rather than material. This is the case, for example, of the entry onto the political and public scene of such issues as gender, race, sexuality, consumption, etc. These are issues where the demand for equal rights is accompanied by strong claims for the recognition of differences; where the typical demands of the social actors in the political system (non-discrimination in wages, the right to land, health protection, recognition of the rights and liberties of the consumer) are accompanied by other demands, harder to translate into social distribution policies, connected with the new roles of women in society and the family, the self-assertion of culture through the institutionalized use of native languages, greater sensitivity to the feelings of the gay community, and the relations between identity and consumption.

Furthermore, the increasingly important role of the communication media means that politics must

primarily develop its media-related component, so that the image of politicians is now defined to a much greater extent by the way they appear in the media and by better-informed use of popular culture on the basis of surveys. There is thus a change in the form of appraisal of political competence, which is measured less and less by the production of projects and is increasingly determined by the circulation of images and information. Citizens are leaving the streets and meeting-points and concentrating on the individual processing of information in front of their television sets or computer monitors. Identification with great national projects is being replaced by opinions on more specific and varied matters. People are now more interested in the integrity of politicians than in their projects for society and are more interested in what the newspapers say than in identifying with political parties.

All this means that reflections on citizenship must now extend both to the relations between culture and politics and to the links between local and global concerns.³ With regard to the first of these matters, political cultures are changing in that they are adapting to the logic of the mass media, to a "post-ideological" situation and to the exhaustion of utopias. Cultural conflicts are becoming more political because they are becoming more ruthless and violent and thus make necessary the intervention of (local or global) powers, but cultural demands are also taking on a more political tone, because the political system -due to its difficulty in meeting traditional social demands and committing itself to great projects for change- finds that the marketplace for cultural demands is a promising place for staying in the contest. Thus, for example, it is now easier to propose bilingual education for the Aymara-speaking population in Bolivia than to try to revitalize agrarian reform, and promoting a television channel for women is easier than trying to redistribute wealth to benefit households headed by women.

As regards the links between local and global issues, there are authors (Mato, 1999; Lins Ribeiro, 1999) who consider that we are witnessing new forms of cultural citizenship. Globalization, they say, is transnationalizing the production of social representations, so that local and global actors are interacting and thus bringing about a change in the meaning of cultural expressions such as "identity" and "civil society" on which the political order and citizenship have traditionally been founded. According

³ This point has been dealt with in another article (Hopenhayn, forthcoming).

to Mato, this reconfiguration of concepts is leading in turn to a reorientation of the practices of some actors which strengthens the positions of the global actors and creates bilateral networks with local actors, promoting their participation in events and production networks. More specifically, according to Mato the formulation of new representations of race, environment and sustainable development in new global networks has taken place on the basis of the creation of transnational codes and linguistic categories such as the biosphere, biodiversity, civil society, etc. According to that author, these aim to establish a form of discourse and a transnational sense which guide the actions of the alternative global and local actors and form the basis for a sort of alliance of interests among them aimed at establishing an alternative transnational programme of action to stand up against the most exclusive and predatory aspects of economic globalization.

Mato's diagnosis points to the interesting possibility of bringing about a kind of "globalization from below" in response to the globalization from above led by the main transnational groups. This would make

it possible to move towards "representations of cultural particularity" expressed in different civic organizations with their own projects. Lins Ribeiro, for his part, considers that in defining the relation between national identity (national cultures) and political practices it is essential to take into account the state of "transnationality". This state involves a new level of integration and representation of belonging and therefore completely changes the traditional settings for action. The interaction between culture and politics is reflected in the challenges of transforming the conditions of citizenship and regulating and ordering the new setting arising from transnationalization. In view of this, Lins Ribeiro's proposal basically involves the creation and strengthening of a "global civil society" which, he considers, is currently represented by "an imagined/virtual transnational community whose material dynamic is a symbol of the new technologies of communication, especially the Internet" and whose main characteristics are its "remote testimony" and its "remote political activism" (Lins Ribeiro, 1999, p. 4).

II

Citizenship: between equality and diversity

The field of citizenship is enriched to the extent that the permeability of the cultural industry and global communications make it possible to claim and promote cultural rights. The banner of democratic communication flies high as a promise combining technology, politics and subjectivity, and many dream of a new utopia in which the old value of equality is replaced by the new value of diversity. Instead of social classes there would be cultural actors and identities whose potential for emancipation could not be universal but would reside in the democratic interplay of differences. The universal element would be the rules of the game which would give such differences visibility and guarantee relative equality of conditions for the exercise of citizenship, especially as regards cultural rights.

In this context, I should like to highlight a contrast which is typical of the present democracies.⁴ On the one

hand, it is sought to restore or revitalize equality, understood above all as the inclusion of those who are currently excluded, without this leading to cultural sameness, greater concentration of political power, or uniformity of tastes and lifestyles. On the other, it is sought to support and promote differentiation, understood as cultural diversity, pluralism of values and greater autonomy of the subjects, yet without turning this into a justification for inequality or for the non-inclusion of the excluded. Integration without subordination would involve both social and cultural rights: better distribution of material assets goes hand in hand with more equal access to symbolic assets (information, communication and knowledge), together with a more equitable presence of the multiplicity of socio-cultural actors in public decision-making and the incorporation of cultural pluralism in rules and institutions.

It might be asked at this point how the free self-determination of subjects and the differences in culture

⁴ This idea is based on the last chapter of Ocampo (coord., 2000).

and values pursued in this defence of autonomy can be reconciled with economic and social policies that implement the “third generation” rights by reducing the differences in income, wealth, employment, human security and access to knowledge. It is a question of promoting equality at the intersection between the fair distribution of potential for asserting diversity and autonomy and the fair distribution of goods and services to make possible the satisfaction of basic needs and the exercise of social rights. At the same time, cultural segmentation also makes it difficult to achieve social agreement on the solidarity and sacrifices (taxes) demanded by social distribution. In other words, without cultural unity the viability of a consensual project for the progressive redistribution of assets in society is more and more difficult.

In order to achieve universal enjoyment of economic, social and cultural rights, non-discrimination in the cultural field must be combined with a socially acceptable form of distribution to correct inequalities. This will include policies of affirmative action with respect to ethnic minorities and other groups defined by their socio-economic level, cultural characteristics, age or gender which are also in more vulnerable situations. Policies against discrimination on the grounds of difference (which serve to promote people’s civil, political and cultural rights) must be complemented with social policies targeted on the groups which are, objectively, victims of discrimination, that is to say, which are in the most unfavourable position for asserting their special characteristics, satisfying their basic needs, and developing capabilities for making more positive use of their liberties.

Such affirmative action must extend rights in particular to those who lack them most: not only social rights such as the rights to education, employment, social assistance and housing, but also the rights to participate in public life, to enjoy respect for cultural practices which are not in the majority, and to be heard in the public dialogue. In short, the objective should be a concept of complex equality in keeping with the new ideals of a democratic, multicultural society in which all citizens have the right to be different, without this being used to justify conditions which produce and reproduce socio-economic exclusion.

Traditionally, the question of equality has overshadowed that of the right to be different in the political debate, in negotiations between actors, in consensus-building, and in the State’s responses to demands. The demand for a socially acceptable form of distribution through wages, contracts, benefits and

services has been at the core of the relationship between politics and society under the principle of equality, but what happens when it is desired to reformulate that relationship so that the right to be different is equally important in the linkages between political and social matters? Once again, this brings us back to the question of culture, cultural demands, and the redefinition of social actors *qua* cultural actors, but with the difficulty that our political systems and our social State (or what remains of it, if it ever existed) are fluent in pro-equality language but not in the more complex language of the right to be different.

This problem is strongly felt in education. We know that the knowledge society strongly discriminates between those who have or have not had access to timely good-quality education, so that it is necessary to improve universal access to educational opportunities in order to give greater future opportunities for well-being to the entire population, so as to incorporate society as a whole into the new patterns of production and communication. We also know, however, that standardized education has traditionally tended to bring about cultural homogenization and is currently eliciting the most bitter criticisms from those who defend ethnic plurality and the right to be different.

This tension is now reflected in education policies. A clear example is the abandonment of “systemic simultaneity”: i.e., the idea that once formal education is universal it should be the same for all, both for reasons of economy of scale and of equality.⁵ Such simultaneity assumed that all those being educated were essentially equal, had the same possibilities of learning, and found the same subjects equally useful, so that standardized education would promote greater equality of opportunity.

Today, however, many analysts have abandoned this idea of systemic simultaneity in order to try to ensure that the subjects learnt and the forms of learning will be more appropriate to the socio-cultural situation of which they form a part (Gvirtz and Narodowski, 1998). The application of critical theories to education, at least two decades ago, showed that homogeneous education did not mean greater equity or greater democratization in the transmission of knowledge, but could on the contrary lead to a type of “systemic rationalization” in which the identities and cultural roots of different groups were sacrificed. Furthermore, it was

⁵ This idea was developed at length in Hopenhayn and Ottone (2000).

seen that a homogeneous supply of education vis-a-vis heterogeneous demand could prolong and heighten initial inequalities during a person's schooling, so that differences of social class or ethnic origin could grow worse rather than being reduced under the "systemic simultaneity" model.

We are faced here with a situation in which it is necessary to balance equality against diversity. Education must not only transmit the values of equality and respect for diversity, but must also incorporate that balance in its own curricular flexibility. Equity through education gives rise to a new approach in which the pursuit of equality exists side by side with respect for differences. For the first of these objectives it is necessary to ensure progressive universal coverage of the school cycle, from basic to secondary education, and to reduce disparities in the quality of education linked with socio-economic origin. For the second, it is necessary to adapt study programmes to specific groups (including bilingual education in areas where Spanish is not the mother tongue), to try to ensure that curricula are adapted to the territorial characteristics of the area where the school operates, and to allocate special financial resources in areas of greater social vulnerability and more precarious economic conditions. As Gvirtz and Narodowski (1998, p. 54) note: "what is involved in the need to get away from systemic simultaneity is the possibility of respecting diversity ... instead of being seen as a civilizing agent which does away with ignorance and barbarity, the school becomes the means whereby different cultural expressions can exist side by side".

A question which remains unanswered, however, with regard to equality of opportunity and the crucial role played in it by education, is that of the real conditions for the progress of students in an educational context which prizes diversity rather than uniformity. Within the framework of globalized economies which compete more effectively in proportion as they advance in the third industrial revolution, the labour market of the future obliges today's children to acquire skills that will enable them to obtain jobs in the future, especially if they seek upward social mobility from one generation to the next. On the other hand, education also pursues the objective of respecting and promoting the cultural identity of its students. The options between these two objectives can be complementary, but they can also be divergent.

This also involves taking risks in the educational process itself, for a school which promotes a multicultural society is also a school teaching

communication, which radically alters the teacher-pupil relationship, sees knowledge as something to be built in the classroom with the students, and respects the students in their own conflicts of identity. In the words of Alain Touraine, "we cannot talk about the school as a place for learning subjects without defending the school as a place for communication, and that is where the greatest resistance is encountered every time this subject is raised it is rejected both by parents and by teachers, who fear that it will lead to uncontrollable disorder in affective relationships and will do away with what they consider to be the main mission of the school, namely, to teach subjects and prepare students for examinations which will open the door to employment for them" (Touraine, 1997, pp. 336-337).

While the school as a place for communication may seem to threaten order and discipline, however, on the other hand it is an indispensable means for tackling the challenge of multiculturalism and tolerance and preparing citizens for the new democracies based on communication and knowledge, without getting lost in a mass of atomized information: "Globalization has stripped society of its role as a creator of norms. In order to avoid the risk of cultural fragmentation it is proposed precisely to adopt the principle of intercultural communication ... to educate students to respect diversity, recognize the qualities and rights of others, and practice solidarity, as conditions for broadening and enriching one's own identity" (Cubides, 1998, p. 45). And as the school is a basic nucleus for socialization, its own practices in terms of learning and discipline must incorporate those values.

Another area of tension between the values of equality and diversity is in the frequent conflicts that arise between formal education on the one hand and, on the other, the exposure of students to the communications media and, increasingly, computers. Today we talk about multiple forms of literacy and different ways of "reading the world". These different ways involve the interaction of the school, television, the new interactive media, and the recomposition of the city as a radically heterogeneous space. This polymorphism undermines the position of forms of culture based preferentially on the written word, and gives rise to areas of both agreement and disagreement not only within a subject but also between different subjects.

In this sense, Guillermo Orozco invites us to get away from the two antithetical positions adopted by education with regard to the communications media: defence of the audience against the media, or uncritical

acceptance of the latter as means of educational modernization. Instead of this, he proposes a form of teaching involving constructive criticism of the material presented, which opens up a debate in the classroom on how the material supplied by the communications media should be received, assumes that the school is one institution competing with a number of others for leadership in the field of knowledge, imparts skills which will enable students to express themselves in a multimedia environment, and sees literacy as an ongoing process dealing with the different alphabets of a post-modern world: a process which is media-

based, multicultural and serves to speed up change (Huergo, 1998; Orozco, 1996). Giving students an attitude of critical analysis of the messages they receive, which will enable them to process the stimuli they receive from the different media so omnipresent in everyday life, is equivalent to training them in citizenship, by making all those exposed to information and audiovisual images capable of using those elements to recreate their own subjectivity and communicate with others, without being limited to the passive receipt of images which are no more than fetishes or the product of unilateral information.

III

The cultural industry and citizenship: symbolic capital and “voice”

As already noted, we are witnessing changes in the exercise of citizenship in which this is not only defined by entitlement to rights but also by mechanisms of belonging, by the capacity for taking part in the public dialogue, and, increasingly, by practices of symbolic consumption (of information, knowledge and communication). In the words of García Canclini (1995): “It is not so much the social revolutions which have taken place as the dizzy pace of the growth of audiovisual communications technologies which have made it so clear how public activities and the exercise of citizenship have been changing since the last century. But these changes have been shifting the exercise of citizenship towards activities of consumption ... many questions of the citizens are answered through the private consumption of goods and of the mass media rather than ... in public spaces”. Thus, the circulation of symbolic goods is increasingly becoming an extension of the exercise of citizenship. This is why it is so important to open up the communications media to new voices.

The relation between the cultural industry and citizenship does not only concern symbolic consumption. Today, the cultural industry is the most important means of access to public spaces for broad sectors which have traditionally had no means of expressing themselves in them. Television, video and information and telecommunications networks are tools

whose relative cost is going down day by day, so that those previous excluded now have unprecedented possibilities for taking part in cultural exchanges, not only as consumers but also as producers of messages, because the cost of using “transmission” technologies such as fax, Internet, e-mail or community radio is going down all the time and very little training is needed to use them, so that more and more actors can now enter the long-distance dialogue as interlocutors and spokesmen. All this is possible insofar as the market does not subject the cultural industry to the system of exclusion that the national economies are currently suffering.

These promises of symbolic participation as a new field for the exercise of citizenship exist, however, in a context in which material access to the fruits of progress is not following the same expansive trend.⁶ Let us look at Latin America: while social and material integration is threatened by the employment crisis and the persistence of income disparities, symbolic integration is being boosted all the time by the cultural industry, political democracy and new social movements. On the one hand, the consumption of communication media and school enrollment continue to expand. Education

⁶ This contrast between access to symbolic capital and access to material well-being has been referred to in previous articles.

now displays problems of quality rather than of coverage, which has increased so much that other challenges in education are beginning to come to the fore. In the case of the communication media, in most of the Latin American countries the great majority of the population now have more information⁷ and more access to the output of culture and the political debate. Never before has the region had democratically elected governments in almost all the countries; today, there is greater awareness and effective existence of civil and political rights, political and cultural pluralism is valued more highly, and the question of citizenship and social and cultural rights has renewed currency.

On the other hand, however, there are now more poor people in Latin America than at the beginning of the 1980s; income distribution has not improved, and has even markedly deteriorated in some countries; the informal sector, based on low incomes and little capital, is growing and is the sector that absorbs most of the great contingents of workers who are left on the sidelines of the production modernization process or the poorly-trained young people entering the labour market; the traditional rural sector is being increasingly marginalized from the other sectors, and societies are becoming increasingly fragmented through the buildup of these phenomena, with disquieting effects in terms of a feeling of insecurity among the population, political apathy and increasing violence.

Let us look at some data in this respect. According to ECLAC statistics, between 1980 and 1990 per capita private consumption in Latin America went down by 1.7% (ECLAC, 2000). Over the same period, however, the number of television sets per 1,000 inhabitants in Latin America and the Caribbean increased from 98 to 162 (UNESCO, 1998), furthermore, the effects of the educational achievements in previous decades began to make themselves felt, considerably raising the average educational level of the young population. In other words, while access to knowledge, images and symbols sharply increased, consumption of “real” goods went down. In the period in question, the media industry⁸ and educational coverage and achievements grew strongly in Mexico, Venezuela and Brazil, whereas poverty reduction or improvement of the quality of life evolved at a very different rate.

⁷ Although it is not clear how far this greater access to information is reflected in greater knowledge and action resources.

⁸ See, for example, the cases of huge enterprises like Televisa in Mexico and O Globo in Brazil.

If we take the period from 1970 to 1997, we see that the number of television sets per 1,000 inhabitants rose from 57 to 205 in the region (UNESCO, 1998), the number of hours of television programmes (and the average number of hours of television consumed by the population) increased geometrically from one five-year period to the next, and the average educational level of the young population rose by at least four years of formal education. Yet the index of poverty of the region is today still at the same level as in the early 1980s, while the real income of the urban population has increased slightly in some countries and gone down in others (such as Venezuela). Thus, access to knowledge, information and publicity has grown at a rate which is totally different from that of access to higher incomes, greater well-being and more consumption.

This situation raises other questions about the changes taking place in the links between politics and culture. Firstly, the greater distribution of symbolic goods than of material goods may transfer the distribution struggle, at least in part, to cultural goods such as timely access to knowledge, information and education. This does not mean that classic matters such as employment, wages and social services will disappear as subjects of political negotiation, but it does mean that there will be changes in political agendas, political publicity, the nature of competition for votes, and matters which are the subject of great consensus in society.

Secondly, this gap between symbolic and material goods may give rise to growing social conflict and may thus affect the political treatment of the gap. As the consumption of publicity expands but the purchasing power for responding to what that publicity touts remains unchanged, society begins to “heat up”, and this affects the distribution struggle and ultimately governance. This problem (the expectations gap) is not new, but it may gather speed: on the one hand the young population of Latin America now has more education and knowledge and greater expectations of consumption because of its exposure to the cultural industry; on the other, unemployment among young people is double that of the rest of the population, in a region with the worst income distribution in the world. Young people have more information and greater mastery of interactive information media than their parents, which makes them more capable of exercising active citizenship today, but their demands for social rights associated with well-being and the quality of life run up against the brick wall of the market, unemployment and exclusion.

Thirdly, the use of long-distance communication is tending to be increasingly important for exerting influence politically, gaining public visibility and becoming a valid interlocutor in the dialogue between actors. There are some striking examples of this, such as the use of the Internet by the Zapatistas. This presents us with a new problem or dilemma: if some problems in the cultural field begin to be politicized, that is to say, if certain matters that were previously only dealt with -or repressed- “internally” are now aired politically, how can we avoid disparities in power due to the fact that some cultural actors take advantage of communications technology to make themselves heard but others do not? How can we promote the most suitable technical media, and knowledge of how to use them, to secure “democratic subject-oriented policies”? How can we prevent the new gap between the informatically literate and illiterate from leading to a gap between symbolic representations that circulate over the Internet and can make news, affect decisions and check abuses of power, and other representations which, because they are “electronically invisible”, subsequently become politically invisible too and, hence, defenceless?

In the face of this latter threat, we must promote the use of the new communications technologies in order to give the silenced or inaudible sectors a voice. Teleconference systems, informatics-based networks and integrated connections (between the telephone, fax machine, computer and photocopier) can be used to pass the microphone to those who have not had a chance to make themselves heard in public spaces. Indeed, these new systems, integrated in turn with the mass media, have great potential for expanding the public spaces for communication. A great mass of social demands coming from scattered or subordinated actors could begin to have a place in the public circulation of messages.

The tendency towards the “de-centering” of the transmission of messages in the cultural industry could help to democratize the societies of the region. While we have already achieved political democracy in the vast majority of our countries, the further deepening of democracy, based on the participation of different social actors, could be favoured by the spread of the new forms of the cultural and communications industry. There are

now highly illustrative cases in a number of countries of the region where the use of new resources of the cultural and communications industry has made it possible to connect up various groups suffering from socio-cultural segregation. These cases could form the basis for new initiatives in this field, including the construction of networks to incorporate demands from highly dispersed sectors, greater linkages of indigenous ethnic groups in and between countries of the region, and the production of programmes for the diffusion of autochthonous cultures run by the indigenous groups themselves.

In Guatemala, indigenous peasants fax messages about violations of human rights to international non-governmental organizations, without knowing how to use a typewriter. In Brazilian Amazonia, illiterate Indians exchange videocassettes in order to spread their ancient customs. In Mexico, neighbourhood organizations have multiplied their pressures in public spaces for attention to their demands with the aid of computers, their own databases and inter-neighbourhood information networks. Also in Mexico, peasant federations have established a database of their own to keep track of rural credit programmes, and in Veracruz local ecological groups have successfully opposed the proposed installation of a nuclear power plant because they obtained timely information from United States ecologists and publicized the risks in the press. In Chiapas, associations of small coffee producers make contact with similar groups in Central America and the Caribbean to share information on transport, markets, international prices, production technology and international trade negotiations.

In this context, cultural policies take on considerable importance: in other words, culture becomes politicized insofar as it becomes a battleground for reversing exclusion through the participation of a larger range of voices in political transactions. There are serious obstacles standing in the way of the self-assertion of the subordinated or excluded identities, however: on the economic side there is the privatization of communications, together with the concentration of media power in great transnational mergers, and on the political side there is the lack of commitment of the State to cultural policies which seek greater democracy in communication.

IV

By way of conclusion

A thesis which is now in vogue, and with which we concur in this article, is that the recognition as inalienable rights not only of those in the civil and political fields, but also of economic, social and cultural rights, could help to further greater equality of opportunities both for attaining well-being and for asserting diversity. Thus, the clamour for “more citizenship” not only seeks the revitalization of citizenship for a media-dominated world and a society based on knowledge but also brings up again the idea of the citizen as the possessor of inalienable rights. Only in this way does it seem feasible to give an ethical basis to social and development policies which have been stripped of their ideological foundations.

In order both to promote the political participation of sectors which have been socially and culturally excluded from the debate on the public agenda and to facilitate communication with them, innovations are needed in the forms of access to negotiation spaces. It is necessary to promote mechanisms capable of expressing the demands of dispersed groups and grassroots socio-cultural movements, and to foster the direct presence of such groups in the intermediate levels of politics (such as trade unions, municipalities, etc.). It is not just a question, within the bounds of modern democracy, of returning once again to the question of the redistribution of material resources, but rather of bringing up the question of the distribution of symbolic resources, such as participation, access to information, and presence in the exchange of messages (communication). Closer links must be promoted among the organizations that express the demands of the groups which are least integrated into the benefits of modernization. This requires that the political system above all, and after it the State social sector, should promote actions to strengthen the network of social movements which have the capacity to discern both the immediate and the longer-term demands of those groups and to help exert pressure in favour of those

demands on the relevant decision-making bodies, within a framework of political viability and the further consolidation of democracy.

In order to promote linkages among organizations representing marginalized groups it may be useful to do the following: spread information and communication technology to the grassroots level; redefine cultural policies in line with the organizational culture of that level; strengthen State initiatives aimed at mobilizing the social and cultural capital of the masses in order to optimize the effect of social aid on different types of programmes; and support the linking role of the “external agents”, whether these be NGOs, municipalities or social programmes, in order to link up the rationales of the socio-cultural movements with the tendencies of society as a whole, thus reducing the degrees of segregation and fragmentation.

Against this background, it is necessary to build a form of political culture which goes beyond the purely formal nature of procedures and turns political action into communication activities which socially internalize norms of reciprocity and mutual recognition between different actors. Building the cultural aspects of democratic citizenship involves rethinking the content of that pact or contract to make room for the voices of a broad range of social actors and to give it a real capacity to prescribe forms of reciprocity and mutual recognition. Those prescriptions can involve such diverse areas as access to justice, to social services and to informed political debate and the ability to express opinions in the communications media. Such a pact should serve as a dual fulcrum: first, as a mechanism for linking a new political culture with the different socio-cultural actors, with their demands and expectations, and second, as a mechanism for strengthening a new political culture of reciprocity which extends to the whole of society.

