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Contenido

The Persistence of Poverty in Peru: Possible Answers, their Limits and their Implications for Latin America*

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RESUMEN

Con la liberación económica de inicios de los noventa, y con el fin de la violencia de *Sendero Luminoso*, en 1992 la economía peruana empieza un periodo de recuperación rápida que dura hasta 1997. Durante ese periodo la incidencia de la pobreza bajó de 55% a 51%. Pero en ese momento la economía dejó de crecer, y no mostró signos de recuperación sino hasta el 2002.

La frustración más importante de los peruanos durante la última década ha sido el problema de encontrar un empleo que sea lo suficientemente productivo como para permitirles salir de la pobreza. Incluso durante el periodo de alto crecimiento que va de 1994 a 1997, las condiciones de empleo se mantuvieron tan débiles que los salarios reales bajaron. Una de las mayores decepciones de los noventa fue que la liberalización económica y el mayor crecimiento económico no ayudaron a mejorar el equilibrio entre la gran mayoría de los trabajadores poco calificados y las limitadas oportunidades de empleo productivo.

Una importante explicación de este fracaso es que la estructura de ventajas comparativas del país, liderada por el sector minero, restringe la capacidad del crecimiento para generar empleo. Este problema estructural puede ser enfrentado usando el tipo de cambio para incentivar las exportaciones y el crecimiento manufacturero, la agricultura no tradicional y los servicios modernos. Ha sido un error costoso para los esfuerzos por reducir la pobreza permitir la apreciación del tipo de cambio real con la liberalización, y mantener tal orientación por casi una década. Muchos otros factores han contribuido a mantener el elevado nivel de pobreza. Uno de ellos es la baja oferta de tierra cultivable con relación a la fuerza laboral agrícola. Otro es la baja calidad de la educación pública. Y un tercero es que la presión tributaria es muy baja como para permitir la inversión social necesaria.

ABSTRACT

In the 1990s, with economic liberalization at the beginning of the decade, and with the end of the extreme violence of *Sendero Luminoso* from 1992, the Peruvian economy went through a period of recovery and rapid growth up to 1997. In that period

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the incidence of poverty came down from 55 to 51 percent. But growth stopped again at that point, and did not show any signs of revival until 2002.

The main frustration for Peruvians in the last decade has been the problem of finding employment that is sufficiently productive to enable them to get out of poverty. Even in the period of high growth from 1994 to 1997, employment conditions remained so weak that real wages of hourly paid production workers fell. One of the greatest disappointments of the 1990s was that economic liberalization, and better results with economic growth, did not do more to improve the balance between the overwhelming numbers of low-skill workers and the opportunities for productive employment.

A major reason for this failure is that the structure of comparative advantage, led by the mining sector, holds down the power of growth to improve employment opportunities. That structural handicap could be lessened by using exchange rate management to raise incentives for exports and growth in manufacturing, non-traditional agriculture, and modern services. It was a costly mistake, from the viewpoint of efforts to reduce poverty, to allow an appreciation of the real exchange rate at the time of liberalization, and to maintain that unhelpful orientation until nearly the end of the decade. Many other factors have kept poverty at high levels. One of them is the low supply of arable land relative to the agricultural labor force. Another is the low quality of public education. A third is that the level of