(Original: Spanish)

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Industrial policy, *comparative advantages* and growth

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This article analyses the relations between the international specialization pattern and growth. For this purpose, it adopts as its analytical framework the recent literature emphasizing the importance of initial conditions and public policies, and not only factor endowment. It also analyses the empirical and economic policy implications of this approach. After an introduction (section I), section II presents the analytical framework: a model with two internationally tradeable goods sectors and a non-tradeable inputs sector, with increasing returns to scale and dynamic pecuniary externalities. Section III draws the implications of the analysis in terms of the effects that industrial policies can have on the specialization pattern and the growth rate, while section IV does the same with respect to the initial conditions and real and monetary shocks. Section V examines the empirical information on the relations between the specialization pattern, the capital accumulation rate and growth, and finally section VI sums up the main conclusions of the study with regard to the scope and limitations of industrial policy.

I

Introduction

In the literature (both old and new) on international trade, there are a number of contributions which analyse the way in which the international trade specialization pattern can affect growth: the “infant industry” argument, Prebisch’s and Singer’s theories on the terms of trade of primary commodities, or the multisectoral models with different rates of learning in the new international trade theory. A common feature of these contributions is that the specialization pattern of an economy, as determined by its comparative advantages, may not be the same as the specialization pattern giving the greatest economic benefits in the long term. This may be because the static comparative advantages of the economy do not coincide with its dynamic comparative advantages, because of technological externalities associated with learning processes, or because the evolution of the terms of trade is such that the economy would do better to abandon the specialization pattern associated with static comparative advantages. In this case, an industrial policy which reallocates resources to the sectors with dynamic advantages, through subsidies or customs tariffs, is justified if there are flaws in the factor markets (especially the lack of a perfect capital market).

There is another way of approaching the subject of the way in which the specialization pattern can affect the long-term growth rate, that is, when a given factor

endowment does not mean that there is only one possible specialization pattern and the different specialization patterns consistent with the same factor endowment have different dynamic effects. This may be due to the existence of dynamic pecuniary externalities associated with different linkages with sectors of goods which are not tradeable, or only imperfectly tradeable, on the international market. In this case, there is not a conflict between static and dynamic comparative advantages which could, in theory, be satisfactorily solved if the capital market were perfect. There is rather a difference between a very high capital yield on a set of coordinated investments and the yield that could be obtained by an individual investor and which is very low or insufficient to shift capital to the sectors with high growth potential. When the economy specializes in a less dynamic pattern, the problem is thus due to a lack of coordination. Recent models based on this approach may be found in Rodrik (1995), Rodríguez-Clare (1996), Ciccone and Matsuyama (1996), Skott and Ros (1997) and Ros (2000, chapter 9). It hardly seems necessary to note that the subject is closely linked with the debates on the role played by industrial policy in the examples of rapid growth after the war and the recent empirical literature on the effects of the international trade specialization pattern on the growth rate (Matsuyama, 1992; Sachs and Warner, 1997; Sala-i-Martin, 1997).

II

The analytical framework

In neoclassical theory, the pattern of specialization is unequivocally determined by the factor endowment of the economy (along with technology and the terms of trade) because, regardless of the initial conditions, the economy is assumed to converge towards a pattern of specialization which can be explained by the factor endowment. At the other extreme of the theoretical scale, some models in the new international trade theory consider productivity growth to be the result of learning

processes and leave out factor endowment as a determinant of comparative advantages (see, for example, Krugman, 1987). In this case, the specialization pattern cannot be determined independently of the initial conditions and past history. Accidents—that is to say, disturbances in the real sphere, such as a temporary boom in natural resources, or monetary disturbances such as temporary exchange rate overvaluation—are of decisive importance in

determining the pattern of specialization. Industrial policy also becomes of crucial importance in the acquisition of new comparative advantages. The model presented in this section may be seen as an extension of a neoclassical model which admits the existence of increasing returns to scale in the production of non-tradeable inputs, or as a model based on the new international trade theory—like that of Krugman (1987) on the “competitive consequences of Mrs. Thatcher”—which discards the assumption of Ricardian-type technology and introduces non-tradeable goods. As we shall see, in these conditions the factor endowment, the initial conditions and the policies adopted all play a role in determining the specialization pattern.

1. The basic model

Let us consider an economy with three sectors. Sector 1 produces a tradeable good using capital and labour, on competitive conditions and with constant returns to scale. Sector 2 also produces a tradeable good, using capital and non-tradeable inputs (we are leaving out the labour factor for the purpose of simplicity and in order to emphasize that what this sector is producing, on competitive conditions and with constant returns to scale, is a good which makes intensive use of capital). In both sectors, the technology used is of the Cobb-Douglas type. Sector 3 produces the non-tradeable inputs used in sector 2. These inputs are produced using labour and with increasing returns to scale. These intermediate goods can represent a set of manufactured inputs and production services (such as banking and insurance services), as in the model used in Rodríguez-Clare (1996), or they can be a set of infrastructural goods and services (energy, transport and communications), as in Skott and Ros (1997). Formally, input I of the set of intermediate goods I_i may be represented as:

$$I = (\sum (1/n) I_i^\sigma)^{1/\sigma} \quad 0 < \sigma < 1,$$

where n is the number of intermediate goods, assumed to be a given value.

Alternatively, sector 3 may be considered as an industry assembling a set of components I_i produced under conditions of increasing returns:¹

$$I = n^a (\sum (1/n) I_i^\sigma)^{1/\sigma} \quad a > 1 \quad 0 < \sigma < 1,$$

where I is the output of sector 3 and n is the number (not fixed) of components produced. In this case, we

¹ This is what is known as Dixit-Stiglitz and Ethier's specification (see Ethier, 1982).

interpret each of these components as a link in the production process. An increase in the number of components means a finer division of labour. Because of the existence of economies of specialization, this greater division of labour makes it more productive, by increasing differentiation and generating new processes and auxiliary industries (see Kaldor, 1967, p. 14). There are two differences between this specification of sector 3 and the previous one. Firstly, the economies (of specialization) taken into account here are external to the enterprise, unlike the economies of scale, internal to the plant, described in the first specification. This is what the second specification implies: as the parameter a is greater than one, an increase of $x\%$ in the number of components, keeping $(n I_i)$ constant, generates more units of I than an increase of $x\%$ in each component, keeping n constant. Secondly, in the present specification the number of intermediate goods, instead of being given, is endogenous and is determined by the size of the market for sector 3.

In the following sections, the presentation will be based on the first specification, characterized by the presence of internal economies of scale, although qualitatively similar results can be obtained using the second specification. At all events, the key difference between sectors 1 and 2 is that whereas sector 2 has a backward linkage with the sector producing inputs, there are no linkages in the case of sector 1. The integrated sector 2 and 3 may be seen as a “production complex” characterized, as we shall see, by effects which are external to each one of the two sectors that make it up.

a) Multiple equilibria and pecuniary externalities

In an economy like that considered here, under certain conditions there can be multiple market equilibria. A formal analysis of the existence of multiple equilibria is given in the appendix. Here, we will limit ourselves to describing the basic assumption. In order to understand why there are multiple equilibria, we may begin by noting that an equilibrium in which sectors 1 and 2 exist side by side is an unstable equilibrium. Thus, let us imagine an economy in which the two tradeable goods sectors exist side by side and both have the same levels of profitability. In this situation, the reallocation of a small amount of capital to sector 2 has the effect of increasing its relative profitability, for the expansion of the market for sector 3 (associated with the reallocation of capital to sector 2) tends to reduce the cost of producing the intermediate goods in question,

with a favourable effect on the rate of profitability of sector 2. This increase in the relative profitability of sector 2 causes capital to flow to it and hence further increases its rate of profitability. In contrast, reallocation of capital to sector 1 has the opposite effect of reducing the relative profitability of sector 2, by reducing the size of the market for sector 3 and raising the cost of producing intermediate goods. The capital therefore tends to flow to sector 1, further increasing its relative profitability. In both cases the process continues up to the point of the complete disappearance of one of the two tradeable goods sectors and total specialization of the economy in the other sector.

The second thing to be noted is that an equilibrium with specialization in sector 1 always exists in the economy in question, regardless of whether there are multiple equilibria or not. When the levels of capital invested in sector 2 are low, the profitability of the sector tends towards zero, because of the high cost of producing the necessary intermediate goods, but it continues to be positive in sector 1, whatever the level of the stock of capital. There are therefore some allocations of capital, if the levels of capital invested in sector 2 are sufficiently low, in which sector 1 is more profitable than sector 2. As we shall see below, the fact that there is always an equilibrium with specialization in sector 1 is due to the assumption that that sector does not use inputs produced by sector 3.

As there is always an equilibrium with specialization in sector 1, it follows that the existence of an equilibrium with specialization in sector 2 ensures the existence of multiple equilibria. There is an equilibrium with specialization in sector 2 if the profitability of that sector, when all the capital is invested in it, is greater than that of sector 1 (taking account of the market equilibrium wage when the entire labour force is employed in sector 3). As demonstrated in the appendix, the existence of such an equilibrium depends on the capital and labour endowments of the economy and the terms of trade between sectors 1 and 2. In particular, in order for there to be an equilibrium with specialization in sector 2, the total stock of capital must be large enough to ensure that, when it is entirely invested in sector 2, the prices of the intermediate goods must be low enough and the wages high enough to make sector 2, which makes intensive use of capital and inputs, more profitable than sector 1, which makes intensive use of labour. The higher the relative price of the goods produced by sector 1 (with respect to those of sector 2), the greater the size of the stock of capital needed for there to be multiple equilibria, since that

higher price increases the relative profitability of sector 1. The size of the stock of capital needed also increases with the number of enterprises n in the intermediate goods sector, which adversely affects the productivity of sector 3 and the profitability of sector 2.²

The existence of multiple equilibria is associated with the presence of pecuniary externalities (although the presence of such externalities is not of itself a sufficient condition, since there may be a single equilibrium with specialization in sector 1). Thus, the existence of increasing returns to scale in the intermediate goods sector means that production decisions in sector 3 and investment decisions in sector 2 have significant external effects. An increase in the production of one of the intermediate goods adversely affects demand for other inputs, but it lowers the price of the overall set of intermediate goods and increases both the total input of intermediate goods and the rate of profitability of sector 2. In addition to these static effects, there is also a dynamic externality: higher profitability of sector 2 encourages capital accumulation in that sector and leads to an increase in future demand for intermediate goods. On the investment side, the atomized producers in sector 2 take all prices as given and do not take into account the external effects that the greater stock of capital has on future demand for intermediate goods or the tendency for the prices of those goods to go down as the production costs of sector 3 are reduced.

As a result of these dynamic pecuniary externalities, an economy specializing in sector 1 will be trapped in that specialization pattern if all the enterprises follow a line of behaviour which is rational for each of them. As all the capital is invested in sector 1, the demand for intermediate goods is non-existent and the production costs of those goods are extremely high. Consequently, the profitability of sector 2 is so low that the capital is invested in sector 1. This keeps the production costs of sector 3 high and lowers the profitability of sector 2.

b) *The two patterns of specialization compared*

Why does it matter if the economy is trapped in a trade pattern specializing in sector 1? The reason is that the two specialization patterns are not equivalent in terms of economic well-being (nor, as we shall see below, in

² This conclusion does not apply to the model with the second specification of sector 3, in which the number of enterprises is endogenous and positively affects the productivity of the sector.

terms of growth potential). As demonstrated in the appendix, the existence of multiple equilibria ensures that the rate of profitability is higher in the equilibrium specializing in sector 2, provided that that sector makes more intensive use of capital than sector 1. It may be assumed that the high level of the stock of capital needed for there to be multiple equilibria will generate relatively high wages, and this will tend to depress the rate of profitability of sector 1, which makes intensive use of labour. On the other hand, at sufficiently high levels of capital stock, real wages are also higher in the equilibrium specializing in sector 2, for at sufficiently high levels of capital stock the greater scale of sector 3 will have made this sector more productive and reduced the relative price of the intermediate goods produced. As a result, as the stock of capital increases the capital/intermediate inputs ratio in the output of sector 2 tends to go down, and the expansion of sector 2 at the expense of sector 1 generates an excess of demand for labour, with a positive impact on real wages.

2. Extensions

a) *The model involving the use of inputs in sector 1*

In the previous model, the technology available in sector 1 does not use intermediate goods. Let us now assume, however, that sector 1 does use intermediate goods, although less intensively than sector 2.³ The demand for intermediate goods no longer comes exclusively from sector 2 and therefore does not depend on the amount of capital invested in it. The capital invested in sector 1 now also affects the demand for intermediate goods and, ultimately, the relative price of those goods with respect to those produced by sector 2. Consequently, the profitability of sector 2 will now depend not only on the capital invested and the wages in that sector, but also on the capital invested in sector 1 and, hence, the total stock of capital. This means that there will be a sufficiently high value of the stock of capital which, when the whole of that stock is invested in sector 1, will make the relative price of the intermediate goods sufficiently low and wages sufficiently high to cause the rate of profitability of sector 2 to be higher than that of sector 1, both rates being calculated at the market equilibrium values for

wages and intermediate goods. When the total stock of capital reaches that value, the equilibrium with specialization in sector 1 disappears, since sector 2 is more profitable than sector 1 even when the whole of the capital is invested in the latter. Unlike the previous model, it is no longer true that there is always an equilibrium with specialization in sector 1, whatever the size of the total stock of capital.

We now have three configurations. First, for a range of low values of the capital stock there is a single equilibrium. In this equilibrium, the economy specializes in the production of tradeable goods in sector 1, and a small sector 3 exists side by side with sector 1. The trade specialization must be in sector 1, not sector 2, because sector 1 is the sector which uses intermediate goods least intensively and is therefore the only one capable of surviving with the high production costs prevailing in the intermediate goods sector.

In a range of intermediate values of the capital stock, there are two stable equilibria, with specialization in sector 1 and sector 2 respectively. The total stock of capital is sufficiently large to generate a productive intermediate goods sector and make sector 2 viable, but only if the capital is invested in sector 2. If the capital is invested in sector 1, the intermediate goods market will not be sufficient to make investing in sector 2 profitable. In the equilibrium with specialization in sector 2, however, the rate of profitability is greater and the real wage is at least as high as in the equilibrium with specialization in sector 1. The equilibrium with specialization in sector 2 is therefore superior in terms of Pareto's criterion to the equilibrium with specialization in sector 1, not just for a certain minimum value of the capital stock but for the whole range of values of the capital stock where there are multiple equilibria.

Finally, for large values of the capital stock we have a single equilibrium once more. The capital stock is sufficiently large not only to make sector 2 viable but also to cause the equilibrium with specialization in sector 1 to disappear. The low prices of intermediate goods and high wages make it profitable for individual investors to shift from sector 1 to sector 2, even when all the capital is initially invested in sector 1. When this is done, the prices of intermediate goods and wages move in such a way as to strengthen the relative profitability of sector 2, and eventually the whole of the capital shifts to that sector. Sector 1 becomes non-viable because of the high wages associated with the relatively high capital/labour ratio of the economy.

³ This is the case analysed by Rodríguez-Clare (1996), in a model similar to that presented in the appendix. As well as providing for the use of intermediate inputs in sector 1, Rodríguez-Clare's model adopts Dixit-Stiglitz and Ethier's specification for sector 3 instead of the specification with a fixed number of intermediate inputs.

b) *The model with skilled labour in the intermediate goods sector*

Let us now assume that the technology employed in sector 3 uses skilled labour (whereas sector 1 uses unskilled labour).⁴ Together with the size of the capital stock, the level of skills of the labour force thus becomes a further factor influencing the existence of multiple equilibria, for a higher level of skills may make up for the high costs resulting from a small market for intermediate goods produced under conditions of increasing returns and thus tends to reduce the size of

the capital stock required for there to be an equilibrium with specialization in sector 2. Similar conclusions may be reached if it is sector 2, rather than sector 3, which makes intensive use of skilled labour: whereas the high price of intermediate goods tends to depress the relative profitability of sector 2, an abundance of skilled labour tends to increase it, so that sector 2 can be viable depending on the allocation of the capital stock. At all events, the existence of multiple equilibria can be the result of different mixes of levels of skills and capital stocks, rather than simply a range of intermediate values of the capital stock.

III

Industrial policy and growth

Many developing countries have adopted industrial policies in an attempt to speed up the rate of industrialization and the economic growth rate. The results have been mixed, judging from the variety of different results obtained using similar policies. This explains why the efficacy of these policies is a matter of controversy and why there are different opinions as to whether these policies have made a difference and, if so, whether their effects have been positive or negative. This is so even though both observers and policy-makers have amply documented the role of industrial policy in achieving the rapid industrialization of East Asia (see Amsden, 1989; Wade, 1990). This situation goes a long way towards explaining why there is no consensus on the key question of how, and in what conditions, industrial policy can significantly alter the rates of capital accumulation and growth. The analytical framework set forth earlier in this article sheds some light on this question, as we shall see below.

Let us begin by noting that in neoclassical international trade theory factor endowment, technology and the terms of trade are considered to unequivocally determine the pattern of comparative advantages and specialization of an economy. In the analytical framework presented in the previous section,

in contrast, the existence of multiple market equilibria associated with different patterns of specialization but with the same factor endowment, technology and terms of trade makes the very notion of comparative advantage ambiguous. More exactly, when a single equilibrium exists, regardless of whether it is with specialization in sector 1 or 2, it makes sense to say that the economy displays a comparative advantage in the corresponding sector, and the market incentives will induce the economy to specialize in the sector which has a comparative advantage. When there are multiple equilibria, however, there is longer a clear answer to the question of where the comparative advantage in trade lies. It could be said (using a phrase which would make no sense in the context of neoclassical theory) that the economy is in a state of transition between a pattern of comparative advantages which has disappeared and another which has not yet emerged.

The different specialization patterns associated with the same factor endowment have different growth implications. Let us consider, for example, the model with intermediate inputs in the two tradeable goods sectors and assume that the conditions for the existence of multiple equilibria are fulfilled. We will compare two economies which are identical in all aspects (factor endowment, rate of saving, size of the labour force) except their pattern of specialization, since one is specialized in sector 1 and the other in sector 2. As we have seen earlier, real wages and the rate of profitability are higher in the second economy. Consequently, this economy will also have a higher per capita income, so

⁴ A similar case is analysed by Rodrik (1995). In the present analysis, the existence of multiple equilibria is associated with a relatively high level of skills of the labour force, together with a relatively small stock of capital.

that for the same rate of saving and investment it will have higher rates of capital accumulation and growth. The superiority of the growth rate of the economy specializing in sector 2 will be even greater if there is international capital mobility, since this capital will tend to flow to the economy offering the highest return on capital and that economy's rate of investment will therefore tend to be higher.

This means that if an economy is specialized in sector 1, an industrial policy which reallocates resources to sectors 2 and 3, leading to a specialization pattern based on those sectors, will raise the growth rate of the economy. Moreover, in the absence of an industrial policy an economy specializing in sector 1 will not move spontaneously towards the high-growth equilibrium. With the prices and wages prevailing in the equilibrium with specialization in sector 1, the rate of profitability of sector 2 will be below that of sector 1, and no individual investor will find it profitable to invest in sector 2. Individual incentives, as measured by the market, will keep the economy on the low growth path associated with specialization in sector 1, as long as that equilibrium persists. Only when a sufficiently large mass of investors shift simultaneously to sectors 2 and 3 will the profitability of sector 2 be more attractive than that offered by sector 1. However, this requires policy interventions in order to provide the necessary coordination among producers.

It is quite true that eventually the economy specializing in sector 1 will obtain a comparative advantage in sector 2 through the capital accumulation process itself. When that happens, the profitability of sector 2 will be greater than that of sector 1 and the market incentives will lead the economy to specialize in sector 2, since the equilibrium with specialization in sector 1 will have disappeared. During the transition to the stock of capital needed for this to happen, however, an economy which specialized in sector 2 from the start will have a higher growth rate. The high and sustained growth rate of the East Asian economies may be understood as the result of a succession of policy interventions which speeded up the transitions between different patterns of production and international trade specialization. It is hard to imagine how a development model driven primarily by the market forces, such as the developing countries are currently being recommended to adopt, can pass through these transitions so successfully. This is not because there are no examples of successes based on the market (this is open to debate), but because theory suggests exactly the opposite: that the market incentives can hardly solve

efficaciously (or at least efficiently) the problems of coordination that arise in the transition.

Successful policy interventions aimed at speeding up the transition form the basis for Rodrik's interpretation of how Korea and Taiwan became rich (Rodrik, 1995; see also Amsden, 1989, and Wade, 1990). The argument is that, rather than their export orientation, the distinctive feature of these examples of growth was the sharp and sustained increase in their investment rates in the early 1960s. Through a variety of policy interventions, subsidizing and coordinating investment projects, government policy succeeded in reallocating resources to modern industries making intensive use of capital and skilled labour. With growing returns in these activities, such reallocation raised the profitability of capital and propelled the economy towards a high growth path. Outward orientation was a consequence of this, because the higher rates of investment increased the demand for imported capital goods. The relatively high level of skills of the labour force in both countries was a necessary condition for the success of the industrial policy adopted.

At the same time, the analysis made shows the limitations of industrial policy when the conditions needed for its success (the existence of multiple equilibria) are absent. Let us assume that there is a single equilibrium in the economy, with specialization in sector 1. In this case, industrial policy cannot improve the results of the market forces. Let us consider, for example, a policy which seeks to reallocate resources to sectors 2 and 3. Let us assume that this policy is successful in reallocating new investments to sector 2. Precisely because there is no equilibrium with specialization in sector 2, wages in this economy will fall compared with their value for equilibrium with specialization in sector 1. Profitability will also tend to fall, because the stock of capital is small and the costs of the intermediate goods produced are therefore high. With a rate of profitability in sector 2 which is less than that of sector 1 (at market prices and wages), the changes in relative prices which must be induced in order to make sector 2 viable would mean an even greater fall in real wages. On the other hand, when there is a single equilibrium with specialization in sector 2 an industrial policy is not needed. The economy has a clear comparative advantage in sector 2, and the market incentives will of themselves lead the economy to adopt the specialization pattern with the highest growth path.

This means that the existence of externalities is not sufficient to justify an industrial policy. When

industrial policy cannot do anything to improve the market results (when there is only an equilibrium with specialization in sector 1) or is actually unnecessary (when there is only an equilibrium with specialization in sector 2) this is due ultimately to the fact that, as we saw earlier in this article, the presence of static and dynamic externalities is not sufficient to ensure the existence of multiple equilibria.

This analysis has other interesting connotations. In the literature on the effects of industrial policy, the variety of results obtained has tended to be associated with the variety of policies adopted (see for example Amsden, 1989). Thus, for example, the success of the industrial policies applied in East Asia compared with the less successful results obtained in Latin America has been associated with the fact that in the first case the incentives for firms or sectors were granted in exchange for the attainment of clearly defined goals, and the time horizon for the operation of the policies was clearly delimited. These differences undoubtedly must have contributed to the success of the Asian model, but our analysis also suggests that the success of an

industrial policy depends very much on the existence of the necessary conditions for its application. A single given industrial policy may be effective or not, depending on this. In this context, it is easy to understand the importance that the initial level of skills of the labour force in the East Asian countries had for their emergence as industrialized countries in the early 1960s. This relatively high level of skills had existed for a long time before, but it only became crucial later on, when it gave viability to an industrial policy which reallocated resources to modern sectors making intensive use of physical and human capital. Our analysis also makes it possible to understand the role played by the particular design of industrial policies in East Asia. By limiting the time horizon and the incentives offered, these policies incorporated self-correction mechanisms. If the conditions needed for the industrial policy to be effective were lacking, its lack of viability was clearly evident as soon as it began to be applied. This made it possible to turn back and thus minimize the loss of resources that persistence with a non-viable policy would have involved.

IV

The terms of trade and the “Dutch Disease”

The size of the capital stock and the level of skills of the labour force are not the only factors affecting the existence of multiple specialization patterns. As already mentioned, the existence of multiple equilibria also depends on the terms of trade between the goods produced by sectors 1 and 2. In order to illustrate the role of these terms, let us consider an economy specializing in the labour-intensive sector (sector 1), and let us assume that with the passage of time the entry onto the international market of new producers with low wage costs tends to reduce the relative prices of labour-intensive goods. This has the effect of generating an equilibrium with specialization in sector 2, without this necessarily causing the economy to shift to that higher-growth equilibrium. In a way, the economy is losing its competitiveness in sector 1, without however acquiring a comparative advantage in sector 2. This situation corresponds to that of a number of semi-industrialized countries which on the one hand are facing strong competition from new low-wage producers of labour-intensive goods, while on the other

they are not as yet capable of competing with the more efficient producers of capital-intensive goods in the industrialized countries. If we interpret sector 1 as a sector producing primary commodities, this transition describes the balance of payments problems and the eventual beginning of industrialization of countries with abundant natural resources which are facing a deterioration in the terms of trade of their exports of primary commodities.

Whichever of these interpretations is adopted, the transitional economy whose terms of trade have become unfavourable will continue to specialize in the goods produced by sector 1 (primary commodities or labour-intensive goods) until it may reach the high levels of capital which make sector 2 profitable from the point of view of individual investors (unless right from the start the drop in the prices of the goods produced by sector 1 is so great that it eliminates the equilibrium with specialization in sector 1). This is so simply because the equilibrium with specialization in sector 1 is a locally stable equilibrium: no individual investor

alone will find the investment opportunities in sector 2 more attractive than those in sector 1. In the transitional period, the economy will suffer a reduction in its growth rate as a result of the decline in the relative price of sector 1's goods. As equations [7] and [14] in the appendix show, the rate of profitability in that economy is an inverse function of the relative price of the goods produced in sector 2. Insofar as the rate of accumulation depends on this profitability, the reduction in the relative price of the goods produced by sector 1 will adversely affect capital accumulation and growth. In turn, the lower rate of accumulation will prolong the transition to the level of capital stock needed to make the production of goods in sector 2 spontaneously profitable. When there is such a "slow growth trap", economic policy intervention may make a substantial difference in the medium-term growth rate.

Another implication of the analysis confirms the fears expressed in the literature on the "Dutch Disease" (for a review of this literature, see Corden, 1984). Let us assume that sector 1 is natural resource-intensive

and the economy is specialized in sector 2. With the initial terms of trade and capital stock there are multiple equilibria. Starting from this situation, the relative price of sector 1's goods subsequently rises to such a point that sector 1 is more profitable than sector 2, so that the equilibrium with specialization in sector 2 disappears. This shifts resources from sectors 2 and 3 to sector 1 and the economy becomes specialized in sector 1. Later on, the relative price of sector 1's goods returns to its initial level, causing the reappearance of the equilibrium with specialization in sector 2, but there is not a corresponding shift in resources to sectors 2 and 3. The economy continues to be specialized in sector 1 because, as we assumed, with the initial terms of trade there are multiple equilibria and the profitability of sector 1 is therefore greater than that which an individual investor can obtain in sector 2 when the economy is specialized in sector 1. The boom in natural resources, although only temporary, has had permanent effects on the specialization pattern of the economy and the long-term growth rate.

V

Empirical evidence⁵

1. Trade specialization and growth

The main conclusion to be drawn from the foregoing analysis is that the specialization pattern is a determining factor in the economic growth rate. There are two channels by which this influence is exerted. Firstly (controlling for other factors), the capital yield, and hence the investment rate, tend to be higher in the specialization pattern based on industries with increasing returns. Secondly, for the same level of income per worker, specialization in industries with increasing returns is associated with a higher product/capital ratio. This means that, even if the rates of investment are the same, the rates of capital accumulation and growth will be higher when the economy is specialized in industries with growing returns. Let us now look at the empirical validity of these relations.

It is worth noting, first of all, that the reallocation of resources to modern industries making intensive use of capital and skilled labour was accompanied in South Korea and Taiwan, as predicted in our analytical framework, with an increase in capital yields (and also in the rate of investment). In South Korea, profit rates in manufacturing rose from 16% in 1954-1956 to 28% in 1957-1962 and 35% in 1963-1970 (Hong, 1993, cited by Rodrik, 1995). In Taiwan, profitability increased after the late 1950s in the majority of manufacturing sectors except traditional industries such as textiles and wood products (Lin, 1973, cited by Rodrik, 1995).

Let us now look at the relation between specialization and growth through a cross-country analysis. The first question that arises is how to measure the pattern of specialization. As the level of income of a country rises, its trade pattern changes. Typically, the economy changes from being a net importer of manufactures to being a net exporter, and manufactures increasingly dominate its foreign trade. As the level of income affects the growth rate in ways which are independent of the pattern of specialization, it would

⁵ This section is based in part on Ros (2000), chapter 9, sections 3 and 4.

be useful to have an indicator of trade specialization which isolates the effects of resource endowment from those of the policies applied and excludes the influence of the level of income on the trade pattern.

Such an indicator may be found in Chenery and Syrquin (1986). It consists of their index of trade orientation, which can be used to measure the bias towards manufactures in the composition of exports of goods, after adjustment for the income level and size of each country.⁶ The index measures, then, the degree to which an economy specializes in manufactures as a result of factors other than size and income (resource endowment and policies). This index is available for 1975, for 34 countries (including Hong Kong and Taiwan)⁷, many of which were semi-industrialized in the 1970s.

We will also consider a smaller sample of 22 countries for which both the trade orientation index and the Leamer index of intra-industry trade and other features of foreign trade are available. These 22 countries were grouped according to their trade orientation index as follows:

- i) countries with a positive bias towards exports of manufactures, mostly from East Asia and Southern Europe: Egypt, Greece, Hong Kong, Israel, Japan, Morocco, Portugal, Singapore, Spain and Yugoslavia;
- ii) countries with a moderate bias towards exports of primary goods, mostly including Latin American and East Asian countries: Colombia, Costa Rica, Malaysia, Philippines, Thailand and Turkey; and
- iii) countries with a strong bias towards exports of primary goods, mostly consisting of Latin American countries: Argentina, Brazil, Dominican Republic, Ecuador, Ivory Coast and Peru.

Table 1 summarizes the information available for this smaller sample of 22 countries: for the sample in

⁶ This means measuring, for a given country, the deviation between the observed bias towards manufactures and the bias predicted for a typical country of similar income level and size. The trade orientation index of Chenery and Syrquin (1986) actually measures the bias towards primary exports. What we have done is to use this index by multiplying it by -1, which gives us the bias towards manufactures.

⁷ Algeria, Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Egypt, Greece, Guatemala, Hong Kong, Iran, Iraq, Israel, Ivory Coast, Japan, Malaysia, Mexico, Morocco, Peru, Philippines, Portugal, Singapore, South Korea, Spain, Syria, Taiwan, Thailand, Tunisia, Turkey, Uruguay, Venezuela and Yugoslavia.

question it reveals a positive relation between the bias towards exports of manufactures and the investment rate. Table 2 presents cross-country correlations for the sample.

Table 3 gives correlations for the larger sample (34 countries); the correlation coefficient between the bias towards manufactures and the investment rate is 0.35. This is exactly what was implied by the models in section II, which suggest that specialization in industries with increasing returns (a bias towards manufactures) should have a positive effect on the investment rate.

As already noted, another implication of these models concerns the effect of the specialization pattern on the rate of capital accumulation, for a given investment rate. As table 2 shows, the correlation between the trade orientation index (which measures the degree to which an economy specializes in the export of manufactures) and growth is very high (0.73): higher than the correlation between the trade orientation index and the investment rate. Also noteworthy is the very significant coefficient of the trade orientation index in a regression of the growth rate with this index, the investment rate, and the initial level of GDP per worker:

$$g = 2.02 + 0.09 I/Y + 1.47 OC - 0.0002 Y/L_{60} \quad R^2 = 0.75$$

(3.73) (4.02) (4.39) (-4.42)

where g is the growth rate of the GDP per worker (1960-1990); I/Y is the real investment rate (1970-1980); OC is the trade orientation index of Chenery and Syrquin, 1975, and Y/L_{60} is the real GDP per worker in 1960. The t statistics are given in parentheses.

This equation indicates that, for the same initial income and investment rate, countries which specialized in the export of manufactures grew faster during the 1960-1990 period than primary commodity exporters. If we interpret sector 1 of the model in the first section as a sector which makes intensive use of natural resources and has few linkages with activities having increasing returns, the equation illustrates the basic implications of the model in terms of the effects of investment allocation on growth. The initial level of GDP per worker also has a very significant (negative) coefficient in the regression. This suggests that in this group of 34 semi-industrialized countries there is a tendency towards convergence: other conditions being equal, the countries with a lower level of income tended to grow faster. As the models examined previously indicate, however, this convergence was conditioned by the specialization pattern: the economies specializing in the export of manufactures converged towards high levels of income faster than those specializing in

TABLE 1

22 countries: Trade orientation, investment and growth^a
(Averages per group of countries)

	Bias towards export of manufactures	Bias towards export of commodities	
		Moderate	Strong
Trade orientation index 1975	0.45	-0.10	-0.45
Rate of investment	24.8	19.1	19.5
Growth rate	4.1	2.8	1.5
Foreign trade share	84.8	48.5	39.2
Trade intensity (Leamer 1)	0.08	0.04	-0.05
Index of intra-industry trade	0.56	0.30	0.17
Number of countries	10	6	6

^a For definitions and sources, see text of article and notes to table 3.

TABLE 2

22 countries: Cross-country correlations^a

	Trade orientation index 1975	Intra- industry trade	Trade intensity	Foreign trade share
Trade orientation index 1975	1.00	0.69	0.42	0.35
Intra-industry trade		1.00	0.73	0.71
Trade intensity			1.00	0.85
Foreign trade share				1.00

^a For definitions and sources, see text of article and notes to table 3.

TABLE 3

34 countries: Cross-country correlations

	TO ₁₉₇₅ ^a	I/Y ₇₀₋₈₀	Foreign trade share ^b	Growth ^c
TO ₁₉₇₅	1.00	0.35	0.33	0.73
I/Y ₇₀₋₈₀ ^d		1.00	0.30	0.54
Foreign trade share			1.00	0.39
Growth				1.00

^a TO₁₉₇₅ : Trade orientation 1975 (Chenery and Syrquin, 1986).

^b (Exports + Imports) / nominal GDP. Average for 1970-1980 period (*Penn World Tables, Mark 5.6*).

^c Growth : growth rate of real GDP per worker 1960-1990 (*Penn World Tables, Mark 5.6*).

Intra-industry trade: index of intra-industry trade 1982 (Leamer, 1988).

Trade intensity: adjusted index of trade intensity 1982, Leamer 1 (Leamer, 1988).

^d I/Y₇₀₋₈₀ : Share of investment in GDP. Average for 1970-1980 period (*Penn World Tables, Mark 5.6*).

commodity exports. In reality, they were converging towards a higher equilibrium level of income, as the analysis made in section II suggests.

It may be noted that the results presented here tend to confirm the findings of recent studies (Sachs and Warner, 1997; Sala-i-Martin, 1997), which show that, after controlling for other variables, economies

specializing in the production and export of goods making intensive use of natural resources tend to grow more slowly than those specializing in the export of manufactures. According to Sachs and Warner, abundance of natural resources, as measured by the percentage of GDP accounted for by exports making intensive use of natural resources, has a negative effect

on growth: an influence that the authors attribute to “Dutch Disease”-type effects. These authors experiment with other measures of abundance of natural resources (such as the share of commodity exports in total exports, or the amount of land per capita), with results that confirm this negative relation. According to Sala-i-Martin, exports of primary commodities as a proportion of total exports is one of the few economic variables which is systematically (negatively) correlated with growth.

2. Trade openness, investment and growth

In their “sensitivity analysis” of cross-country growth regressions, Levine and Renelt (1992) examined the robustness of the empirical relations between long-term growth and a variety of economic, political and institutional indicators. Their findings were pessimistic. Although there are many econometric specifications in which various indicators are significantly correlated with per capita growth rates, almost all these specifications are fragile in the sense that small alterations in the “other” explanatory variables change the results previously obtained. Only two relations pass this test. One is the positive correlation between growth and the investment rate (investment as a percentage of GDP). The other is the positive correlation between the share of foreign trade in GDP and the investment rate. Table 3 presents results that support these conclusions for the large sample of 34 countries: the positive correlation between growth and the investment rate (0.54) and that between the share of foreign trade and the investment rate (0.30).

The first result is reassuring because it coincides with economic theory. The second is a puzzle, however. Firstly, it is important to note that the robust relation found by Levine and Renelt is not between the investment rate and trade barriers, but between the investment rate and the share of foreign trade. The relations between the investment rate (or the growth rate) and various indicators of trade barriers or distortions in foreign trade policy are not robust⁸, so the robust relation does not seem to reflect the effects

⁸ These indicators include “real exchange rate distortion” (Dollar, 1992), the average premium on the currency black market, and Chenery and Syrquin’s trade openness index. In a more recent review of the literature on trade policy and growth (after the publication of Levine and Renelt’s article), Rodríguez and Rodrik (1999) conclude that trade policy indicators lack statistical significance in well-specified cross-country growth regressions.

of trade policy. Secondly, when controlled for the investment rate, there is no robust relation between the share of foreign trade and growth (provided of course that the indicator used is the share of exports and/or imports). The fact that the robust relation is between trade and the investment rate suggests that if trade affects growth it does not do so through the conventional channels involving resource allocation but through less conventional channels involving positive effects on the investment rate.

What these channels can be is not clear from the existing literature. Romer (1990 a and b) suggests that trade openness has a positive effect on research and development expenditure and, by thus increasing the rate of technological change, influences the investment and growth rates. Other points of view stress the positive effects of trade openness on technology transfer.⁹ Whatever the merits of these views, they hardly represent a convincing explanation of Levine and Renelt’s findings. One reason is that the trade openness considered in these models does not refer to the share of trade in GDP and therefore any attempt to provide an explanation of the statistical relation between the share of trade and the investment rate runs up against an old objection recently restated by De Long and Summers (1991). The share of trade is influenced by the size of a country and its proximity to its trading partners. If Belgium and the Netherlands were to merge, it would be difficult to imagine how much the combined rate of technical progress should go down (or increase) because this new entity would be less “open” than each of the two countries separately.¹⁰

Even if the objection against measuring trade openness by the share of foreign trade were not decisive, however, the following question remains: Why is the robust correlation only between investment and trade

⁹ At the same time, it can be argued that the effects of trade openness depend on the specialization pattern induced by the greater openness (as in the model in section II). In some North-South models, such as that of Young (1991), trade openness can even result in a slower rate of technological change in the South. Moreover, foreign direct investment is a major vehicle for technology transfer but there is no clear relation between trade openness and openness to foreign direct investment.

¹⁰ It should be noted that De Long and Summers’ observation is not an objection against models in which trade openness -in the sense of the absence of trade barriers- has a positive effect on investment. It is rather an objection against the use of the share of foreign trade in GDP as a measure of trade openness. The implication, however, is that we must not interpret the correlation between investment and the share of foreign trade as evidence in support of models in which openness stimulates investment.

share and not between investment and other (more appropriate) measures of trade openness? The analysis made in this and earlier sections suggests various hypotheses which can provide a convincing explanation of the positive relation between trade share and the investment rate.¹¹ Our line of argument will be that the link between trade and investment involves the specialization pattern as determined by policies and factor endowment, including natural resources. The studies on differences in growth rates between countries have ignored these links because, with a few recent exceptions, they have ignored the influence these two factors (industrial policy and resource endowment) exert through their effects on trade orientation.¹²

The nub of the argument is that the positive correlation between trade share and the investment rate is measured by the trade orientation; in other words, the explanation of the positive relation is that the trade share and investment rate are both positively affected by a bias towards manufactures in trade orientation. We have already analysed and illustrated the effects of trade orientation on the investment rate. We will now look at the effects of trade orientation on trade share. Table 1 shows a positive relation between these two variables, while tables 2 and 3 show positive coefficients of correlation of 0.35 and 0.33.

Why should a specialization pattern based on the export of manufactures have a positive effect on trade share? One reason is the positive effect that

specialization in activities with increasing returns can have on trade creation. The increasing returns favour the expansion of intra-industry trade -two-way trade flows of similar products with economies of specialization. Countries with a bigger bias towards manufactures in their exports usually have higher indexes of intra-industry trade. The correlation coefficient between the two indexes, as shown in table 2, is 0.69.

A second reason may be the presence of “Dutch Disease”-type effects of exports of primary commodities. What the “Dutch Disease” models imply is that commodity-exporting countries tend to be less open (other things being equal), because in the long-term equilibrium they have bigger non-tradeable goods sectors (see Ros, 2000, chapter 8). It may be noted in this respect that trade orientation towards manufactures has a positive relation with Leamer’s trade openness index. This is an adjusted trade intensity index which represents the difference between the observed level of trade (not the trade pattern) and the level predicted by a Heckscher-Ohlin model, which includes factor endowment and distance to markets. The positive relation with trade orientation indicates that the more biased the trade orientation is towards commodity exports, the lower the index of trade intensity tends to be, probably because of the existence of larger non-tradeable goods sectors and lower levels of intra-industry trade.

VI

Conclusions

This study offers an analytical framework for analysing the relations between the specialization pattern and growth, together with empirical evidence which does indeed suggest that the specialization pattern is an im-

portant determinant in the growth process. The analysis showed the scope and limitations of industrial policy. On the one hand, it showed how an industrial policy which reallocates resources towards sectors with potential to exploit economies of scale and specialization can raise the growth rate of an economy by increasing the capital yield and capital accumulation rate. On the other hand, it clearly revealed that the efficacy of industrial policy depends on the presence of certain conditions—especially physical and human capital endowment and a sufficiently broad market for sectors with economies of scale and specialization— which do indeed allow the reallocation of resources to raise the profit rate in the new spearhead sectors.

¹¹ We have already mentioned the argument put forward by Rodrik (1995) whereby a higher investment rate can lead to a higher trade share as a result of an increase in imports of capital goods in economies which are in the process of industrialization. In this argument, the causality is from investment to trade and not in the opposite direction. In the following paragraphs of this article our ideas will follow a different direction which is complementary to the foregoing.

¹² As already mentioned, the exceptions include Sachs and Warner (1997) and Sala-i-Martin (1997).

The empirical analysis tended to confirm that economies oriented towards the export of manufactures tend to grow faster than those oriented towards commodity exports. Among the semi-industrialized countries, there are no examples of super-growth based on the export of goods making intensive use of natural resources.¹³ This does not mean that countries with an abundance of such resources must change their specialization pattern in order to grow faster. Efforts in this direction would probably be a failure in many of them, precisely because the efficacy of industrial policy is conditioned by factor endowment. Nor does it mean that these countries with an abundance of natural resources are doomed to grow more slowly than countries with a bias towards exports of manufactures,

since they can speed up their growth process by trying to influence other determinants of that process.

Finally, it should be noted that in this article the economic policy implications are limited by the type of externalities considered. The external effects of a pecuniary and dynamic nature which take place between producers of capital-intensive goods and producers of intermediate goods operating in conditions of increasing returns give rise to flaws in coordination whose solution calls for public intervention. However, the study did not deal with other types of externalities and market flaws (especially in factor markets) which justify interventions generally included under the heading of industrial policy.

(Original: Spanish)

Appendix: The formal model¹⁴

There are two sectors producing tradeable goods in the economy (denoted by 1 and 2). The technology used in both sectors is of the Cobb-Douglas type:

$$Q_1 = K_1^b L_1^{1-b} \quad Q_2 = K_2^a I^{1-a}$$

where K is the capital input and L is the labour input. Let us assume that $a > b$, that is to say, sector 2 is more capital-intensive than sector 1. I represents the input consisting of a set of intermediate goods:

$$I = (\sum (1/n) I_i^\sigma)^{1/\sigma} \quad 0 < \sigma < 1,$$

where n is the number of intermediate goods, assumed to be given. The sector producing these intermediate goods (sector 3) does so using labour in conditions of increasing returns to scale:

$$I_i = L_i^{1+\mu} \quad \mu > 0 \quad [1]$$

where L_i is the labour input.

The enterprises in the three sectors maximize their benefits, taking the prices of the inputs as given. The enterprises in sectors 1 and 2 also take the prices of the goods produced as given. In both sectors the capital stock is predetermined. The levels of use of the factors variable in the short term are derived from the first-order conditions for the maximization of benefits:

$$L_1 = [(1-b)p_1/w]^{1/b} K_1 \quad [2]$$

¹³ Although Botswana can hardly be described as a semi-industrialized economy, it comes closest to being an exception to this. The sustained progress of this economy seems to have been the result of a series of mining booms (diamond mining) within the context of a stable macroeconomic policy.

¹⁴ This appendix is based on Ros (2000), chapters 5 (sections 2 and 3), 8 (section 3) and 9 (section 1).

$$I = (1-a)^{1/a} (p_3/p_2)^{-1/a} K \quad [3]$$

where w is wages, p_1 and p_2 are the prices of goods 1 and 2, and p_3 is the (minimum) cost of a basket of intermediate goods such that $I = 1$.

In sector 3, the producers operate in conditions of monopolistic competition and face downward-sloping demand curves:

$$I_i^d = D p_i^{-\eta} \quad \eta > 1 \quad [4]$$

where D reflects the position on the demand curve and η is the price elasticity of demand faced by individual producers. This elasticity is a function of σ , a and n , and for large values of n is given approximately by $1/(1-\sigma)$. The inequality in [4] is due to the parametric restrictions $0 < a < 1$ and $0 < \sigma < 1$.

Based on the demand function in [4] and production function [1], the optimal price decision of an individual producer of intermediate goods is a profit margin (π) over the marginal cost (ω):

$$p_i = (1 + \pi) \omega \quad [5]$$

where:

$$1 + \pi = [\eta / (\eta - 1)] \quad \omega = w/(1 + \mu) I_i^{\mu / (1 + \mu)}$$

Equations [4] and [5] are combined with the input demand of sector 2 (equation [3]) to find a solution for I , p_3 and D . Using [1] and the solution for I , we obtain the level of employment in sector 3:

$$L_3 = [(1/n)^{1-f} G K_2^a p_2/w]^{1/f} \quad [6]$$

$$G = (1-a) (1 + \mu) (\eta - 1) / \eta$$

$$f = a - \mu (1 - a)$$

Equilibrium in the labour market

Equilibrium in the labour market means a uniform rate of wages in sectors 1 and 3, with full employment of the labour force (L): $L = L_1 + L_3$. Let us consider what happens with the equilibrium wage when capital is reallocated from sector 1 to sector 2. At the initial level of wages, the reduction in the stock of capital in sector 1 causes a decline in the demand for labour in that sector. Using the labour demand equation for L_1 and keeping wages constant, the reduction in employment in sector 1 is given by:

$$-dL_3 = [(1-b) p_1 / w]^{1/b} (-dK_1)$$

The greater stock of capital in sector 2 causes an increase in the demand for labour in sector 3. Using the demand function for L_3 , the increase in employment in sector 3 at the initial wage level is:

$$dL_3 = [(1/n)^{1-f} G p_2 / w]^{1/f} (a/f) K_2^{(a/f)-1} dK_2$$

with $-dK_1 = dK_2$, on the assumption that the reallocation does not affect the total stock of capital. Whether the change gives rise to an excess supply or demand for labour depends on the size of $(-dL_1)$ compared with (dL_3) . Obviously, the answer depends on the level of K_2 . When K_2 is small, sector 3 is also small and produces at very high costs, in view of the existence of economies of scale in this sector. As the relative price of intermediate inputs (p_3/p_2) is very high, the capital intensity (K/I) in sector 2 is also very high, even though the absolute value of K_2 is small. With a high value of the ratio (K/I), the increase in the stock of capital in sector 2 has only small indirect effects on employment in sector 3. The reduction in the demand for labour in sector 1 is then greater than the increase in the demand for labour in sector 3. A reallocation of capital from sector 1 to sector 2 thus tends to create an excess supply of labour, and this requires a reduction in wages in order to clear the labour market.

In contrast, when the level of K_2 is high, the indirect effects of the expansion of sector 2 on employment may outweigh the reduction in the demand for labour in sector 1. The greater scale of sector 3 has made it more productive and reduced the relative price of intermediate goods. With a lower level of capital intensity (K/I), the expansion of sector 2 at the expense of sector 1 may then have the effect of giving rise to excess demand for labour and increasing the equilibrium wage.

We can formally verify that a reallocation of capital to sector 2 should first of all have the effect of lowering the equilibrium wage but later on have the effect of raising it. Substituting the labour demand functions in the full employment condition, we can derive an equilibrium locus for the labour market which shows the equilibrium wage for

different compositions of the capital stock. Keeping K constant, the slope of this locus in the space ($\log w, \log K_2$) is:

$$d \log w / d \log K_2 = [a/f - (K_2/K_1)(L_1/L_3)] / [1/f + (1/b)(L_1/L_3)]$$

where L_1/L_3 , using the labour demand functions, is given by:

$$L_1 / L_3 = (B K_1 / A K_2^{a/f}) w^{1/f-1/b}$$

$$B = [(1-b) p_1]^{1/b} \quad A = [(1/n)^{1-f} G p_2]^{1/f}$$

As we can see, the slope of this locus is negative, tending towards zero at low levels of K_2 but becoming positive and tending towards “a” at high levels of K_2 (on condition that such high values exist because of the size of the total capital stock). Consequently, the equilibrium value of wages first goes down as K_2 increases and subsequently rises, becoming a growing function of K_2 (see figure 1).

Equilibrium in the capital market

Using the definition of the profit rate and the first-order conditions for maximizing benefits in sectors 1 and 2, the rates of profitability in these sectors may be expressed as inverse functions of the wage rate:

$$r_1 = b (p_1 / p_2) [(1-b) p_1 / w]^{(1-b)/b} \quad [7]$$

$$r_2 = a K_2^{\mu (1/a)f} [(1/n) G / (w/p_2)]^{(1-f)/f} \quad [8]$$

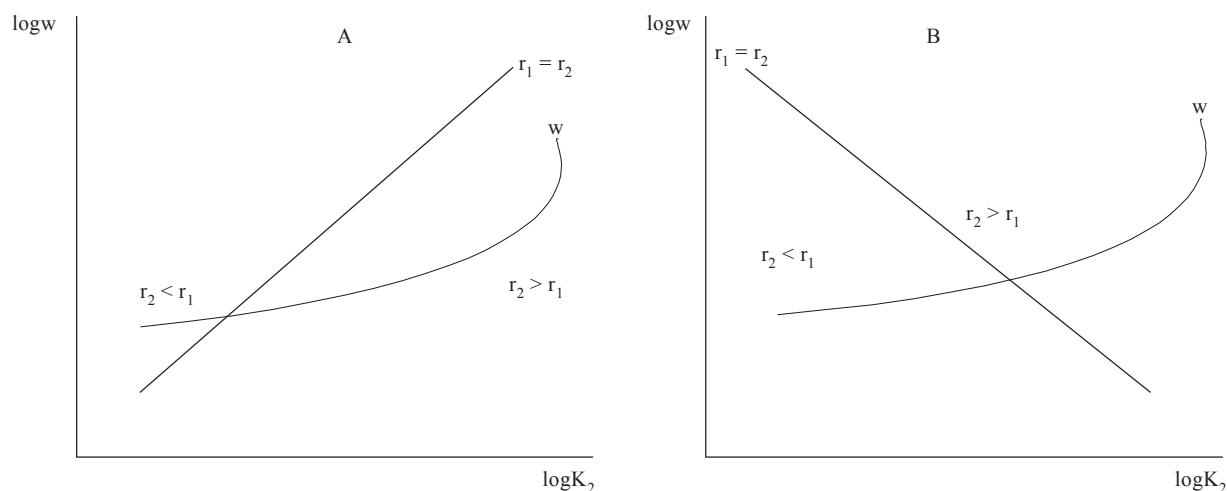
Capital is assumed to be mobile between sectors 1 and 2. Equilibrium in the capital market requires full use of the total stock of capital (K) and equal rates of profitability in the two sectors using capital (insofar as these two sectors exist side by side):

$$K = K_1 + K_2 \quad r_1 = r_2$$

By replacing the expressions for the profit rate in the condition of equality between the two rates, we can derive the equation for an equilibrium locus in the capital market. In the space (w, K_2), this locus shows the value of K_2 for each given value of wages and the corresponding composition of the capital stock which gives the same rate of profitability in sectors 1 and 2. So, if there is an increase in wages, how must the composition of the capital stock change in order to maintain equilibrium in the capital market? Intuitively, the answer to this question depends on which of the two sectors makes the most intensive use of labour. Higher wages will naturally tend to cause a bigger reduction in the profitability of the sector which makes the most intensive use of labour. The reallocation required would therefore depend on the

FIGURE 1

Specialization pattern for increasing returns to scale



effects of K_2 on the relative rates of profitability.¹⁵ The problem is that in this model it is not clear which of the two sectors makes the most intensive direct and indirect use of labour. Although the use of capital in sector 2 is more intensive than in sector 1 (in the sense that $a > b$), the parameter of increasing returns (μ) may be sufficiently great to cause the “indirect” share of labour in sector 2 to be greater than the share in sector 1. This is because of the presence of returns to scale in sector 3, which causes the sum of the shares of capital and labour in the “integrated” sectors 2 and 3 to be greater than unity.

Formally, the slope of the locus for capital market equilibrium in the space ($\log w$, $\log K_2$) is given by:

$$d\log w / d\log K_2 = [\mu (1-a) / f] / [(1-a)(1+\mu) / f - (1-b)/b]$$

We have, in fact, two different cases, depending on the technology parameters for the three sectors. Section A of figure 1 shows the case where $b > f$. This means that $(1-a)(1+\mu) > (1-b)$, that is to say, that the “indirect” share of labour in sector 2 is greater than the share of labour in sector 1. In this case, an

increase in wages (K_2 being given) reduces the rate of profitability in sector 2 more than in sector 1. An increase in K_2 (which has a positive effect on r_2) is therefore required in order to restore equality of profit rates. This means that the slope of the locus is positive.

In the second case (section B of figure 1), we have $b < f$. This means that $(1-a)(1+\mu) < (1-b)$: in other words, the “indirect” share of labour in sector 2 is less than in sector 1. In this case, an increase in wages (K_2 being given) will reduce the profitability of sector 1 more than that of sector 2. This requires a reduction in K_2 (which reduces r_2) in order to restore equality of rates of profitability. The slope of the locus is then negative.

In the two configurations shown in figure 1, the area to the right of the locus $r_1 = r_2$ is such that sector 2 is more profitable than sector 1. This is because it is an area in which K_2 is relatively large for each given level of wages, and K_2 has a positive effect on the relative profitability of sector 2. Thus, on the right of the locus capital will flow to sector 2 and the ratio K_2/K_1 will tend to increase. To the left of the locus $r_1 = r_2$, in contrast, the profitability of sector 2 is less than that of sector 1 and capital will flow to sector 1. It follows from this that in both cases the composition of the capital stock corresponding to the intersection of the two loci is an unstable equilibrium. As the figure shows, allocation of the capital stock with a level of K_2 which is higher than at the intersection generates a profit rate in sector 2 which is higher than that of sector 1. Capital thus moves to sector 2 and further depresses the relative profitability of sector 1. Similar mechanisms, in the opposite direction, operate

¹⁵ If there is no effect—that is to say, if K_2 does not appear in the equation for the rate of profitability of sector 2—there will be no reallocation capable of restoring the equality of the rates of profitability. In this case, the locus would be a horizontal straight line corresponding to the single value of wages consistent with equality of the rates of profitability. As may be seen, this is the case if $\mu = 0$: that is to say, if the technology of the integrated sector 2/3 has constant returns to scale.

for capital allocations in which K_2 is lower than at the intersection.¹⁶

Multiple equilibria

We can also verify that when the two curves intersect, this intersection is unique.¹⁷ Consequently, if an intersection exists there will be two stable equilibria in which the whole of the capital stock is invested in one of the two sectors. In one equilibrium, the economy is completely specialized in sector 1. As in this case there is no sector 3, not only the whole of the capital stock but also the whole of the labour force is employed in sector 1. In the other equilibrium, the economy is specialized in the production and export of the goods produced in sector 2, and as there is no sector 1 the whole of the labour force is employed in sector 3.

In our economy, there is always an equilibrium with specialization in sector 1, regardless of whether or not there are multiple equilibria. As already noted in the article, this is because of the assumption that sector 1 does not use intermediate inputs produced under conditions of increasing returns. At low levels of K_2 , the profitability rate of sector 2 will tend towards zero, while it will remain positive in sector 1 however large the capital stock is. There are therefore capital allocations at sufficiently low levels of K_2 for which sector 1 is more profitable than sector 2.

As there is always an equilibrium with specialization in sector 1, it follows that the existence of an equilibrium with specialization in sector 2 ensures the existence of an intersection and hence also ensures the existence of multiple equilibria. Likewise, an equilibrium with specialization in sector 2 exists if the profitability of sector 2, when the whole of the capital stock is invested in that sector, is greater than that of sector 1 (valued at the market equilibrium wage corresponding to $L = L_3$). Let us first of all consider the wage with specialization in sector 2 (w_2^*). Using [6] and the conditions $L_3 = L$ and $K_2 = K$, and solving the equation for the wage, we have:

$$w_2^* = G (1/n)^{1-f} p_2 K^a / L^f \quad [9]$$

Substituting [9] in [8], and making w_2^* equal to w_2 and K_2 equal to K , we obtain the profitability rate for the equilibrium with specialization in sector 2 (r_2^*):

$$r_2^* = a (L/n)^{1-f} / K^{1-a} \quad [10]$$

The profitability rate in sector 1, valued at wage w_2^* , is obtained by substituting [9] in [7]:

$$r_2^1 = b (p_1 / p_2)^{1/b} [(1-b) n^{1-f} L^f / G K^a]^{(1-b)/b} \quad [11]$$

It should be noted that the profitability rate of sector 1, r_2^1 , valued at wage w_2^* , is an increasing function of the number of producers of intermediate goods (n). A larger number of producers increases the unit cost of each of the intermediate goods and reduces the demand for labour in sector 3. This has a negative effect on w_2^* and thereby tends to increase the rate of profitability in sector 1, which does not use intermediate goods. This negative effect on wages is offset in the case of the profitability rate of sector 2, since a larger number of producers implies higher costs in sector 2: r_2^* is a decreasing function of the number of producers (n).

Using [10] and [11], the condition for $r^* > r_2^1$ and, hence, for the existence of multiple equilibria, is:

$$K^{a-b} > K^{* a-b} = (b/a)^b (p_1/p_2) [(1-b) / G]^{1-b} n^{1-f} L^{f-b} \quad [12]$$

The existence of multiple equilibria depends on the endowment of capital and labour and the relative prices. In particular, the total stock of capital must be sufficiently large to ensure that, when the whole of that stock is invested in sector 2, the price of intermediate goods is sufficiently low to make that sector viable. The critical value (K^*) of the total stock of capital increases with the relative price (p_1/p_2), which increases the profitability of sector 1. That profitability also increases with the number of enterprises (n) in sector 3, which adversely affects the profitability of sector 2. The effect of the size of the labour force on the critical value of the capital stock depends on the sign of $(f-b)$, that is to say, on the “indirect” share of labour in sector 2 compared with sector 1.

Let us assume that the conditions for the existence of multiple equilibria are fulfilled, and let us then compare the wages and profitability rates in the two equilibria. In the equilibrium with specialization in sector 2, the rates of wages and profitability are given by equations [9] and [10]. In the equilibrium with specialization in sector 1, we have $K_1 = K$ and $L_1 = L$. Using equations [2] and [7], the wages and rates of profitability in the equilibrium with specialization in sector 1 are:

¹⁶ The instability of the capital allocation corresponding to the intersection is due to the existence of increasing returns to scale in the integrated sector 2/3. At constant returns to scale, the labour market equilibrium locus has a negative slope (if the integrated sector 2/3 is the capital-intensive sector), while the capital market equilibrium locus is a horizontal straight line (see footnote 15). As the reader can see, in this case the equilibrium corresponding to the intersection is stable.

¹⁷ In case A, this is because the capital market equilibrium locus has a more pronounced slope than the labour market equilibrium locus at high levels of K_2 . The necessary and sufficient conditions for this are that $a > b$ and $f > 0$. In case B, the intersection is unique because the capital market locus has a steeper slope, at low levels of K_2 , than the labour market locus.

$$w_1^* = (1-b) p_1 (K/L)^b \quad [13]$$

$$r_1^* = b (p_1/p_2) (L/K)^{1-b} \quad [14]$$

Comparison of [10] and [14] shows that r_2^* is greater than r_1^* if:

$$K^{a-b} > K^{**a-b} = (b/a) (p_1/p_2) n^{1-f} L^{f-b} \quad [15]$$

Comparing [12] and [15] we can establish that $K^* > K^{**}$. The assumption that $a > b$ and the second-order condition for a maximum of producers of intermediate goods guarantee this inequality.¹⁸ Consequently, when an equilibrium with specialization in sector 2 exists ($K > K^*$), the rate of profitability in this equilibrium is greater than in

the equilibrium with specialization in sector 1 (since K is then greater than K^{**}).

Examination of [9] and [13] shows that for w_2^* to be greater than w_1^* the total stock of capital must be such that:

$$K^{a-b} > K^{***a-b} = (1-b) (p_1/p_2) n^{1-f} L^{f-b} / G \quad [16]$$

From [12] and [16] we can establish that $K^{***} > K^*$.¹⁹ The existence of an equilibrium with specialization in sector 2 does not ensure that the wages in that equilibrium are higher than in the equilibrium with specialization in sector 1. For this to take place, the capital stock must be greater than K^{***} . In that case, with $K > K^{***}$ and hence with K greater than K^* and K^{**} , there is an equilibrium with specialization in sector 2 which has both profitability rates and wages higher than in the equilibrium with specialization in sector 1.

¹⁸ $K^* > K^{**}$ if the following condition is fulfilled:

$$(1-b)/b > [(1-a)/a] (1+\mu) (1-1/\eta)$$

$a > b$ means that $(1-b)/b > (1-a)/a$. In order for the second-order condition for the maximization of benefits among producers of intermediate goods to be fulfilled, it is necessary that $(1+\mu)(1-1/\eta) < 1$. Together, these inequalities ensure the fulfillment of the above condition.

¹⁹ This requires, as in the previous case:

$$(1-b)/b > [(1-a)/a] (1+\mu) (1-1/\eta)$$

This inequality is guaranteed by the conditions mentioned earlier ($a > b$ and the second-order condition for the maximization of benefits among the producers of intermediate goods).

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Brazil in the *1990s:* an economy *in transition*

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The 1990s have been termed “the reform decade” in Brazil, because of the significant number of changes which took place in various aspects of that country’s economic and administrative policy. This article aims to systematically set forth the main features of those changes and analyse them in the light of the literature on reforms. It represents an attempt to sum up various studies made on the case of Brazil as part of a regional-level study coordinated by ECLAC. The article finds that in various aspects the results have been in line with those proposed by the literature in question, but not everything has turned out as planned or desired. It considers that this disparity of results can be explained by factors ranging from the way the reform process was designed, in some cases, to the different perceptions by the economic agents of the market signals associated with those changes.

I

Introduction

Analysis of the Brazilian economy during the 1990s represents much more than something which coincides with the calendar. This period, which is an extremely fertile area of study, displays a number of aspects which will continue to be analysed for a long time to come.

The international scene at the beginning of the decade was marked by an increasingly intensive flow of capital and technological changes, although the difficulties associated with an unstable domestic macroeconomic environment did not allow the Brazilian economy to participate to the full in these new movements. Furthermore, the economic policy-makers were constantly being reminded of the success of the emerging economies in other regions, and the path for attaining such success seemed to be clearly marked, according to the various analysts.

At the domestic level, the growing inflation was giving rise to various anti-inflationary attempts, while a new Constitution (promulgated in 1988) added further fiscal and social problems to an already unsettled economic environment.

In the second half of the decade, the context was markedly different. The stabilization of prices achieved, accompanied by relative openness to foreign trade, has

no precedent in the economic history of the country. At the macroeconomic level, various important changes were made which facilitated access to international capital markets and led to a new growth pattern.

The purpose of the present article is to analyse these features in the light of the adjustment process which took place in the 1990s. Some aspects evolved in line with the prescriptions of the specialized literature on reforms in developing countries. Not everything turned out as planned or desired, however. We consider that the reasons for this lie in factors ranging from policy design to the economic agents' perceptions of the market signals.¹

This article has five sections. The following section (section II) gives a brief overview of the literature on the reforms, and more specifically the suggestions as to the time and sequence for their application. Section III then gives a detailed account of the basic characteristics of the reforms applied in Brazil during the 1990s. Section IV analyses some results which do not fully correspond with the expectations, and an attempt is made to identify the reasons for this. Finally, section V relates some lessons that may be derived from the recent Brazilian experience.

II

The need for reform, and the basic recipes

In general, Latin American policy-makers were exposed to a variety of pressures during the 1970s and 1980s. The economic and social distortions and shortcomings which existed, together with external constraints made worse by the intensive movements in international commodity markets and the prevailing financial difficul-

ties, further increased the need to promote substantial reforms.

The countries of the region adopted different approaches in the course of the period studied,²

□ The views expressed here are exclusively those of the author and do not necessarily correspond with those of ECLAC or the University of Brasilia. This text is an updated and edited version of the chapter published in Baumann (coord.), 2000.

¹ This article is based on the 1988-1998 period. Even so, we consider that its findings hold good for the rest of the decade, because although the economic contraction and changes in relative prices in 1999 and the recovery in activity in the year 2000 changed some aspects, most of the basic tendencies analysed here continue to hold good.

² As may be seen, for example, from the processes of greater openness

although in general the design of the reforms was highly influenced by the orthodox reading of the results of the successful experiences of the emerging economies of Southeast Asia. According to this view, reform was an urgent task, because the sooner the adjustment process was begun, the lower the costs involved would be. In the words of a high World Bank official, “a delayed adjustment is more painful” (Stern, 1991, p. 3).

Market-oriented policy reforms were recommended, on the basis of four main arguments (Rodrik, 1993a, p. 7): a) economic liberalization reduces the static inefficiencies generated by faulty distribution and waste of resources; b) it stimulates the learning process; c) outward-oriented economies manage to cope with adverse external shocks better, and d) market-based economic systems are less prone to rent-seeking activities which lead to waste of resources.

Thus, a reform programme should include fiscal discipline and measures to guarantee free trade, as well as reducing existing market price distortions to the minimum. Economies in the process of restructuring should receive financial assistance during the transitional period, as a way of reducing the costs associated with the reforms at the microeconomic level: the adjustment includes reforms of both policies and institutions, because it is believed that such changes can improve resource allocation, increase economic efficiency, expand the growth potential and heighten resistance to future shocks (Thomas, Chibber and De Melo, eds., 1991, p. 12).

The finance agencies and various academics agreed that the measures which it was indispensable to take at the start of the process³ included those now known as the Washington Consensus: fiscal discipline; reorientation of public expenditure priorities towards the areas of health, education and infrastructure; fiscal reform (broadening of the tax base and reduction of marginal tax rates); establishment of competitive exchange rates; guarantees for property; deregulation; trade liberalization; privatization; elimination of barriers to foreign investment, and financial liberalization.

This ideal roadmap for a system free of distortions sheds little light on how to cope with some crucial aspects, however (Conley and Maloney, 1995), such as: how to minimize the costs of the adjustment; how to cope with the implications of different rates of adjustment between sectors; the right macro-policy to apply during the reforms (specifically, how to manage

the exchange rate), and how to minimize the consequences for social welfare of leaving one sector controlled while others are freed of State intervention.

In an ideal world, anyone who had to reform –for example– trade policies would not need to bother with these intermediate stages, as the optimum policy would be an immediate leap to free trade, unless there were specific market distortions (Mussa, 1986).

In practice, however, proper design of the reform process is essential, and not only for the benefit of academic appraisals or in order to ensure political support for the reforms. Credibility is an essential aspect which must be taken into account (Calvo, 1989). Lack of confidence in the durability of a reform brings in distortions which can end up by destroying it: the reform process can be reversed simply because people believe it is only going to have a short life.⁴

The need to recommend a particular path to follow in the reform process has given rise to a literature focussing on the proper moment and sequence of the reforms which also emphasizes the importance of eliminating all uncertainty about the government’s intentions.

The major part of the debate has been on whether trade liberalization should precede or follow liberalization of the capital account.⁵ Experience has shown that a macroeconomic imbalance at the beginning of a period of reforms can affect the final results. There is therefore an additional and more specific debate on the sequence that should be followed in an initial economic environment of high inflation, with special attention to synchronization between the price stabilization process and the reforms proper.⁶

Another aspect connected with the analysis of the reforms⁷ is the relation between reform of the domestic

in Argentina, Chile and Uruguay in the late 1970s and early 1980s, as compared with the later trade reforms in Bolivia, Brazil and Mexico.

³ According to Williamson (1990).

⁴ A simple example is that of a trade reform which is only perceived as being temporary. The economic agents may perceive that imported goods will only temporarily be cheaper: in those circumstances, they will assume bigger debts than they normally would, simply by bringing forward their consumption. If they can obtain finance (in the belief that they will have higher permanent incomes) through an open capital account, present consumption will increase (Conley and Maloney, 1995). The current account imbalance resulting from such actions can lead to the restoration of trade barriers and consequent reversal of the original trend.

⁵ The literature does not express any clear conclusions on the point in time at which the reforms should also include other markets, such as the labour market (an inevitable step if trade openness continues).

⁶ This was a matter of great interest for Brazil in the early 1990s.

⁷ Strongly influenced by the Chilean experience in the early 1980s.

financial sector and liberalization of the balance of payments capital account. Especially in countries with high rates of inflation, the fiscal deficit and interventions in the financial market often result in artificially low domestic interest rates. When opening of the capital account takes place in a context in which domestic interest rates are being kept below their equilibrium level, the result will be the draining-away of resources. If the fiscal deficit is under control, however, the reformed domestic financial market will operate at equilibrium interest rates.

There would thus appear to be little to discuss regarding the sequence between reform of the domestic financial market and liberalization of capital movements: the barriers to international capital movements should not be eased before the domestic financial sector is liberalized.⁸

A number of authors have also argued that liberalization of the capital account should only take place after trade and other distortions have been eliminated (McKinnon, 1982). By giving rise to inflows of capital, the easing of controls on capital leads to an increase in the level of aggregate expenditure, both on tradeables and on non-tradeables, which will in turn promote a real revaluation of the currency, hindering or even frustrating foreign trade liberalization.⁹

Although the opening of the capital account usually leads to a real revaluation of the currency, it is known both theoretically and empirically (Choksi and Papageorgiou, eds., 1986),¹⁰ in respect of a number of cases of trade policy reform, that successful trade liberalization generally requires real devaluation of the currency.

Thus, in principle trade reform should be adopted before eliminating controls on foreign capital flows. This conclusion gives rise to two other dilemmas, however.

Firstly, it is not clear from this debate whether a gradual reform is preferable to one that takes place more abruptly. As Edwards (1990) explains, a gradual approach can have characteristics which either increase

or compromise the credibility of the reforms, depending on the real conditions in each country: if it reduces unemployment or makes possible fiscal balance, a gradual reform will tend to generate greater credibility, but at the same time, a slower reform process could allow the groups affected by the new policies to organize themselves in order to act against them.

Another aspect is the relation between the reforms and price stability. Economic theory offers few guidelines in this area. Even so, experience suggests (Corbo and Fischer, 1992) that in economies with acute macroeconomic problems reforms should only be begun after suitable reduction of the imbalances in question: instability limits the benefits of reforms aimed at improving resource allocation through changes in relative prices.

With regard to trade liberalization –the first stage in the proposed reform scheme– there are three arguments in favour of delaying it until inflation is under control (Rodrik, 1993b). First, the already mentioned variability of relative prices, which affects the way the advantages of the greater efficiency are passed on. Second, trade liberalization could affect fiscal income if the reduction or elimination of duties on trade exceeds the fiscal income deriving from the increase in trade activity. Third, liberalization requires a compensatory devaluation of the exchange rate in order to protect the current account, and this would affect domestic price stabilization, through the cheaper imports favoured by a revalued currency.

The exchange rate argument calls for some detailed considerations. From the theoretical point of view, this is the aspect which imposes the most serious restrictions on trade liberalization.¹¹ As far as this article is concerned, this matter is directly related with proper understanding of the Brazilian experience since 1994.

The debate on the application of reforms in a context of stabilization policies has been concentrated on whether the reforms can effectively facilitate the process of reducing inflation, since trade liberalization should make possible price stabilization by forcing convergence between the rates of variation of the domestic and external prices of tradeable goods. Whereas trade liberalization requires compensatory exchange rate devaluation (because of wage rigidities), however, price stabilization requires, on the contrary, avoidance of such devaluation, so that the exchange

⁸ Edwards and Edwards (1987) and Edwards (1990). As we shall see below, the question of regulation of the liberalized financial sector is also of fundamental importance.

⁹ Another way of presenting this argument is based on the rate of adjustment of the goods and financial markets: since the former is slower to adjust than the latter, a homogeneous reform will require the liberalization of the goods markets before the financial markets.

¹⁰ It is considered that real devaluation of the currency is a necessary condition for successful trade liberalization.

¹¹ See the analysis in Rodrik (1993b).

rate can be used either as a means of attaining a real goal (in which case it forms part of the process of fixing prices and wages) or as a nominal anchor for domestic price levels (in which case it leads this process).

Furthermore, when accompanied by financial liberalization,¹² real exchange rate revaluation tends to compromise the credibility of the liberalization process, or else, once the initial excess of capital inflows is over, the expectations of real devaluation may lead to higher real interest rates, precisely at a time when the productive sector is going through the difficult period of adjustment following the easing of trade restrictions (Edwards and Edwards, 1987).

However, this dilemma over the exchange rate may be illusory, if over-valuation of the exchange rate is viewed as the price that must be paid for ensuring the credibility of the process. If, on the one hand, inflation has a strong inertial component linked to indexing or the accommodation of key nominal variables¹³ to delayed variations in price levels, then on the other hand, in order to be credible a policy must not only fight inflation but must also eliminate the nominal rigidities which make it necessary to use devaluation to ensure competitiveness.

From this point of view, exchange rate overvaluation may be considered as an appropriate approach, although not devoid of risks. For a public which has already witnessed the failure of many anti-inflation plans due to the lack of political will, an ambitious package which attacks all the sources of inflation may be taken to indicate the presence of a government with clear decisions and well-defined policies, so that a reversal of policy in the event of temporary problems will be less likely. Thus (Rodrik, 1993b), the use of the exchange rate as a nominal anchor may not necessarily conflict with trade liberalization, since if that anchor works, nominal wage rigidity will finally disappear and sustainable competitiveness will be more likely.

The last two observations regarding the reforms are connected with the fact that: a) open market policies generate their own group of interested parties (Rodrik, 1992) –as new opportunities for gain appear, the business community benefitted by the post-inflation situation will tend to fight against any attempt to reverse that state of affairs; and b) a reformed system does not necessarily mean the elimination of rent-seeking activities –as long as governments are responsible for applying policies, individuals will always try to obtain benefits for themselves (Rodrik, 1993a).

III

The reforms and the economy in the 1990s

The 1990s are considered as the “reform decade” in Brazil. Although some initial actions were taken in the late 1980s –such as foreign trade liberalization and the first privatization operations, for example– the most significant stages only began to be fulfilled from 1990 on.

This decade represented a turning-point in the country’s economic history. After having been for the previous four decades a closed economy with a strong presence of the State as a producer of goods and

services, and after a long period of high inflation with indexing, at the end of the 1990s Brazil became an economy with a marked degree of openness to merchandise trade and capital¹⁴ and a simultaneous reduction in the function of the State as a direct producer.

In addition, the economy attained an unprecedented degree of price stability which has already lasted for over six years: the consumer price index rose to a record level of 2,489% in 1993 but

¹² The elimination of inflation-related gains as a result of a successful stabilization process could lead the financial sector to seek other sources of finance.

¹³ Wages, the monetary aggregates and the exchange rate.

¹⁴ According to estimates by Mesquita (1999), the imported component of industrial production rose from 4.3% in 1989 to 20.3% in 1998.

gradually went down to single-digit values by 1996, standing at 5.3% in the year 2000.¹⁵

In order to understand the reforms and their effects, it is necessary to take into account the extremely significant impact of a price stabilization process like that which took place in this period: a) it generated a “wealth effect” which affected both consumers and producers; b) the stable macroeconomic situation created a political environment favourable to the reforms; c) it inspired confidence among Brazilian and foreign investors, and d) at the same time it eliminated the substantial gains obtained by the government and the banking sector from inflation, with important consequences for monetary and fiscal policy as well as for the design of the new regulations for the financial sector as a whole.

The specialized literature on policy reforms usually takes a taxonomic approach in which various levels of measures are identified. According to this view, Brazil has almost completed its first-generation reforms, which began with trade openness and the privatization of State enterprises in the late 1980s and has been further intensified since the early 1990s. The country has also taken a number of steps towards second-generation reforms such as those in social security, public administration and fiscal policy.

There were also other policy changes in the same period which had important consequences for the economy. Social programmes were thoroughly redesigned in order to incorporate the new universal rights guaranteed by the 1988 Constitution and to overcome fiscal difficulties and spread the burden of providing services among the federal government, the states and the municipalities.

On the social level, as well as in other areas such as science and technology, there was growing (although still insufficient) private sector participation in the financing of various activities. The recent fiscal results and the forecasts for coming years suggest that this is a feature which could be further accentuated in the future.

This does not mean that the reforms have necessarily been in the right direction, that they have been properly applied, and much less that they are now complete. There can be no doubt, however, that they have substantially changed the production environment in recent years.

¹⁵ As we shall see below, in spite of the marked exchange rate devaluation in 1999, the consumer price index only rose by 8.4% in that year.

It might be wondered why such a concentration of reforms took place in this particular period of time. The answer has to do with the increasing perception of the domestic economic actors –government authorities, employers and analysts from the academic field– that changes were very necessary. The conjuncture of the final stages of the multilateral trade negotiations, the renewed access of other Latin American countries to finance, and the fiscal policies applied in other economies¹⁶ acted as a stimulus for the reformers.

The reforms –especially privatization and the redesign of social security– called for major changes in the Constitution. Political will and power were therefore needed, and these could only be attained on the basis of consensus among the economic agents.

Figure 1 shows the sequence in which the main reforms took place. The process began with the reform of trade policy and, early in the 1990s, some sporadic tentative moves towards the privatization of public assets, followed by the opening of the balance of payments capital account. The second generation of reforms only began in the second half of the decade, with reforms in public administration and social security, accompanied by a series of changes in various social programmes covering education, health and the reduction of poverty.

1. Trade reform

Trade reform began in 1987, with the first change in the nominal tariff structure in 30 years and a progressive reduction in tariff rates which gained pace from 1990 on.¹⁷ The simple (unweighted) tariff rates were as follows:

1988-1990:	33.4%
1991-1993:	17.8%
1994-1996:	12.9%
1997-1998:	13.9%

There were two points at which the tariff reduction process speeded up: in 1990, and again in late 1994. In both cases one of the main arguments for carrying out the process was the need to provoke a competitiveness shock among Brazilian producers, breaking up

¹⁶ The tax and interest rate differentials were an important stimulus for arbitrage-related international financial movements.

¹⁷ A full examination of the changes in trade policy in the 1990s should also take into account the fact that, for the first time in its history, Brazil formed part of a regional integration process, which brought in some important additional considerations.

FIGURE 1

Brazil: A decade of reforms^a

	1988 or earlier	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Trade reform	*	*	*	*	*	*	*	*	*			*	*
Opening up to external financial capital					*			*	*				*
Privatization	*		*				*	*		*		*	*
Regulation of financial sector								*	*	*	*	*	*
Reform of social security									*	*	*	*	*
Administrative reform											*	*	
Reform of social programmes:													
Education								*	*	*	*	*	*
Health								*	*	*	*	*	*

Source: Prepared by the author.

^a The asterisks indicate the approximate date of the main measures designed to regulate each of the reform processes rather than the date of the greatest intensity of change. It is important to bear this in mind, for example, in the case of the privatization process, which was much more intense in 1998, in terms of the real value of the transactions carried out, than in any previous period.

monopoly situations and using trade policy as a complement to the price stabilization process.¹⁸ The 1990 trade reform was broadened to include the elimination of non-tariff barriers and various export incentives, as well as a significant reform of the institutional structure responsible for foreign trade policy. The 1994 reform led to partial advance application¹⁹ of the MERCOSUR common external tariff, which would otherwise only have come into effect in January 1995.

Consequently, analysis of the impact of trade reforms on the balance of payments is not direct, because: a) due to the special features of the very large domestic market which had been closed for so many years, some time passed before imports reached a significant level; b) the growth of exports was the result of two simultaneous processes: multilateral tariff reduction and the regional preferences in force in MERCOSUR; c) the price stabilization after 1994 caused a “wealth effect” which affected domestic demand for imported goods, and d) exchange rate policy kept the currency markedly overvalued up to 1999, and this affected foreign trade.

¹⁸ There is still some criticism of the way these changes were carried out. For a detailed description of the 1994-1996 tariff reforms, see Baumann, Rivero and Zavattiero (1997).

¹⁹ In September 1994.

Taking account of these preliminary observations, it may simply be noted that the trade surpluses which averaged US\$ 13 billion between 1992 and 1994 turned into trade deficits of US\$ 6 billion in the 1995-1998 period.²⁰ The import coefficient²¹ rose from 5.5% in 1990-1993 to 7.2% in 1995-1997 (see figure 2). The imported goods in greatest demand were raw materials and intermediate products, capital goods and motor vehicles. The importance of this import structure for the domestic investment cycle and some production sectors will be analysed later on in this article.

The trade reforms were substantial and really served to: i) increase the imported component in domestic production,²² which ii) raised the productivity of labour²³ and iii) increased the consumer surplus (total imports of consumer goods

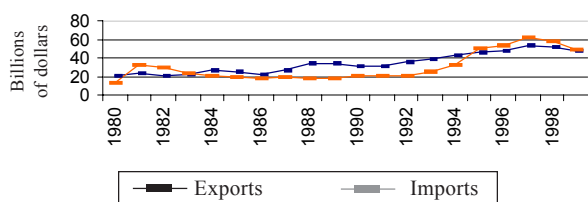
²⁰ In spite of the sustained expansion of exports, which registered an average annual growth rate of 6% between 1994 and 1998, and the improvement of almost 20% in the terms of trade between 1991 and 1995.

²¹ Total imports/GDP (percentage).

²² Data from the IBGE show that in 1990 only 11% of gross fixed capital formation in machinery and equipment corresponded to imported goods, but by 1997 this percentage had risen to 41% (Sainz and Calcagno, 1999).

²³ Bonelli (1998) estimates that labour productivity in the manufacturing sector rose at the rate of 8.7% between 1991 and 1997, compared with an average rate of 0.3% between 1981 and 1989 and a rate of 5.6% in the early 1970s.

FIGURE 2
Brazil: Trade balance, 1980-1999



Source: Central Bank of Brazil.

increased from US\$ 2.6 billion in 1990 to US\$ 11 billion in 1998), but their impact on exports was offset by overvaluation of the exchange rate²⁴ and the increase in wages²⁵ (especially in industry).

2. Opening-up to financial capital

There was also concern in the early 1990s to establish conditions which would enable the Brazilian economy to take advantage of the growing facilities for access to international capital markets which existed at that time.

Ever since the 1950s, Brazil has stood out among the developing countries because of the large share of foreign capital in its production structure.²⁶ Up to the end of the 1970s, it was one of the countries which received most foreign investment. The situation changed during the crisis of the 1980s, and quite a widespread perception grew up that the economy was

²⁴ Exchange policy during the 1990s was quite varied. Starting with a situation where the market was allowed to determine the equilibrium exchange rate (as a new means for breaking a long-standing and generalized indexing process), the government found it necessary to adopt a system of currency bands, which underwent some modifications in the course of time. In January 1999, external pressures which had built up as a result of the accumulated overvaluation led to a new free-floating system.

²⁵ A bilateral dollar-real index, deflated by the wholesale price indexes prevailing in mid-1994, would show that the real was overvalued from July 1994 to March 1996, with a peak of 17 points in February 1995. Bonelli and Fonseca (1998a) give some details in this respect: while the competitiveness of labour increased by 62% between 1990 and 1996, the average wage in dollars rose by 84%, so that the gains in terms of productivity were more than offset by the increase in labour costs. In other words, the reduction in competitiveness was not due solely or even mainly to overvaluation of the exchange rate: wages in industry, deflated by the wholesale price index, increased by 76% over the period, compared with a 5% revaluation of the real vis-a-vis the dollar.

²⁶ It is calculated (Chudnovsky and López, 1997) that, in 1995, 92% of total sales in the motor industry, 59% in the pharmaceutical industry, 56% of sales of domestic appliances and 44% of the sales of the beverages and tobacco industry in Brazil were linked with foreign companies.

missing out on the opportunities created by financial globalization, which were more plentiful in that decade than in any other period.²⁷

This led to the adoption, beginning in 1991, of various specific policy measures aimed at creating favourable conditions for attracting portfolio investments. As a result, flows of such investments, which amounted to less than US\$ 800 million up to 1992, already rose to nearly US\$ 7 billion in 1993. The systematic deficits registered on the balance of payments capital account between 1985 and 1991²⁸ turned into a surplus of US\$ 25 billion in 1992.

It may be noted that this was a period of somewhat limited economic activity: the GDP growth rates in 1991 and 1992 were 1% and -0.3%, respectively, rising to 4.5% in 1993. The inflow of resources was therefore mainly due to the changes made in domestic legislation²⁹ and the relatively low levels of the equity capital of Brazilian companies after several years of inflation and low growth rates.

The recovery of domestic economic activity,³⁰ together with the opportunities created by the privatization process, subsequently caused foreign direct investment to exceed the flows of portfolio investments, FDI flows (in billions of dollars) being approximately 0.9 in the 1990-1993 period, 2.2 in 1994 and 3.3 in 1995, but then rising to unprecedented levels of 9.6 in 1996, 17 in 1997, 26 in 1998, and 30 in 1999.

3. Privatization

The new favourable conditions offered to foreign investors, together with a favourable international environment, gave rise to the first expectations of major foreign participation in the privatization of State enterprises. In reality, this was one of the main obstacles encountered by the programme in its initial stages, although the actual results would have shown that such fears were exaggerated, since the share of foreign investors in the national privatization programme³¹ represented less than 1% of total income.

²⁷ Brazil's share in total world foreign direct investment was as follows: 1970-1975, 5.1%; 1976-1980, 6.3%; 1981-1985, 4.4%; 1986-1990, 1.2%; 1991-1995, 1.3%, and 1996, 2.7%, according to United Nations Conference on Trade and Development (UNCTAD) (various issues).

²⁸ Due to amortization payments on the external debt.

²⁹ And also to international liquidity.

³⁰ After a rate of -0.3% in 1992, GDP growth averaged 4.5% in the following four years.

³¹ According to Pinheiro and Giambiagi (1998).

The privatization efforts began in the early 1980s,³² but it was only in the mid-1990s that the process really got under way. In the period from 1991 to 2000, the total income from the privatization programme amounted to US\$ 58 billion (in respect of enterprises belonging to the federal government), plus US\$ 33 billion in respect of enterprises owned by the federal states. All this came to a total of US\$ 74 billion for sales of assets, plus US\$ 18 billion in respect of debt transfers (see table 1).

Between 1991 and 1994, only quite a small number of enterprises were privatized, for a total income of US\$ 8.6 billion. It was in this phase that the privatization of the industrial sector was completed, however, with the sale of all the most important State enterprises: those in the iron and steel, petrochemicals and fertilizers sectors accounted for over 90% of the State's industrial activities. A curious aspect of this stage was that a third of the total income corresponded to federal bonds.³³

The total amount of resources involved—more than US\$ 92 billion over a period of 8 years³⁴—makes this one of the biggest privatization processes in the world, and it will certainly have a powerful impact on the production sector. The process had a dual rationale: the enterprises were sold in order to improve general efficiency, but in a number of cases there were strong fiscal motives.³⁵

4. Fiscal accounts

The successful plan to combat inflation and privatize State enterprises did not have the positive effects on the fiscal accounts obtained in other countries, however. On the one hand, fiscal income was indexed before the stabilization process.³⁶ Moreover, some items

³² In 1979 the government set up a special ministry for the control of State enterprises, charged with limiting the number of enterprises belonging to the State. It was only in 1981 that the first special commission on privatization was set up (Pinheiro and Giambiagi (1998)).

³³ For a detailed account of the whole process of privatization in Brazil, see Pinheiro (1996).

³⁴ With a significant number of enterprises still for sale in the energy and telecommunications sectors.

³⁵ For example, in the case of the states privatization was important because of its stronger fiscal impact: whereas the enterprises belonging to the central government obtained a fiscal surplus equal to 0.1% of GDP on average during the 1995-1998 period, those belonging to the states had a deficit of 0.5% of GDP over the same period. See Pinheiro and Giambiagi, 1998.

³⁶ The "Olivera-Tanzi effect" associated with the end of inflationary processes was only small: in the years with high rates of infla-

TABLE 1

Brazil: Privatization programme, 1991-2000 (Millions of dollars)

Sector	Number of enterprises	Assets sold	Debt transferred	Total
Iron and steel	8	5 562	2 625	8 187
Petrochemicals	27	2 698	1 003	3 701
Electricity	3	3 907	1 670	5 577
Railways	6	1 697	—	1 697
Mining	2	3 305	3 559	6 864
Telecommunications	21	26 978	2 125	29 103
Others	14	2 583	344	2 927
Federal enterprises	81	46 730	11 326	58 056
Enterprises belonging to the states	26	26 866	6 750	33 616
<i>Total</i>	<i>107</i>	<i>73 596^a</i>	<i>18 076</i>	<i>91 672^a</i>

Source: Pinheiro and Giambiagi (1998) and Banco Nacional de Desenvolvimento Econômico e Social (n/d).

^a Including sales of minority holdings.

of expenditure increased after stabilization, such as public sector wages³⁷ and expenditure on social security, reform of the health sector, and adjustment of the financial sector.

As a result, there was a deterioration in the fiscal results from a surplus of 1.4% of GDP in 1994 to a deficit of approximately 8% of GDP in 1998. The nominal interest rates needed to finance this deficit³⁸ were kept at very high levels,³⁹ often exceeding 3% per month, while monthly inflation rates were around 0.3% (and were even negative in some months in 1997 and 1998).

5. Financial restructuring

The elimination of transfers to the banking sector (generated by inflation)⁴⁰ after price stabilization

tion this effect was in reality positive, since the indexed income associated with arrears of payment generated fresh gains for the government.

³⁷ It is calculated that the public sector wage policy applied in 1995 (whereby wage adjustments were on the basis of past inflation) increased the wage bill by 15% to 20%. Furthermore, the significant increase in the minimum wage in that year also affected social security expenditure.

³⁸ And to neutralize the monetary impact on the flow of external resources.

³⁹ And rose even higher in response to the external shocks in 1995, 1997 and 1998.

⁴⁰ These transfers were generated by the decline in the real value of deposits. It is calculated that they amounted to 4% of GDP in 1990-1993, but disappeared as from 1995.

caused the monetary authorities to create new mechanisms for avoiding systematic crises in the financial sector. The rapid drop in inflation rates gave rise to a bigger demand for money, so that in 1998 the broadest monetary concept (M4) was double that of 1994 in real terms, while credit to the private sector increased fourfold in those four years.

However, this expansion of credit includes both normal finance and a significant number of resources used to restructure the banking sector. The elimination of the gains generated by inflation, together with the big rise in interest rates (see figure 3) as from March 1995,⁴¹ gave rise to enormous difficulties for a number of private and public banks, so that restructuring of the banking sector was a very necessary measure.⁴²

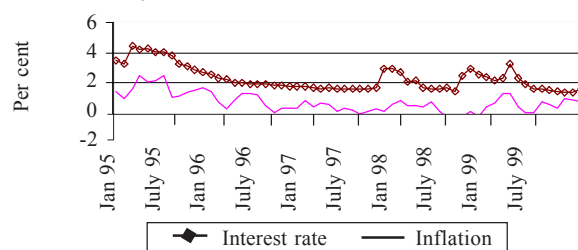
The monetary authorities were obliged to intervene a number of institutions and had to create various instruments for dealing with the problems encountered. The most important of the mechanisms used were credit programmes to finance institutions in difficulties, at both the federal and state levels, together with the redesign of the sector as a whole through mergers or the sale of private and public banks with liquidity problems.⁴³ This led to the elimination of most of the institutions owned by the state governments. As a result of this process, the banking system managed to cope with the 1997-1998 external shocks with a total loan/assets coefficient of 35% and a capital/reserves ratio of 13%.⁴⁴

6. Financing social expenditure

The macroeconomic adjustment also had effects in the area of social expenditure. In the early 1990s, social policies were usually financed through monetary transfers. The enormous number of potential clients was at variance, however, with a system which depended to a large extent on contributions⁴⁵ and had a large number of administrative bodies and service networks, together with strong concentration of resources (two-thirds) in

FIGURE 3

Brazil: Nominal monthly interest rates and inflation, 1995-1999



Source: Central Bank of Brazil.

the federal government, which led to faulty targeting of social programmes. Furthermore, the considerable number of social funds and the fact that they were linked to specific expenditure items meant that resources for social expenditure were highly sensitive to the economic cycle (Draibe, 2000).

The 1988 Constitution reduced the links between contributions and the financing of the system,⁴⁶ made access to social services a universal right, and established minimum levels of social benefits. The most radical change was in the area of health, with the creation of the single health system, covering both health and social security services.

The paradoxical feature of all this is that in the early 1990s there was feverish legislative activity to regulate the new constitutional provisions, yet at the same time there was a drastic reduction in social expenditure⁴⁷ and in the institutional facilities for providing social services. In the middle of the decade a new social development strategy was adopted which took into account the universal right of access to basic social services and included employment and income programmes to generate new opportunities, with priority for universal programmes.⁴⁸

Since 1994, in spite of the fiscal difficulties facing the states and municipalities, both have been taking on

⁴¹ Average nominal monthly rates for inter-bank transactions rose from 3.2% in February to 4.4% in March 1995.

⁴² The proportion of operations where recovery of the funds was doubtful rose from less than 9% of the total number of loans to nearly 14% by the end of 1995 (Baumann and Mussi, 1999).

⁴³ Between July 1994 and December 1997, 42 banks out of a total of 271 were affected by such problems.

⁴⁴ That is to say, higher than the 8% ratio recommended by the Basle Committee.

⁴⁵ Fixed percentages of wages and profits, together with other semi-fiscal sources of income.

⁴⁶ Although financing continued to be heavily dependent (58% in 1996) on such contributions.

⁴⁷ Government social expenditure went down from 11.4% of GDP in 1990 to 9.7% in 1992 (a period of recession). Each of the areas was affected differently: whereas federal expenditure in 1993 on health, nutrition and drinking water supply and sanitation was only 50-60% of its 1989 level, expenditure on social security doubled over the same period (Draibe, 2000).

⁴⁸ Social expenditure as a proportion of GDP increased by approximately 4% between 1990-1991 and 1996-1997, reaching almost 20%. In the same period, the share of social expenditure in total public expenditure remained practically unchanged (59%) (ECLAC, 1999).

more and more responsibility for the financing of social programmes, thus reducing the amount of resources provided by the central government.⁴⁹

According to Draibe (2000), in 1995 the federal government was still responsible for the major part of expenditure, in 8 out of a total of 14 social programmes. In 1995, the joint social expenditure of the federal, state and municipal governments was equivalent to 21% of GDP, and 85% of that amount was devoted to education, health, social assistance and benefits of public officials.

Price stabilization and political will were the factors which made possible better targeting and greater selectivity of programmes, new expenditure procedures, and more clearly defined technical criteria for the allocation of resources. Social programmes concentrate on two lines of action: investment in human resources and social assistance, and programmes for combating poverty.

7. Reform of the pension system

The need to reform the social security sector became evident in the late 1980s, due to a number of factors: up to then, the system had been incorporating members faster than the rate of increase of the number of beneficiaries, and even at a faster rate than the growth of the labour force, but there was a significant change in the demographic pattern of the population, and the 1988 Constitution brought rural workers into the system.⁵⁰ The number of new pensioners between 1991 and 1995 was almost two million, while the average pension almost doubled in value over that period and a third of the rural population of pensionable age received pensions (Dias and Amaral, 2000).

Furthermore, there is the fact that the life expectancy of the population has been increasing in recent decades. As the system allowed members to retire

on the basis of their number of years of service, in 1995 two-thirds of the new pensioners were only 54 years old, with a remaining life expectancy of over 22 years. In 1998, social security expenditure absorbed almost 10% of GDP,⁵¹ and there were almost 19 million real beneficiaries. In that year, the social security deficit amounted to some 3% of GDP, due mainly (75%) to the benefits paid to public employees.

The reform of the social security system therefore involved the establishment of a maximum value for pensions as well as a minimum age for retirement. Moreover, military personnel were obliged to begin to pay contributions.

8. Investment and productivity

As was to be expected, price stabilization and trade openness promoted economic activity and investment, both through increased domestic demand for consumer goods and through easier access to cheaper capital goods.⁵²

In the early 1990s (especially between 1990 and 1992), most manufacturing enterprises went through a process of rationalization of their production, as one of the ways of facing up to the competition from imported products. With the disappearance of inflation, the returns on investment became relatively high, because of the lower cost of equipment and parts, the fact that most enterprises had already gone through a rationalization process, and progress made in overcoming the technological backwardness of the sector thanks to the new equipment installed. All this helped to increase factor productivity in industry, although it also made the sector more capital-intensive.⁵³

Investment in the industrial sector was concentrated mainly on modernization, with only a limited increase in production capacity in some specific sectors.⁵⁴ Classifying sectors by capital formation reveals a different picture from that observed in previous investment cycles, such as the 1970s. Table 2 shows the basic information in this respect.

⁴⁹ This has been possible thanks to the bigger transfers of resources from the federal government to the states and municipalities and the improvement in the latter's fiscal income: in 1980 the states received 25% and the municipalities 9.6% of total income, but in 1991 the corresponding shares were 27% and 16% (Draibe, 2000).

⁵⁰ The amount of the retirement pension is calculated on the basis of the last 36 months of contributions to the system, up to a maximum of approximately US\$ 1,000. Public employees, however, can retire with a pension equivalent to their last salary. Rural workers are guaranteed retirement pensions, but do not make contributions. It is considered that the transfer of resources resulting from the inclusion of rural workers in the social security system has helped considerably in reducing the percentage of families under the poverty line from 41% in 1990 to 20% in 1996, according to ECLAC estimates (ECLAC, 1999).

⁵¹ Taking account of both public and private pension schemes.

⁵² This effect was further amplified by the overvaluation of the exchange rate during most of the second half of the decade.

⁵³ According to estimates by Bonelli and Fonseca (1998b), the annual increase in total factor productivity rose from an average of 1% in the 1980s to 2.1% in the 1990-1997 period. According to Neri and Camargo (1999), industrial production increased by 10% between 1991 and 1995, while employment in the industrial sector went down by 22% over the same period, resulting in a 40% increase in labour productivity.

TABLE 2

Brazil: Gross fixed capital formation, 1970-1997
(As a percentage of GDP, at constant 1980 prices)

	1970-1980	1981-1989	1990-1994	1995-1997
Manufacturing	4.5	3.2	2.0	3.3
Mining	0.2	0.2	0.1	0.1
Petroleum	0.9	1.0	0.4	0.4
Infrastructure	5.4	3.7	2.3	2.2
Electricity	2.1	1.6	0.9	0.6
Telecommunications	0.8	0.4	0.5	0.7
Transport	2.1	1.5	0.8	0.8
Drinking water supply and sanitation	0.5	0.2	0.2	0.1
Others	12.5	9.7	10.1	11.1
Total gross fixed capital formation	23.5	17.8	14.9	17.1

Source: Bielschowsky (coord.), 1998.

The sectors which had led the way in investment in the 1970s –industry, mining and petroleum– had a smaller share of gross capital formation in the 1990s. Investment in infrastructure (electric power, telecommunications, transport and drinking water supply and sanitation) went down in the 1990-1994 period to between a half and a third of the values registered in the 1970s. If the first and second halves of the 1990s are compared, it will be noted that there was a decline in absolute terms in investment in electric power, a more or less stable pattern in the transport and drinking water supply and sanitation sectors, and a marked increase in telecommunications.

In the industrial sector, consumer goods registered the fastest increase (the most dynamic segments were those of consumer durables, led by the transnational corporations), thanks to the marked “wealth effect” resulting from price stabilization.⁵⁵ In the case of intermediate and capital goods, the results were unfavourable.

The three new elements affecting investments in the second half of the 1990s were the incentives offered by states and municipalities,⁵⁶ the environment which existed after privatization, and the imported component in investment and production processes. Another

important feature of investment from the mid-1990s on is the fact that much of it is associated with the exploitation of the country’s comparative (static) advantages in natural resources.⁵⁷

This raises the question of how far the industrial growth model in recent years has been based on the resource endowment, and hence how far it depends on the international commodity market.⁵⁸ A specialization pattern centered on production segments with sluggish demand raises doubts about its long-term sustainability and its vulnerability to fluctuations in outside markets. An important aspect is therefore the real capability of the economy to support an alternative model favouring more technology-intensive products.

9. Production development policies

Up to the late 1980s, Brazil’s science and technology policy was concentrated on the construction of infrastructure for research and development, along two

⁵⁴ In some sectors, such as the motor industry, there was indeed more completely new investment, encouraged by the fiscal incentives provided. In most sectors, however, investment projects were aimed above all at modernization.

⁵⁵ The only exception was that of textiles.

⁵⁶ These were of decisive importance in the unprecedented geographical relocation of factories within the country in recent years.

⁵⁷ According to Bielschowsky (coord., 1998), total fixed investment in the manufacturing sector, at constant 1980 prices, averaged 3.3% of GDP between 1995 and 1997. The group of “dynamic” sectors, made up of manufacturers of steel products, transport equipment, processed foodstuffs, electrical and electronic equipment, pharmaceutical products, plastics and textiles, invested an average of approximately 2.1% of GDP, while the manufacturers of chemical products, machinery, non-metallic products, pulp and paper, and rubber products invested only 0.77% of GDP during the same period.

⁵⁸ In contrast, for example, with the strategies adopted by other emerging economies and indeed by Brazil itself in previous decades, such as incentives for (producers and) exporters to enter new and more dynamic markets.

main lines: a) provision of resources to finance research and development projects by enterprises (these were very seriously affected by the 1980s crisis), and b) provision of fiscal incentives.

During the 1990s, the institutional structure connected with innovation and research underwent various changes, due above all to the reduction of the role of the federal government:⁵⁹ in 1990, it had been responsible for 73% of investment in research and development of new products (R&D), but by 1997 its share had gone down to 64%.

Part of this reduction was offset by a more active role on the part of the private sector. Thus, the share of enterprises in research and development spending went up from 15% to 20% between 1990 and 1997, corresponding to an average of 0.7% of total sales. Furthermore, the considerable number of ISO 9000 certificates granted to Brazilian firms⁶⁰ and the increase in private expenditure on technology and capital goods reflect the concern to modernize factories.⁶¹ However, local enterprises as a whole have not developed their own capacity for innovation in order to penetrate new markets.

Analysis of the potential supply of research and development is of fundamental importance for any country, and even more so for an economy where two-thirds of exports consist of industrial goods. In the recent experience of Brazil, however, there are three effects which appear to have contributed to the low percentage of R & D expenditure as a proportion of total sales: the negative impact of the fiscal adjustment, which meant fewer public resources for the financing of activities in this field; reforms in legislation which facilitated the importation of technology⁶² (as part of the opening-up of the economy); and the composition

of exports,⁶³ which displays a growing share of products making intensive use of natural resources.

In general, the sluggish performance of Brazilian exports during the 1990s would appear to be connected with the specialization pattern: in spite of the greater share of industrial products, the export account is mainly characterized by the export of commodities making intensive use of natural resources and products making intensive use of energy or labour.⁶⁴

An economic environment more open to trade also had implications for the multiplier effects of foreign trade. For example, Tigre, Cassiolato and others (2000) note that for sectors such as ceramics and steel – in whose production Brazil has a comparative (static) advantage – trade openness did not represent a challenge for local producers,⁶⁵ and in fact was crucial for the development of a network of local suppliers. In the case of other sectors – such as motor vehicles and telecommunications – which depend less on the availability of resources, exposure to competitive imported products, linked with easier access to capital goods and inputs produced abroad, meant a new challenge which in fact led to them breaking their links with local suppliers, thus affecting the possibility of encouraging research in the development of products or processes.

10. Employment

These factors – price stabilization, strong domestic demand and investment in specific sectors – had different consequences for the labour market. Up to the beginning of 1995, total employment grew as the net result of the growth in the number of workers in commerce and the services sector and in the informal sector, which more than made up for the decline in the level of employment in industry and agriculture.

The share of industrial employment in total employment went down from 25% to 16% between 1990 and 1997.⁶⁶ Practically the whole of this change in the sectoral structure of employment is due to the

⁵⁹ Total expenditure on science and technology amounts to approximately 1.5% of GDP (Tigre, Cassiolato and others, 1999).

⁶⁰ Some 2,500 certificates up to 1997 (Tigre, Cassiolato and others, 1999).

⁶¹ Although positive, these results are poor compared with other countries. R & D as a proportion of sales comes to almost 2% in the Organization for Economic Cooperation and Development (OECD) countries, and even other emerging countries show a greater commitment to technology: in South Korea the share of the private sector in research and development amounts to 80%.

⁶² In 1991, and again in 1993, specific regulations were adopted which facilitated technology transfer contracts between the head offices of foreign firms and their subsidiaries in Brazil (see Tigre, Cassiolato and others (2000) for a description of the main changes made in the legislation).

⁶³ The elimination of some export incentives has led to a more “passive” share in the international division of labour.

⁶⁴ Wood pulp, paper, orange juice, soybean products, semi-processed mineral products, etc.

⁶⁵ In fact, the ceramics sector represents a success-story in terms of restructuring, which resulted in an increase in the number of patents taken out, greater investment in R & D, and various other positive effects.

⁶⁶ There was also a decline in employment in agriculture, which will be analysed later.

migration of workers from the manufacturing sector to commerce and the services sector,⁶⁷ largely because of the new technologies and the (low) cost of labour.⁶⁸ Table 3 shows the urban occupational structure, by sectors.

It can be seen from table 3 that the reduction in employment in the manufacturing sector was offset by an increase in the absorption of labour in the housing, commerce and services sectors.⁶⁹

Employment in the industrial sector has been declining since 1995 in spite of the increase in production,⁷⁰ whereas employment in commerce and the services sector grew up to late 1996 but subsequently stagnated. In other words, at the beginning of the price stabilization process the increase in the number of workers in the services sector more than made up for the decline in the number of workers in industry, but this phenomenon only lasted up to 1997. As a result, at the end of the decade there was increased and growing open unemployment: according to the Brazilian Geographical and Statistical Institute (IBGE), open unemployment rose from 4.3% in 1990 to 7.6% in 1998 (see figure 4).

In general, there was a clear productivity shock in both the industrial and services sectors of the Brazilian economy, but it was more severe in the case of the former.⁷¹ The references already made earlier to the increases in productivity reflected in the labour/output ratios are confirmed by other indicators, such as the evolution of the initial wage of newly-hired workers⁷²

⁶⁷ This migration was also facilitated by another structural characteristic of the Brazilian labour market: an average of between 2.5% and 3% of all workers in industry change their jobs every month, while approximately 40% of the workers in industry only occupy the same job for less than two months, because of the legislation governing severance payments (see Amadeo and Gonzaga, 1997, and Amadeo and Neri, 1997, for more details).

⁶⁸ The increase in the cost of labour in the industrial sector between 1994 and 1997 (55%) was greater than in the case of the services sector (15%) (Camargo, 1998).

⁶⁹ The figures on the agricultural sector in table 3 appear to reflect a significant increase in the number of own-account workers: the share of rural wage-earners went down from 44% of the total number of persons employed in the sector in 1990 to 34% in 1996, while the proportion of own-account workers increased from 53% to 64% over the same period (ECLAC, 1999).

⁷⁰ There has been an incipient recovery, however, since late 1999.

⁷¹ In the future this could lead to growing wage disparities between these two sectors (Camargo, Neri and Reis, 2000).

⁷² Considered as an indicator of the marginal productivity of the labour force, this suggests that between 1995 and 1997 the increases in productivity were 45% in the industrial sector and 33% in the services sector (Camargo, Neri and Reis, 2000).

TABLE 3

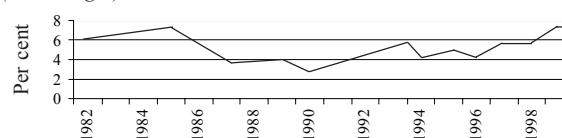
Brazil: Urban occupational structure, by sectors, 1990-1996
(Percentages)

	1990	1996
Agriculture and mining	6.8	8.7
Manufacturing	25.2	16.0
Housing	1.0	7.5
Transport and communications	4.8	4.6
Commerce and services	62.2	63.2
<i>Total</i>	<i>100.0</i>	<i>100.0</i>

Source: ECLAC, 1999.

FIGURE 4

Brazil: Open unemployment rate in metropolitan areas, 1982-1999
(Percentages)



Source: Brazilian Geographical and Statistical Institute (IBGE).

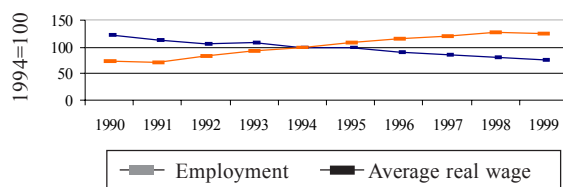
and the number of years of formal schooling of industrial workers.⁷³

The real income of urban workers did not go down during the whole period, because: a) the stabilization and trade openness processes tended rather to favour the prices of non-tradeable goods; b) as long as these favourable factors lasted, the real incomes of workers in the services sector increased; c) when: i) employment in the industrial and services sectors began to flag; ii) open unemployment began to increase, and iii) relative prices ceased to favour the products of those sectors, so that the real income of workers in the services sector began to go down steadily. In the industrial sector, however, while employment went down the real income of the workers continued to increase up to 1998, thus raising the real cost of labour in that sector (see figure 5).⁷⁴

⁷³ The percentage of workers with less than four years' schooling went down from 38% in 1989 to 31% in 1996, while the percentage of workers with more than eight years' schooling rose from 42% to 49% of the labour force (Camargo, Neri and Reis, 2000).

⁷⁴ There was an increase of 30% between 1994 and 1997 (Camargo, Neri and Reis, 2000).

FIGURE 5
**Brazil: Employment and average real wages
 in the manufacturing sector, 1990-1999**



Source: Brazilian Geographical and Statistical Institute (IBGE).

The adjustment of the labour market to an open economic environment with stable prices thus involved the transfer of workers from the tradeable goods sector to the non-tradeable sector. This is consistent with the foregoing considerations on the growing capital-intensity of the production process following trade openness.

11. The agricultural sector

In the previous sections we have been dealing with the urban sectors. Up to the mid-1980s, the agricultural sector went through a period of constant government intervention which was of fundamental importance for the growth process, since it made possible the supply of food at low prices. Since that time, however, agriculture has lost its main compensation mechanism - official programmes providing heavily subsidized credit - as part of the fiscal adjustment process.

In the new (post-1990) environment, in which the agricultural sector is exposed to international competition and the loss of official credit, the main factor behind the growth of production was the strong systematic increase in productivity: the loss of easy credit made producers try to reduce their average costs through increases in productivity based on a moderate reduction in the area cultivated and a marked cut in the number of employees.

In the case of the main products, productivity in the 1996-1998 period was substantially higher than in 1990-1992.⁷⁵ All the productivity indicators for the agricultural sector registered systematic increases between 1987 and 1998, the annual rise in these indicators being close to 1.8%.⁷⁶

⁷⁵ The increases in productivity were 26% in the case of cotton, 29% in soya beans, 27% in coffee, 30% in millet, and 21% in beans (Dias and Amaral, 2000).

⁷⁶ The growth rate in the stock-raising subsector was similar: close to 1.9% per year (Dias and Amaral, 2000).

This recovery in productivity was favoured by: a) the poor transport infrastructure, which led to more intensive use of the land, especially in areas close to urban centres; the growing use of new technologies developed in the country;⁷⁷ c) the growing professionalism of the labour force, due among other factors to migration from the southern states to the western and northern regions of the country, and d) trade openness, which reduced the cost of inputs (Dias and Amaral, 2000).

One of the most important elements in the sustained growth of agricultural production was the improvement of the terms of trade of the sector. Between 1987 and 1994 (the peak year), the terms of trade of agriculture increased by 46%, while the profitability of the sector increased by 59% between 1987 and 1998, reflecting a rise of 22% in productivity and 31% in the terms of trade of the agricultural sector (Dias and Amaral, 2000). This advantage in respect of productivity and the terms of trade enabled producers using new technologies to find substitutes for traditional rural credit.

The general picture emerging from these figures is that the agricultural sector managed to adjust through higher productivity, together with an increase in the capital/product ratio and greater selectivity of producers. Together, these factors placed a still greater burden on the urban labour market.

12. Reforms still pending

The above indicators suggest that Brazil is on the way to completing the set of so-called "first generation" reforms. The further continuation of this process will involve the adoption of more measures, such as the reform of social security policies. Experience has already shown that in its present form this system is bound to register considerable deficits in the years to come. If the system is to keep in balance over time, it will be necessary to take various additional measures.

It has already been shown that the labour market is subject to a number of restrictions imposed by the legislation which, in some aspects, goes back to the 1930s. Trade union representation, its financing and the incentives to move between different activities are all part of the same group of issues which must be tackled in the short term.

Other reforms that will be needed have to do with the functioning of the system of justice, which is slow and costly, and the system of political representation

⁷⁷ Mainly developed by the Brazilian Agricultural Research Corporation (EMBRAPA) of the Ministry of Agriculture.

and decision-making itself, through the creation (for which there are no precedents in past history) of mechanisms that will allow citizens to feel that they

are truly represented and actively participating. For this purpose, profound changes need to be made in the political and party structure and in electoral legislation.

IV

What is it that didn't work?

Do we really know why?

Brazil has quite a lot of experience in making reforms. Retrospectively, these reforms followed a well-defined sequence, were varied, and mostly coincided with a stabilization programme. Various indicators show that not all of them achieved the expected results, however.

Firstly, the two episodes of intensification of the import tariff reduction process, in 1990 and 1994, were basically part of price stabilization programmes. The lowering of tariffs was therefore neither an instantaneous process nor one that followed a linear course over time. On the contrary, various sectors had to face a series of increases and reductions in tariff rates over relatively short periods of time.⁷⁸ These ambiguous signals placed an extra burden on investors and consumers of imported goods.

One of the most frequent criticisms of the stabilization policy adopted in 1994 is that, when analysed five years after its application, it is noted that it continued to be basically just a stabilization programme. There was a lack of a medium- and long-term strategy, and economic policy continued to be subordinated to that main objective, which naturally had its costs.

The exchange rate was kept below the equilibrium levels on the grounds that: i) the economic "fundamentals" had been changed through price stabilization (so that the parity criterion must be reconsidered, on new bases; ii) exchange rate devaluation would have caused pressures on costs (thus adversely affecting the stabilization process), and iii)

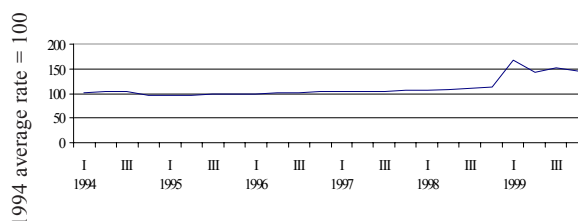
the more stable macroeconomic environment would ensure that the economy was attractive to foreign investors. As may be seen from figure 6, there was a decline in competitiveness (measured in parity terms on the basis of the wholesale price index) up to mid-1996.

The overvaluation of the exchange rate was reduced when the government began to emphasize the need to modify the exchange rate in the light of domestic inflation (from 1997 on), but external pressures made necessary a bigger change in 1999.

It was expected that the positive effects of the trade reforms on competitiveness would stimulate exports. It is not yet clear to what extent the easier access to imported goods stimulated export growth, but at all events the high domestic interest rates affected the production of export goods, while the wage increases associated with the overvaluation of the exchange rate had a negative impact on the foreign trade agents. At the same time, there was an explosive increase in the demand for imports, and this gave rise to big trade deficits.

The literature consulted for section II would seem to suggest that this procedure may have been part of the government's strategy designed to win credibility

FIGURE 6
Brazil: Real exchange rate, 1994-1999



Source: Central Bank of Brazil.

⁷⁸ Baumann, Rivero and Zavattiero (1997) showed that in the case of various products there were as many as eight changes in nominal tariff rates within a period of 26 months: from July 1994 to September 1996. In some cases, the nominal tariff rates fluctuated between 0% and 19% (and between 19% and 73% in some other products), and these changes took place repeatedly in both directions, i.e., there was a series of rises and falls.

for its reform programme, but it is not clear how much time was required by the credibility argument: basically, exchange policy was kept substantially unchanged for four and a half years.

In the monetary field, the domestic debt was financed during the first half of the 1990s through fixed-interest bonds. As from the adoption of the Plano Real, however, the price stabilization associated with the inflow of external capital caused the authorities to modify their finance structure, above all in favour of flexible interest rate bonds (70%) and dollar-indexed bonds (21%). The continuity of monetary policy and the restrictions on the exchange rate were of fundamental importance for maintaining price stability, although the maintenance of high interest rates called for by this combination of policies helped to increase public indebtedness, without the government being able to make the necessary policy changes.

This does not mean that efforts were not made to increase revenue collection: fiscal income increased from 25% of GDP in 1993 to 30% in 1998, and the "primary" fiscal results⁷⁹ were positive throughout the second half of the decade. The problem lay in the area of expenditure,⁸⁰ especially as a result of the variation in domestic interest rates: in 1998 interest payments on the domestic public debt were equivalent to 44% of total fiscal income.

The overvalued exchange rate stimulated the demand for foreign exchange by importers. The changes in legislation, price stabilization and renewed access to international capital markets generated substantial inflows of foreign capital, first in the form of loans and portfolio investments and subsequently as foreign direct investment.

The result was a vicious circle of inflows of foreign currency which were monetized and had to be neutralized through higher interest rates. The latter, in turn, placed pressure on the fiscal accounts, giving rise to the expansion of indebtedness, the need for new loans, and hence also for still higher interest rates. Table 4 shows the various components of the fiscal deficit.

There are two aspects which are worthy of note in table 4. First, interest payments on the domestic and external debts explain most of the deficit in the late 1990s. Second, the monetization at the beginning of the stabilization process was replaced by the sale of

⁷⁹ I.e., excluding monetary correction and interest payments.

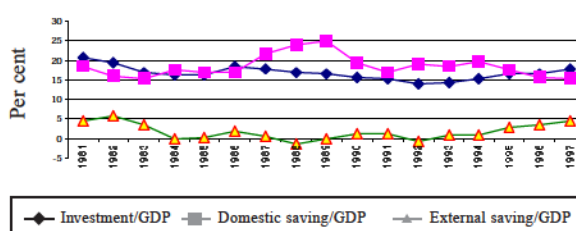
⁸⁰ At the end of the decade another debate arose about the type of revenue collected, which was based more and more on levies (fixed percentages of wages and profits) than on taxes.

TABLE 4
Brazil: Main components of the fiscal deficit
(As percentages of GDP)

	1994	1998
"Operational" fiscal deficit	-1.4	7.5
Uses		
"Primary" deficit	-5.3	-0.0
Interest on domestic debt	3.2	7.2
Interest on external debt	0.7	0.3
Sources		
Domestic finance	-2.6	4.5
External finance	-3.0	2.2
Monetary expansion	4.3	0.8

Source: Central Bank of Brazil, 1999.

FIGURE 7
Brazil: Investment and saving, 1981-1997
(As a percentage of GDP)



Source: Brazilian Geographical and Statistical Institute (IBGE).

domestic and foreign bonds as a source of public finance.

The dependence on external saving proved to be a two-edged weapon. It helped to finance the public debt, but on the other hand the increase in the rate of external saving after 1994 (from 0.9% to 4.4% of GDP in 1998 (see figure 7)) mainly went to finance consumption. The investment rate rose from 15% to 18%⁸¹ over these four years,⁸² although these investments were above all in modernization projects and not in the expansion of production capacity.⁸³ Between 1993 and 1996, private consumption accounted for 72% of the increase

⁸¹ At constant 1980 prices.

⁸² Mainly by the private sector, for public investment on machinery and equipment went down from 0.7% in 1994 to only 0.4% in 1998, while the corresponding rates for investment in construction were 2.9% and 1.8%, according to the IBGE.

⁸³ The dependence on external finance also raised the total external debt by 47% over the same period: from US\$ 151 billion in 1994 to US\$ 222 billion in 1998.

in aggregate demand, whereas capital formation only accounted for 22% (Saínz and Calcagno, 1999).

The privatization programme helped to cope with this situation of incomplete fiscal adjustment through the sale of public enterprises and the reduction of the fiscal burden caused by inefficient State enterprises. Whatever the consequences for production efficiency may have been, there are two collateral effects which are worthy of note.

Some enterprises were sold even before the regulation of the corresponding sector was completed, and this may have affected competition on the domestic market. Furthermore, the privatization of a number of important enterprises was initially the result of financial arbitrage operations, with the participation of agents not directly involved in production activities and –until recently– with only limited participation by foreign investors. Consequently, the efficiency gains may not have been as significant as had originally been planned, or else more time was needed for the changes in ownership to improve competitiveness.

Although one of the objectives of the privatization programme appears to have been the maximization of income, and in spite of the impressive amounts of resources involved, the public debt continued to be heavy, above all because of the public sector wage bill (9% of GDP in 1997), the social security deficit (9.4% of GDP) and the high real interest payments (3.4% of GDP) (Cysne, 2000).

The privatization of public enterprises, together with the changes in regulations and the elimination of the public monopoly in various sectors, improved private-capital activity, but this only occurred in the production sector, since private-capital contributions to social expenditure continued to be quite rare. Although private enterprises and NGOs have long taken part in the provision of public services, most of these services continue to be basically a public-sector activity.

The level of social expenditure in Brazil is comparable with that of most other middle-income countries –approximately 19% of GDP, although unjustly distributed– and the reforms have not so far been successful in substantially changing the origin and composition of the income which serves to finance it: in spite of the changes made in the Constitution, social expenditure continues to depend on funds from social contributions (58% in 1996).⁸⁴

⁸⁴ The resources continue to be concentrated in specific areas: the federal government devotes two-thirds of its resources to social security and payments to public employees; the states devote most

Furthermore, the aggregate social indicators suggest that there is still much to be done in this field. Price stability and public transfers generated substantial positive effects. The real income of employed persons increased by 30% between 1993 and 1997, due mainly to: a) a marked increase in transfers to families of all income levels and b) changes in relative prices which reduced the prices of staple products. Consequently, between 1990 and 1996 the proportion of households below the poverty line went down from 41% to 29%,⁸⁵ which undoubtedly represents a positive development.

With regard to income equality, however, the estimates of Neri and Camargo (2000), who use data from the national household surveys (PNAD),⁸⁶ confirm the very marked concentration of income in Brazil, since they reflect only a very slight change in the indicators of inequality between 1990 and 1997.⁸⁷ This result is obtained regardless of whether the Theil index (0.748 in 1990 and 0.715 in 1997, for all sources of income) or the Gini coefficient (0.607 in 1990 and 0.595 in 1997, for all sources of income) are used.⁸⁸

Neri and Camargo (2000) also show that detailed calculations based on the primary data of the national household surveys require some qualification of the results. These slight declines in the general inequality indicators do not reflect an improvement in income distribution: the share of the richest strata of the population in total income continues to be very high, and the individuals in those income brackets made their gains through a variety of effects, such as those associated with the higher pay of more highly skilled workers or particular types of activity, financial gains obtained from higher interest rates, etc. Various tests indicate that the apparent improvement suggested by these indicators is due above all to the “wealth effect” deriving from the reduction in the cost of the consumer

of their expenditure to education, payments to public employees and health, while the municipalities devote three-quarters of their expenditure to education, housing, health and drinking water supply and sanitation.

⁸⁵ The reductions were from 36% to 25% in urban areas and from 64% to 46% in rural areas (ECLAC, 1999).

⁸⁶ Pesquisa Nacional de Domicílios (PNAD).

⁸⁷ Indeed, the coefficients are almost unchanged if the margin of error of this type of indicators is taken into account.

⁸⁸ Alternative methodologies using a different unit for analysis –like that of ECLAC, 1999– also indicate a high degree of concentration, with relatively little change during the 1990s: in 1990 the Gini coefficients were 0.528 for urban areas and 0.456 for rural areas, only a little lower than the 1997 coefficients of 0.538 and 0.460, respectively.

shopping basket and the lower volatility of workers' income after price stabilization. There was practically no significant structural change in the income distribution profile in this period.

At all events, the considerable number of households which rose above the poverty line had a considerable impact on domestic aggregate demand. Consequently, imports shot up and aggregate investment rates rose, largely to satisfy domestic demand.

In most industries there was a significant expansion in investment in 1995-1997, as compared with 1990-1994. Except in the telecommunications sector, however, the level of this investment was lower than in the 1970s and 1980s. In the 1990s there was clearly a new investment model which was perhaps more efficient from the microeconomic point of view, but not from the standpoints of production capacity and economic growth.⁸⁹

Outside the industrial field, levels of investment were varied. In the mining sector, investment was quite scarce because of the relatively limited knowledge of the available resources and the poor market prospects for those minerals whose reserves were known; the same was true in the petroleum sector.

Production and distribution bottlenecks are so widespread that they have come to be known as the "Brazilian cost", to denote general inefficiency costs due to specific cases of inadequacy. Investment in infrastructure, too, is a mixture of successes and failures: modernization of the ports has been under way since their privatization, but there is relatively little investment in railways and equipment, and there continues to be a lack of integration of the railway system with other means of transport.⁹⁰

The most outstanding performance is that of the telecommunications sector, where there is a significant amount of investment connected with privatization. The electric power sector has turned in only a mediocre performance, however, and this is leading to an insufficient supply of electricity and even to the risk of power cuts.

⁸⁹ Furthermore, investment was stronger in those sectors which maintained to some extent their protection against foreign competition, which had higher levels of productivity (consumer durables, for example), and where there was a greater presence of transnational corporations.

⁹⁰ Private investment is beginning to improve conditions on various highways, but only a limited number of Brazilian expressways are candidates for privatization, in view of the private sector's expectations as regards profitability.

Thus, from the point of view of industrial policy the reforms were only partially successful in terms of improving the infrastructure. As already shown, output growth could recover for a time, but there are increasing doubts about the resulting structure and the long-term prospects with regard to the economy's place in the international division of labour.⁹¹

Generally speaking, enterprises have tried to adjust to competition from imported goods through defensive specialization strategies which have often adversely affected local production of components and products with the highest content of technology. The adjustment process of the industrial sector has increased the competitiveness of sectors producing on a large scale with intensive use of labour. At the same time, the easier importation of capital goods has stimulated the modernization of technologically sluggish sectors.

In the period from 1991 to 1993, various measures helped to facilitate the importation of technology, but the use of foreign technology has not usually been accompanied by a corresponding domestic technological effort, other than the adaptation of those technologies to local conditions.⁹² Only a few enterprises maintain research and development activities, and the external technological links of Brazilian enterprises are quite limited, not only with other enterprises but also with universities and research institutes. The establishment of technical relations among enterprises is made more difficult by the fact that the industrial sector is excessively heterogeneous.

The spread of production processes which are more capital-intensive and involve more imported components has also helped to increase a structural component of open unemployment: even if the economy begins to produce more once again, the reduction in open unemployment will be slower than on previous occasions. Thus, the average length of time

⁹¹ There is also concern about the real participation of producers in export activity: out of a total of over a million registered enterprises, only 14,000 systematically operate on the external market.

⁹² The balance of payments data show an increase in the importation of technology during the 1990s and a significant change in its composition: the share of "specialized technical services" in total imports went down from 67% in 1990 to 32% in 1996, while at the same time there was a pronounced increase in payments for "use of patents" and "supply of industrial technology" (in the case of non-patented technologies). This reflects an increase in the importation and transfer of foreign technology, without a corresponding increase in investment in research and development by local firms (see Tigre, Cassiolato and others, 2000).

a worker remains unemployed rose from 3.5 months in 1991 to 6 months in 1998 (Camargo, Neri and Reis, 2000). This situation is further aggravated by the labour legislation.⁹³ An average of 3% of the workers in the industrial sector change jobs every month, which reduces the incentives to provide training and heightens the difficulties already mentioned regarding local technological efforts.

The effects of the adjustment were also perceived in rural areas. The reduction in credit, trade liberalization and an overvalued exchange rate caused significant changes in the relative prices of agricultural products.

The agricultural sector adjusted by experimenting with different forms of domestic capitalization, mostly associated with a notable increase in productivity and

reductions in costs and assets. As a result, there was a high level of unemployment.⁹⁴

The increase in the demand for food which occurred after the stabilization process⁹⁵ was covered by the domestic supply of food, which was stimulated by the significant reduction in the cost of imported inputs. This fact, together with the marked reduction in official credit, discriminated against small producers, who use more traditional technologies. The elimination of producers with below-average levels of productivity also helped to increase the rate of open unemployment.

The problems resulting from this situation and the dissatisfaction with the results obtained are due to the fact that the reforms were incomplete, wrongly implemented, or sent wrong signals to the economic agents.

V

Lessons from the Brazilian experience

The reforms applied in Brazil since the late 1980s are quite enlightening in various aspects. First, they have at least two features which have not been taken into account in the literature on reforms: a) they were applied in parallel with a regional integration process (MERCOSUR) which involved significant commitments, at least in terms of external trade policies, and b) Brazil has a federal structure, and this has major implications for the results of many reforms such as those in the social security system and the financial sector.

As suggested in figure 1 (see section III above), the sequence of the reforms seems to have corresponded to the recommendations made in the literature: trade reform preceded all the others. There were nevertheless two clearly identifiable stages –up to mid-1994, and after that time– with the turning-point being represented by the adoption of an energetic price stabilization programme.

In other words, the trade reform process began at a time when the economy was still suffering from

serious macroeconomic imbalances –so that it was not possible to maximize the benefits transmitted through relative prices– and then speeded up in parallel with the price stabilization programme.

Simultaneous trade openness and deflation is more fully covered in the literature on reforms.

The indicators show that in reality the trade openness process aided stabilization and increased the surpluses of both producers and consumers, through access to imported goods. The simultaneous presence of exchange rate overvaluation, which was needed for the purpose of stabilization, affected both the trade balance and the relative prices of tradeable and non-tradeable goods. As a result, there was a trade deficit, and the movement of factors towards the production of non-tradeable goods was stimulated.⁹⁶

⁹³ When the economy is growing and there is low unemployment, there is an implicit incentive for workers to provoke their own dismissal, as in this case they receive a month's wages, plus 40% of a fund (FGTS) built up by the enterprise they work in, at the rate of one month's wages per year of service in the enterprise (Amadeo and Gonzaga, 1997).

⁹⁴ It is calculated that the number of workers in the agricultural sector went down by 23% (5.5 million jobs) between 1985 and 1996, but the sector's output increased by 30% over the same period.

⁹⁵ The purchasing power of urban workers has increased in relation to the cost of food and clothing by over 60% since 1990, as the increase in the wages of unskilled workers exceeded the increase in food prices.

⁹⁶ This was very similar to what an absorption-type balance of payments model would have predicted: a shift of the production frontier, in which relative prices favour the production of non-tradeable goods.

It is generally accepted that during stabilization programmes the maintenance of an overvalued exchange rate is a cost that has to be paid, if it forms part of the government's strategy designed to show its firm commitment to the reform process. The social cost of the alternative -losing credibility with regard to the reforms- could turn out to be infinitely greater. The question raised by the Brazilian experience, however, is why this policy lasted so long: much longer than would be considered necessary to generate credibility.

This therefore gave rise to growing concern about long-term growth. The signals sent to the economic agents were mainly aimed at promoting stabilization. Not much was done in terms of creating suitable conditions for the recovery of growth, except for the increases in efficiency expected from privatization and trade openness. Consequently, there was an increase in investment as a whole, and it was more efficient in microeconomic terms, but the amount invested has not been large enough from the point of view of the long-term growth strategy (there was only a limited increase in production capacity), and it does not hold out much hope as regards export performance.

It was also noted earlier that the literature on reforms states that the financial sector should be reformed before controls on foreign capital are eliminated. Here, too, the Brazilian experience was rather special. Incentives for foreign investment were adopted in 1990-1991, but the real financial sector reform only took place in 1995, after it was seen that adjustments needed to be made because of the loss of the profits previously derived from inflation, which had been channeled to the banking sector. This reform did not bring about a reduction in interest rates, as might have been expected. Instead, there was a vicious circle of capital flows linked with the fiscal deficit, this led to even higher rates which in turn attracted fresh inflows of capital, and this process was repeated successively.

According to the models analysed in section II, whenever lack of confidence in the permanence of the reforms is linked with access to external finance, the private sector ends up contracting debts to finance the expected consumption. The Brazilian experience is different, however. This same effect -increasing external indebtedness primarily in order to finance domestic consumption- took place in a context of relatively low levels of investment, but strong domestic demand, although there were few doubts about the government's intentions (as the series of political victories won by it shows).

The basic recommendations regarding structural adjustment likewise indicate that public expenditure

should be concentrated on health, education and infrastructure, leaving all the other activities in the hands of private enterprise.

This is probably the aspect in which the federal structure of Brazilian society is most clearly seen as a determinant of the results. Sections III and IV showed that various characteristics altered the structure of public finance. The evidence also shows that: a) private sector commitment to the financing of these areas is slow and limited, and b) there are structural restrictions which condition the extent to which it is possible to transfer federal government expenditure to the states and municipalities. If it is desired to insist on these reforms, this will call for a new design of the fiscal structure.

This latter aspect, together with the signs of rigidities in the labour market due to the legislation, and the increasingly evident cost of the manner of operation of the judiciary and legislature, mean that there is no room for partial reforms. If the aim is to maintain the reform process, then once that process has been initiated it must be constantly deepened and widened.

In short, there are at least seven lessons which can be learned from the experience of Brazil in the 1990s.

1. There are clear advantages in ending inflation, but the results obtained will depend on the way the stabilization process is kept up.

Brazil did not adopt either i) a repressive scheme like that adopted in Chile in the 1980s or that followed in Argentina (with Bonex and reductions in nominal wages) or ii) a negotiated process like those adopted in Mexico and Israel. Instead, since the mid-1990s Brazil has combined: a) a nominal exchange rate anchor; b) high positive real interest rates; c) repression of real wages in the public sector, and d) quantitative adjustments in the labour market, with the result that this set of measures has created obstacles to competitiveness and medium- and long-term growth.

2. As economic theory predicts, trade openness increased both producer and consumer surpluses, but the way the openness process was carried out seems to have imposed excessively high costs on some sectors.

3. Fiscal adjustment is essential if it is desired to avoid excessively high interest rates and resume action in the public sector. Such adjustment must be planned, however, so that it does not adversely affect production efficiency or impose excessive social costs: private financing of social expenditure is neither immediate nor sure.

4. Restructuring of the financial sector is of fundamental importance in a world of intensive capital movements: in this respect, the Brazilian process was less costly in terms of GDP than similar processes in other countries, and it seems to have been of crucial importance for avoiding the multiplier effects of recent external crises.

5. Although it is important, price stabilization should not be made the sole objective of economic policy. Experience has shown that it takes some time for expectations of inflation to disappear.⁹⁷ It is just as important, however, to transmit the right signals to the economic agents about the recovery of production in order to ensure that suitable conditions for the reforms are sustainable over time.

6. Once begun, the reform process will determine its own continuity, progressing in each stage if there is a firm intention to avoid a relapse. Consequently, economic contexts of low inflation and open economic relations with the rest of the world demand fiscal consistency and changes in labour legislation, as well as in administrative and institutional procedures.

7. Relying on external saving to resume an investment cycle is a risky approach, since the decisions of foreign investors are based not only on what happens with regard to the internal variables but also on events in other parts of the world.

The reforms made in Brazil in the 1990s were so intensive and numerous that it may still be premature to try to evaluate them in full. Various policy changes - such as the privatization of public enterprises and reform of the social security system- are only likely to be reflected in dynamic advantages after a certain length of time. However, ten years have passed since the first significant changes, and there can be no doubt that some lessons can already be derived from them which will help us to understand adjustment processes in developing countries.

The experience of Brazil is an example of a case where the reforms did not follow the recommended ideal sequence, and sometimes the wrong signals were sent to the economic agents, but it is also a case where the advantages already obtained could easily be lost if the changes made so far came to be reversed.

(Original: Spanish)

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⁹⁷ See, for example, the studies of the stabilization processes in Argentina, Chile, Mexico and Peru published by IPEA/ECLAC Office in Brazil (1997): over four years can elapse after stabilization before the economic agents lose their memories of inflation and adjust their behaviour. Indeed, the long Brazilian experience of widespread inflation could require an even longer period of adaptation.

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Job-seeking *strategies* in Trinidad and Tobago

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National levels of unemployment in Trinidad and Tobago have remained consistently high since the 1980s, because of the economic recession, subsequent structural adjustment arrangements and the diminution of traditional labour-intensive activities such as estate agriculture. Groups which had been dependent upon casual employment that was available in pre-recession times have been experiencing chronic unemployment. Combining extremely irregular casual employment with activity in the informal sector, they occupy a marginal and precarious position in the labour market. This study examines the way in which the characteristics and strategies of job-seekers differ in mainstream and in peripheral areas of the labour market. In analysis of the qualitative data, based on 45 in-depth interviews, Ragin's qualitative comparative procedures were used. This method of analysing qualitative data permitted scrutiny of different individuals' combinations of characteristics, and identification of those job search strategy components that led either to finding employment or to suffering long-term unemployment. The chronically unemployed showed a consistent lack of up-to-date knowledge of the labour market, whereas those who were successful in finding employment did have this type of information, through 'weak ties' based on family and previously established labour market links. The success in finding employment by individuals who lacked advanced secondary schooling and vocational training could be associated with their 'ties of merit' acquired from employment experience and a work record in the formal sector. The data suggest that while affiliation with the formal economy could strengthen an individual's position in the labour market, association with the informal sector did not seem to give any later advantages in finding employment.

I

Introduction

Work is inextricably woven into the fabric of societies, and indeed it is of vital importance in societies where the social security system is not extensive, for in such cases income depends on participation in the labour market, and households rely on the earnings of their economically active members. Although traditionally the Government of Trinidad and Tobago has shown a strong commitment to the provision of a basic safety net to cover the old, the disabled and female-headed households, 'able-bodied' citizens must rely on their links to the labour market, since they are not eligible for the traditional forms of welfare assistance and are not covered against the risk of unemployment. National unemployment levels have remained consistently high since the 1980s, because of the recession, subsequent structural adjustment arrangements, and the diminution of traditional labour-intensive activities such as estate agriculture. In a harsh economic climate, casual employment opportunities that were once abundant (in, for example, public and private sector construction) became scarce, and that part of the labour force which was dependent upon such periodic employment was left without a livelihood and has to seek out earning opportunities in the informal sector.

This qualitative study is an examination of the characteristics and job search strategies of unemployed groups in Trinidad. The in-depth interviews used in it produced rich data whose scrutiny reveals information on features of the job search which are highly relevant in this particular research context. A matrix based on these relevant features is used to organize or 'code' the

data about each individual's combination of characteristics and job search strategy components that have led either to success in finding employment or to a condition of long-term unemployment. Boolean algebra is used to facilitate identification and comparison of the different combinations of characteristics and strategies associated with successful or unsuccessful job search outcomes. The study was conducted in the lower-middle and lower socioeconomic levels of job-seekers. Among the latter, in particular, the educational background is weak.

The data collection targeted individuals in different positions vis-à-vis the labour market. The first group were those who were seeking work in the more dynamic areas of the labour market and were very near to finding employment. The second group consisted of individuals who had been unemployed for long periods and occupied a marginal position in the labour market. The research thus looks at the way in which the characteristics and strategies (henceforth also referred to as 'attributes') of job-seekers differ in the mainstream and in the peripheral areas of the labour market in Trinidad. The typology that emerges from this exercise can benefit policy and intervention planning for similar target groups which are in danger of marginalization from the labour force. A holistic perspective is sought with regard to the range of salient attributes and their interlinking processes. In the case of marginalized groups, problems often need to be addressed on several fronts in order to be dealt with effectively.

II

The labour market: the 'centre' and the 'periphery'

Trinidad and Tobago (population 1.4 million) is an island State in the Caribbean with a colonial past and a more recent era of independence beginning in the early 1960s. The history of settlement and development has given each of the Caribbean islands its own individual character, but Trinidad is distinctive because of its resources of oil and

natural gas. Oil exports are only a small fraction of the total world production, but they are the main source of national revenue, and the economy is heavily dependent on the production and export of petroleum and gas. This capital-intensive sector is very sensitive to fluctuations in world market prices (Rogozinski, 1994, pp. 275-279).

Oil 'windfalls' in the period between 1973 and 1982 made possible rises in income, expansion of jobs in the public sector and investments in infrastructure, and improvements in living conditions.¹ With the fall in international oil prices during the 1980s, there was a sharp contraction of the economy, so that high levels of government expenditure could not be maintained. Meanwhile only a small number of the jobs created were in the more long-term goods producing sectors, and even at the height of the oil boom the unemployment rate did not fall much below 10%. During the recession, and with the stringent measures required by structural adjustment, employment has been retrenched in the public sector. The public works infrastructure programmes on which many had come to rely as a periodic source of income were also cut back. In the construction industry, the decline in the private and public sectors meant a drop from the peak in 1980, when the sector employed 18% of the labour force, to a situation in which half of the labour force in the sector was unemployed by the late 1980s (United Nations, 1995; Ramsaran, 1992). The decreased income opportunities for the unskilled in both public works projects and in the construction sector have brought economic hardship to households which had relied on this type of work, and this situation is reflected in the living conditions of the less-educated unemployed in the target group.

The unemployment rate fluctuated between 16% and 22% in the 1990s. In the third quarter of 1995, according to Central Statistical Office data, the rate was 16.3%, the lowest since 1985. Unemployment is higher among women and young people. In Trinidad and Tobago, unemployment is very closely linked with economic and social inequality. Thus, Henry and Melville (1989) found the correlation between unemployment and poverty to be 0.88 in the late 1980s.

Over 75% of all workers are employed in the formal sector: 42% in the private formal sector and 33% in the public sector. The remainder of the labour force is located in the informal sector, and a significant proportion are own-account workers (self-employed). The agricultural sector accounts for less than 5% of the labour force. Occupations are not significantly different in rural and urban areas.

¹ Public spending and production subsidies increased, especially in the public administration and in transfers to alleviate the continued high rates of unemployment attributed to the capital-intensive nature of the oil sector (World Bank, 1995, pp. 11-32).

Certain growing areas of unskilled work, such as the domestic and security sectors (maids and security guards), have high levels of underemployment. The informal sector² is the area of the labour market to which individuals must invariably resort in search of an opportunity to earn income. There are two views on the informal economy: that it ultimately reinforces social inequality, or alternatively, that it serves to alleviate or dilute unequal conditions (see McKeever 1998)³. Informal sector employment involves personal services, artisan and craft production, and small businesses, including micro-enterprises. Wages in the informal sector are on average half of those of manual and non-manual workers in modern enterprises (ECLAC, 1997, p. 16).

The data collected show that informal social networks based on strong reciprocity, combined with intermittent income often from the informal sector, form the commonest subsistence mechanisms in circles lacking regular income. Households routinely have to struggle to meet even basic expenses, such as the cost of food, medicines, clothes, or transport fares for school-age children. Economic subsistence in informal networks has developed into a long-standing survival mechanism for the long-term unemployed and underemployed. Mutual assistance networks constitute the only ongoing 'safety net', occasionally supplemented by targeted welfare programmes such as that whereby the long-term unemployed in this target group were contacted for this study. Many unemployed individuals seek work in some capacity or other in the informal economy: peddling food and small articles, for example, or, among the rural-based, selling home-grown produce, are some of the ways to generate income.

² In keeping with the mostly widely held usage of the term, the 'informal economy' refers to otherwise legal forms of income generation that are not regulated by the legal and political institutions of society (Portes and Castells, 1989, p. 12). For example, workers may not pay taxes, workplaces may not comply with government regulations, or business owners may operate without required licences. This type of economic activity takes place, however, within the context of a dominant formal economy, rather than independently of that economy. Moreover there are generally links between the two: for example, materials, labour and finished products move between them (McKeever, 1998, p. 1211).

³ More recent studies present the argument that the informal economy comprises a wide range of jobs, offering opportunities to many who could not find them in the formal sector, yet at the same time exploiting the labour of others. In McKeever's (1998) analysis of national-level survey data from South Africa, it was found that success, in terms of occupational status and income attainment, follows patterns of stratification in the informal economy that are consistent with those in the formal economy.

III

Previous studies

The economic and structural dynamics of social inequality in the Caribbean have been dealt with in several studies, e.g., Ramsaran (1992) and Gafar (1998). Sociopolitical and race-related aspects of inequality have been researched by Ryan and Stewart (eds.) (1995). The characteristics of deprived groups within a framework of poverty and deprivation have been focused upon by Ryan, Mc Cree and St. Bernard (eds.) (1997), who used quantitative surveys and interview

data. These issues have also featured in Valtonen's (1996) study of immigrant integration in Trinidad and in Neil's (1987) in-depth study of one particular local community in urban Trinidad.

Research has not been carried out in the Caribbean region on employment strategies and the job search stage of labour market participation. This study looks at a preliminary but crucial stage on the threshold of the labour market, where individuals negotiate entry or re-entry into employment.

IV

Data collection and the target group

This study is based on qualitative data from in-depth interviews conducted in Trinidad⁴ during 1995-1997. Each interview lasted between one and one and a half hours. The interviews were semi-structured around issues that were approached through direct questions, as well as by the use of probes. Individuals were willing to participate in the study because the topic was a subject of concern, both for them and for others in the same situation.

The number of persons interviewed amounted to 45, aged between 17 and 45 years. Of the total, 22 were urban-based in Port of Spain and its environs, and 23 were rural-based, while 24 subjects had only primary-level education. Of the 21 subjects who had some secondary education, 10 had completed it to the O-level (ordinary-level) grade and two of them had gone on to complete their schooling to the A (advanced)-level, thus completing their high school education⁵. There was a

spread of educational attainment in the group, but the level of most of the 45 subjects was low (primary or lower secondary levels).

Following the procedure in the qualitative method, sampling was purposeful in order to reach individuals who would provide the best information on the research topic. The target group was drawn from two areas of the labour market, comprising individuals who were looking for work in the mainstream or dynamic part of the labour market and were close to finding employment, and individuals who had been unemployed for long periods and were without any immediate prospects of locating work. This sampling procedure allowed for differentiation of the target group by strategy outcome, and facilitated the comparison of attribute configurations.

Those subjects who were on the point of finding work were contacted through the State Labour Office⁶.

⁴ The majority of the country's population live in Trinidad, where the 'modern' industrial sector is also located. The study was conducted in Trinidad, to which the data mentioned in the course of the article refer. Only 3.3% of the population live in Tobago, where agriculture is the main occupation, with some diversification into tourism.

⁵ Grades 1-5 (age groups 5-11 years) correspond to primary-level schooling. The secondary level is made up of Forms 1-5 (age groups 12-16 years), culminating in the O-level exams in the Fifth Form.

The Lower and Upper Sixth Forms (age group 17-18) lead to matriculation (the A-level exams). It should be noted that 55% of the economically active population in Trinidad and Tobago have not gone beyond the initial years of secondary schooling.

⁶ The State does not maintain comprehensive labour exchange services, but conducts recruitment for specified areas of employment in the public sector and, less frequently, the private sector.

Some were at a pre-selection stage (shortlisted) for clerical work in the public sector and were likely to be called to fill vacancies at some point, if not immediately. Others were registering for employment in fruit harvesting in Canada, which is a seasonal recruitment activity organized by the labour authorities.

The individuals with more remote prospects of employment were contacted through an NGO Supplementary Feeding Programme that functions under State auspices. Eligibility for the programme is based on inability to afford the 'minimum food basket'.⁷ Food assistance is provided to eligible households for a period of three months. As participants of this highly targeted and residual-level social welfare

programme, these households had been experiencing economic difficulties and unemployment over a considerable number of years. The data were thus obtained from two groups in the job-seeking spectrum: one deploying an effective employment strategy, and the other a non-effective strategy.

The interview protocol was structured into the following sections: personal information (age, civil status, family and household type); education level (schooling and vocational education); employment history (types of activity, employers, length of employment periods, job search, channels, contacts); and own outlook on the future, plans, and suggestions for official interventions.

V

Conceptual framework

The theoretical and conceptual framework underwent some changes in the course of data collection and analysis, as is common in the qualitative method⁸. The developed theoretical frame is discussed in this section, together with the range of attributes and job-search strategies that emerged from the data as having an impact on the job seeking process in this target group.

Bourdieu's thesis on the effect of cultural transmission on later occupational success in the succeeding generation has relevance to this study. Bourdieu and Passeron (1977) argue that education reproduces the system of social stratification, since parents' economic capital can be turned into the children's 'cultural capital', which in turn determines the second generation's economic position and occupational success. According to Bourdieu, each class possesses its own set of meanings, or cultural framework, which is initially internalized through

socialization within the family. This *habitus* moulds perception, thought, taste, appreciation and action. It is at the same time a framework of meanings which the dominant class is in a position to impose on others (and on the education system) as the only legitimate culture. Thus, children of upper-class families are equipped with 'cultural capital' that fuels their academic achievement and eventual occupational success. This cultural transmission process, that underlies achievement-oriented activity, is generally assumed to be absent in the lower levels of the social structure, whose members are thus assumed to be disadvantaged vis-à-vis their 'upper-class' counterparts.

Although the target group was not from the levels generally associated with Bourdieu's cultural transmission processes, the data showed that the majority of subjects were nonetheless very aware of the value and utility of education. Their school career had often, however, been cut short prematurely because their families of origin had been too poor to meet the cost of books, transportation, uniforms, etc., which schooling entailed⁹. This was a prevalent feature among those who had started secondary schooling but had dropped out before the O-level exams. Their weak educational background was not so much due to being

⁷ It is estimated that 11% of the households in Trinidad and Tobago are 'extremely poor', i.e., unable to afford the minimum food basket (United Nations, 1995).

⁸ Ragin (1994, p. 82) states that 'qualitative research often involves a process of reciprocal clarification of the researcher's image of the research subject, on the one hand, and the concepts that frame the investigation, on the other. Images are built up from cases, sometimes by looking for similarities among several examples of the phenomenon that seem to be in the same general category. These images, in turn, can be related to concepts'.

⁹ Book and uniform grants that were formerly targeted at poor families were discontinued during the economic recession.

outside of circles where the cultural transmission is supposed to take place, but rather to material circumstances that inhibited the course of schooling. This finding corroborates that of Halsey, Heath and Ridge (1980), who found in their study of pupils at a selective secondary school that material circumstances were a factor determining the length of school career.

Looking at the links between education and labour market status from a family perspective is useful in this group. Those subjects at the higher end of the educational scale who had actually completed their secondary schooling came from families in which at least one adult was in steady employment in the formal sector. Among those subjects whose education had been interrupted, family labour market links tended to be much more tenuous. Sustained educational achievement in this group seems to be linked overall with relatively stronger socioeconomic status. The cultural transmission theory may also have implications in the lower-middle and lower socioeconomic levels. Whereas in the upper levels of the social structure family background or 'cultural capital' and higher academic achievement leading to occupational success are presumably linked, the very attainment of basic education in the lower levels may correspondingly be the path out of economic dependence or subsistence conditions.

'Social resources' is a concept implying a range of tangible and intangible components. It is possible to select appropriate aspects that apply to this target group in which the educational and family background resources are at the weaker end of the scale. Social resources have been defined as the wealth, status, power and social ties of those persons who are directly or indirectly linked to the individual being studied. Lin, Ensel and Vaughn (1981) proposed that access to and use of social resources through one's network provide an essential transition between family background and education, on the one hand, and socioeconomic achievement on the other. Their study was focused on one aspect of personal contacts: the occupational status of the contact used in job-seeking. Taking into account the methodological constraints arising from the use of a single aspect of social resources, the data suggested that an individual possesses a substantial advantage in the occupational attainment process if he has access to and uses greater social resources (Lin, Ensel and Vaughn, 1981, p. 1176). Social resources are seen as intermediary attributes, mediating between personal resources and occupational status attainment. The model of Lin, Ensel and Vaughn (1981) proposes,

specifically, that (socioeconomic) characteristics of personal contacts affect variations in the level of occupational status eventually attained.

The present analysis is concerned with two aspects of social resources which the data indicate as being important for the job search process and its outcome. Two categories of social ties were identified: 'weak ties' (Granovetter, 1973) and 'ties of merit'.

Granovetter (1973) states that most network models deal with strong ties¹⁰, confining their applicability to small, well-defined groups, as a result of which all the important issues involving their content are ignored. Instead, he lays emphasis on 'weak ties' that function as outward bridging mechanisms, especially between groups. These are channels through which ideas, influences or information socially distant from the individual may reach him. The fewer indirect contacts a person has, the more encapsulated he will be in terms of knowledge of the world beyond his own friendship circle. The degree of overlap of two individuals' friendship networks also varies directly with the strength of dyadic ties (Granovetter, 1973, pp. 1370-1371).

In this study, 'weak ties' are understood as those that lack the characteristics of 'strong ties', but special emphasis is placed on their function as avenues of fresh information to which the individual job seeker would not normally have access through the 'strong ties' of his immediate, but generally limited, network of interaction. 'Weak ties' can include also ties 'once removed' that can be mediated through others, as well as loosely maintained direct ties, in which interaction is not intensively sustained.

Examination of the data brought out a category of social resources termed 'ties of merit', which refer to labour market ties that have been established through the individual's own efforts. Merit refers also to the value assigned by others. 'Ties of merit' are

¹⁰ Granovetter (1973) states that 'the strength of a tie is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie'. Anthropologists associate with strong ties the quality of 'multiplexity' or multiple contents in a relationship (see Kapferer, 1969, p. 213). Marsden and Campbell (1984) found in a study of best-friend ties that the best indicators of an unobserved tie strength concept were measures of closeness or intensity in the sense that they were not contaminated by other measures. Duration tended to overstate the strength of kinship links, and frequency exaggerated the strength of ties to co-workers and neighbours. Frequency was quite weakly associated with both closeness and duration.

based on the individual's previous achievement or performance in some field. They reflect the recognition, reputation or merit engendered by such activity, and enjoy legitimacy in wider circles of the labour market. They have the quality of 'symbolic capital', which, according to Bourdieu (1986), is any social asset, tangible or intangible, that is regarded as legitimate in society. This category of labour market ties belongs to the 'constructed' type, i.e., links built by the individual with friends, co-workers, employers, etc. in the course of working life and other activity, as opposed to prescribed consanguineous and affinitive kinship ties (see Lin, Ensel and Vaughn, 1981). Since a large part of the research conducted on the link between personal resources (family background and education) and occupational status attainment is located in strata where it can be assumed that personal resources are strong, 'ties of merit', as an alternative form of personal resources, are especially relevant in

the context of the less advantaged socio-economic strata under study here.

Areas of human interaction are seldom discrete categories. 'Ties of merit' can also be information-generating and thus function as 'weak ties'. The latter are seen essentially as generating information -e.g., on current conditions in the labour market- which would not otherwise be socially available to the job seeker, while the former are understood as an asset enjoying legitimacy and symbolic value in society. 'Ties of merit' are understood here to be based on, for example, an individual's employment record with a reputable enterprise, or a history of steady work relationships, especially in the formal sector, that generate a feeling of 'trust' and confidence in potential employers. 'Ties of merit' could also be synonymous with, or signify, a desirable skill level that is maintained, or even possibly acquired and developed, in favourable working environments.

VI

Characteristics and employment strategies observed in the target group

Specific characteristics and employment strategies were initially selected from the data because they were considered to be most important for the outcome of the job search. These were transformed to nominal-scale measures to comply with Boolean algebra, which uses binary data. There are two conditions or states: true (or present) and false (or absent), which are represented as: 1, indicating presence, and 0, indicating absence of the following attributes:

- Family background (abbreviated to 'family'): the presence of 'family' indicates that one adult in the subject's family or extended family¹¹ is in steady employment, so that there is some regular source of income and possibly also contacts or 'social capital' in the workplace. Absence means that the

adult/s in the family is/are without any steady employment.

- Secondary education (abbreviated to 'secondary'): the presence of 'secondary' indicates that the individual has reached the secondary schooling level and obtained O-level qualifications. Absence means that the individual has had only primary level education and possibly the first years of secondary schooling.
- Vocational education (abbreviated to 'vocational'): the presence of 'vocational' indicates that the individual has had vocational training, thereby acquiring a skill that increases his employability¹². Absence means that the individual has not received such training
- Skill: the presence of 'skill' indicates that the individual has acquired some level of skill, through vocational education or other channels, that would

¹¹ Although the nuclear family is the predominant form in households in Trinidad and Tobago (40%), extended families nevertheless account for 21.4% of households and single parent families 13.9%.

¹² The masculine gender is used for pronouns in order to increase text readability.

- improve his chances on the labour market. Absence of skill means that the individual is basically competing for unskilled work in the employment market.
- ‘Ties of merit’ (abbreviated to ‘merit’): the presence of ‘merit’ indicates that the individual has established ‘ties of merit’ linking him with at least one socially recognized institution or employer. The link is a resilient one, based on an adequate period of participation or a good work record. ‘Ties of merit’ can also be a sign of employability, signifying that the individual has acquired some skill on the job, and function as a social guarantee of competence or worth. Their absence means that the individual lacks the social guarantee that backs up his job search initiatives at any level. The data suggested that ‘ties of merit’ were established chiefly through participation in the formal sector. Work activity in the informal sector did not seem to enjoy this type of value.
 - ‘Weak ties’ (abbreviated to ‘weak’): the presence of ‘weak’ indicates that the individual has information on at least two possible areas of employment opportunities through networking contacts (in this group these were generally once removed). The individual is thus abreast of current developments in the wider labour market and of possible opportunity areas, especially at the level appropriate to his capacity and potential. Their absence means that the individual’s job seeking activity was somewhat unfocused, diffuse and probably unproductive.
 - Urban: the presence of ‘urban’ indicates that the subject is living in an urban concentration, where problems of distance and transport costs in the job search stage do not generally arise. In the case of rural-based subjects, the job search was often hindered by lack of resources to cover transport costs.
 - Plan: the presence of ‘plan’ indicates that the individual has the objective of acquiring some type of training to enhance his/her employability. Its absence means that the individual is not considering alternatives to improve his capacity base.
 - Active job search (abbreviated to ‘active’): the presence of ‘active’ indicates that the individual engages in the job search very actively, has a high frequency of enquiry, and initiates direct contacts. Its absence means that job search activity is not of a high level, possibly due also to financial problems with transport.
- One characteristic initially expected to be significant was found to be common to all the subjects. Thus, all stated that they were willing to accept any type of work. This attribute is therefore not included in the matrix.

VII

Procedures and findings

Scrutiny of the combinations of characteristics and strategies was carried out using the qualitative comparative analysis method and the related Boolean algebra procedures developed by Ragin (1987 and 1994). The main features of the procedures are briefly described below, condensed from Ragin’s text.

Boolean analysis is combinatorial by design. This feature of combinatorial logic is consistent with the idea that cases –and especially their causally relevant features– should be viewed holistically. Thus, in Boolean-based qualitative comparison, causes are not viewed in isolation but always within the context of the presence or absence of other causally relevant conditions.

By identifying patterns of similarities and differences it is possible to identify causal links: i.e., how different configurations of causes produce different outcomes across the range of cases. The Boolean approach has several features that lend themselves to the analysis made in this study. It has the ability to address complex causal conjunctures, and it allows the researcher to investigate cases both as wholes and as parts. Organizing the findings in the form of configurations which can be juxtaposed makes it possible to present and ‘evaluate’ competing explanations.

A raw data matrix or ‘truth table’ was constructed for data on the whole target group. The truth table is

not presented here in full, as it is possible to summarize the configurations that exist in the raw data matrix, indicating the number of instances in which each occurred. Table 1 gives a summary of configurations. Each row in table 1 represents one configuration type, and the number of instances of occurrence in the target group is given in the last column.

In Boolean analysis, the number of instances of each combination of causal conditions does not enter directly into any computations. Frequency criteria are not as important as they are in statistical analysis. Instead, the focus is on types of situations (that is, rows of the truth table) as the basic unit of analysis.

For clarity, the configurations can be translated into upper case letters to represent presence of the condition, and lower case letters to represent absence of the same condition. Thus 'SECONDARY' indicates presence of this condition, while 'secondary' indicates its absence.

Table 2 shows all the identified configurations (those shown in table 1), translated into uppercase and lower case names. A multiplication sign (.) is used to indicate a combination of conditions.

At this stage, the first simple minimization step can be carried out. This involves combining rows when they differ on only one causal condition if they otherwise have the same output values. This step produces configurations which Ragin (1987) called 'prime implicants'. This simplification strategy follows the logic of an experiment. Only one condition at a time is allowed to vary (the "experimental condition"). If varying this condition has no discernible impact on the outcome, it can be eliminated as a factor (Ragin, 1994, pp. 124-125).

In rows 1 and 2, which both lead to success in finding employment, all features except one (secondary education) are the same. Individuals can seek work

TABLE 1

Summary of configurations

Row No.	Family	Secondary	Merit	Weak	Urban	Plan	Active	Skill	Vocational	Employment outcome	Instances
1	1	1	0	1	1	1	1	0	0	1	7
2	1	0	0	1	1	1	1	0	0	1	2
3	0	1	0	1	1	1	1	0	0	1	2
4	1	1	0	1	1	1	1	1	1	1	1
5	0	0	1	1	0	0	1	1	0	1	5
6	0	1	0	0	1	1	1	0	0	0	2
7	0	0	0	0	1	0	1	0	0	0	4
8	0	0	0	0	0	1	0	0	0	0	18
9	0	0	0	0	0	0	0	0	0	0	4

TABLE 2

The configurations^a and their outcomes

<i>Outcome: access to employment</i>	
1.	FAMILY.SECONDARY.merit.WEAK.URBAN.PLAN.ACTIVE.skill.vocational
2.	FAMILY.secondary.merit.WEAK.URBAN.PLAN.ACTIVE.skill.vocational
3.	family.SECONDARY.merit.WEAK.URBAN.PLAN.ACTIVE.skill.vocational.
4.	FAMILY.SECONDARY.merit.WEAK.URBAN.PLAN.ACTIVE.SKILL.VOCATIONAL
5.	family.secondary.MERIT.WEAK.urban.plan.ACTIVE.SKILL.vocational
<i>Outcome: lack of access to employment</i>	
6.	family.SECONDARY.merit.weak.URBAN.PLAN.ACTIVE.skill.vocational
7.	family.secondary.merit.weak.URBAN.plan.ACTIVE.skill.vocational
8.	family.secondary.merit.weak.urban.PLAN.active.skill.vocational
9.	family.secondary.merit.weak.urban.plan.active.skill.vocational

^a As explained earlier, upper case means presence of the condition and lower case its absence.

TABLE 3

An empirical typology of job seekers' attribute configurations

Configurations with successful outcome: employment access

10. FAMILY.merit.WEAK.URBAN.PLAN.ACTIVE.skill.vocational
 11. family.SECONDARY.merit.WEAK.URBAN.PLAN.ACTIVE.skill.vocational
 12. FAMILY.SECONDARY.merit.WEAK.URBAN.PLAN.ACTIVE.SKILL.VOCATIONAL
 13. family.secondary.MERIT.WEAK.urban.plan.ACTIVE.SKILL.vocational

Configurations with unsuccessful outcome: lack of employment access

14. family.SECONDARY.merit.weak.URBAN.PLAN.ACTIVE.skill.vocational
 15. family.secondary.merit.weak.URBAN.plan.ACTIVE.skill.vocational
 16. family.secondary.merit.weak.urban.active.skill.vocational
-

effectively, even in the absence of advanced secondary level education. Nonetheless it should be noted that the successful combination with the absence of secondary education is not common in the target group, and is almost an exception. Nevertheless, rows 1 and 2 can be paired, and if we omit the 'secondary' variable that does not affect the outcome, the minimized row reads:

FAMILY.merit.WEAK.URBAN.PLAN.
ACTIVE.skill.vocational

It is not possible to do further minimization among the successful combinations in this list, since there are no further pair combinations which differ only in one feature. Four configurations remain for describing the diversity of characteristics and strategies among the 17 individuals effectively looking for work.

In table 2, in the list showing negative results (failure to find work), rows 8 and 9 only differ in the presence or absence of Plan. The two rows can be paired and minimized by omitting the Plan variable, which does not influence the result. The minimized row will thus be:

family.secondary.merit.weak.urban.active.
skill.vocational

The prime implicants present succinct 'product terms' or configurations of attributes. The prime implicant combinations established from the data may be seen as configurations of causal conditions or simply as combinations of features which form the basis of an empirical typology. Since the main interest in this study was to describe diversity succinctly by determining the prime implicants, further minimization or computation procedures were not necessary. The final phase of Boolean minimization, the 'prime implicant chart',

which seeks maximum logical parsimony, was not the objective here and was thus not carried out.

The brevity of the minimization stage is not a disadvantage in this study, as the necessary clarity and economy of description are achieved by organization of the data according to Boolean procedures, which facilitates the identification of distinct combinations.

Boolean algebra is useful for the analysis of groups in which lack of resources may be just as influential in determining the outcome, because the components are considered in their presence as well as their absence as part of the statements of prime implicants. The method permits extrapolation of holistic interrelationships within the configurations. The use of rich data from which to select salient phenomena is an initial dimension of the 'holistic' treatment. Tracking the presence or absence of features and their interplay, and being able to look at configurations in juxtaposition, are procedures that add rigour to the analysis of qualitative data.

Table 3 shows the final four configurations (numbered 10, 11, 12 and 13) for successful job seeking, and the final three configurations (numbered 14, 15 and 16) for unsuccessful job seeking. These comprise an empirical typology of attribute configurations in the target group.

The successful strategy and characteristic profiles will now be discussed, after which they will be compared with the unsuccessful ones.

Row 10 describes the pattern of individuals for whom the presence or absence of secondary education did not affect the outcome. These individuals have the asset of 'weak ties': i.e. up-to-date labour market information and information on opportunities. They are urban based, able to sustain an active job search, and have plans to take up training of some kind in order

thereby to increase marketable skills and employability. As these individuals do not have vocational education or specialized skills, they lack 'ties of merit': a solid record or reputation that would otherwise serve independently to support job seeking efforts. They come from families with stronger ties to the labour market, since at least one adult has regular employment and income.

Row 11 shows a configuration similar to row 10 in most attributes. However, links of the family or household to the labour market are weak, as no adults are employed. The job seeker nonetheless has secondary education to O-level. Studies have shown that education begins, at the secondary level, to show an effect on employment (World Bank, 1990). This finding suggests that the presence of basic educational qualifications is decisive for individuals from families without strong ties to the labour market.

Row 12 is a configuration of those with good resources in this target group. Individuals have not, or possibly not yet, entered the labour market and established 'ties of merit', but they have a range of other resources: strong family background vis-à-vis the labour market, secondary education, vocational education and skill of some kind. They are urban based, have an information base ('weak ties'), seek employment actively, and have plans for further training. Their prospects look good.

Row 13 is the configuration that does not conform to the main features of the majority of successful configurations described above. This opens up an interesting perspective. Row 13 represents a type of job seekers who have strengthened their labour market position from what was originally a less advantageous starting point for the job search. They resemble the previous type in that they possess 'weak ties' or effective information channels, and their job seeking activity is high: a combination occurring across all successful patterns. These may also be mutually reinforcing attributes. Otherwise, however, there is a marked absence of other assets. This type has entered the labour market without having secondary school qualifications, and in the absence of other family connections with the labour market, their 'weak ties' were probably based on existing labour market relations. These individuals did not have any plans for further training, and they were also rural based.

The difference is that they now have 'ties of merit', i.e., they have established a record in the labour market, based on steady work relations. The type of connection made with the labour market has been decisive. It has

most likely given rise to their skill resource, since they have not had vocational training. Row 13 demonstrates that an adequate level of marketable skills can be acquired through productive employment relations even when the individual has not previously had the opportunity to obtain formal schooling and training. A well established labour market relation can carry enough weight independently to overcome the absence of formal qualifications and of the social capital represented by family relations. A combination of weak ties and a high level of job seeking activity is complemented by skill and established 'ties of merit' with the labour market: decisive attributes for labour market mobility and for avoiding long-term unemployment in this configuration.

From a practical perspective, row 13 would seem to offer a formula that could be copied by job seekers starting with fewer resources. However, the alternative approach would be to look at the range of successful configurations in juxtaposition with the unsuccessful and discover if it would be possible to respond with a wide range of interventions designed to address multiple 'absences' of resources. The patterns presented here represent different configurations of attributes that give rise to a variety of interlinking processes. In the case of patterns with a more generous range of resources, the interrelationships and interaction processes are likely to be mutually reinforcing and empowering. In more weakly resourced patterns, the multiple absence of resources and assets may jeopardize the effectiveness of singly occurring resources.

Scrutinizing the patterns of those who are chronically unemployed, we see that row 14 resembles row 11, except that, in contrast with that row, there is an absence of 'weak ties'. This suggests that without weak ties, the individual's planning and job search diligence could be unfocused and ultimately unproductive. This finding is significant in that it illustrates how the absence of one attribute ('weak ties') can cancel out, as it were, the effectiveness of a resource which is actually present (ACTIVE). In groups where social and personal resources are lower in an absolute sense, the particular configuration patterns, as well as the relationships between components, may have a decisive influence on the eventual outcome of the job search.

The presence of the urban-based factor seems to be consistently associated with the presence of high job search activity. The individuals in row 14 and row 15 are urban based and, as in the case of successful urban-based individuals in rows 10, 11 and 12, this

attribute seems to facilitate very active job seeking. In urban locations where residential and workplace concentration is higher, transport and transport costs do not constitute an obstacle to job seeking, as they might in rural locations. It can likewise be assumed that information networks are also denser in urban concentrations, giving the urban based a possible advantage over the rural based. Nonetheless, this finding suggests that the information generated by density of contact in urban locations may not be of the same quality as that generated by 'weak ties'. The

configurations with unsuccessful outcomes on rows 14 and 15 show a presence of urban location and high level of job search activity, but combined with an absence of 'weak' information-generating ties. This points to the importance of accurate employment and labour market information over the whole range: such information was consistently absent among the chronically unemployed who lacked 'weak ties'. The role of officially sponsored, more comprehensive labour exchange facilities to fill at least part of this gap would be important for individuals who do not have such contacts.

VIII

Conclusion

The four effective and three ineffective configurations discussed here constitute an empirical typology of job seeking in two areas of the Trinidadian labour market. From a policy and planning perspective, research exercises such as this can indicate where the weaknesses lie in resource configurations. The resources or resource deficiencies of individuals should be considered not in isolation but in the context of other impacting attributes which together, in concert, shape the job search outcome. Study findings illuminate several important aspects of the job seeking process. Being urban based is associated with having plans for further education or training. Such individuals were generally disposed towards acquiring marketable skills, possibly because of the proximity of facilities and denser information circuits. Being urban based is also associated with a high level of job search activity. In this target group that is not strongly resourced, a high level of job search activity may yield many indirect benefits, such as increasing the individual's awareness of labour market dynamics, its structure, or its unwritten rules. However, this activity has proven to be largely unproductive among those job seekers who lacked a source of more accurate information on current and developing opportunity areas on which to focus their search. 'Weak' information-generating ties occupy a pivotal role in any configuration of attributes. Among job seekers who lack initial resources such as vocational education, basic educational qualifications and 'social capital', acquired 'ties of merit' built incrementally on employment performance in the formal economy can be a

compensating asset guaranteeing a degree of acquired competence or skill.

Those attribute configurations featuring multiple absence of resources and labour market marginalization point to a situation in which the individuals concerned are in a subsistence pattern, depending heavily on informal networks and irregular income from the informal economy. In this target group, the outcome difference is marked between those who managed to establish links with the formal labour market and those who sustain activities at subsistence level without gaining entry into the formal sectors. It is possible to extrapolate from the data that association with the formal employment sector is more productive of resources -and not only financial resources- that promote social and economic mobility. Association with and activity in the informal sector, on the other hand, produces economic benefits that hover around the subsistence or safety net level but do not lead either to upward or lateral socioeconomic mobility. Configurations with vocational education and skills were markedly absent from this target group (with one exception). Those possessing such configurations would probably not linger long on the threshold of the labour market. Some measures to address the conditions in peripheral groups are obvious. Innovative approaches call for the identification of key attributes and the interrelations between these, in order to maximize programme effectiveness.

(Original: English)

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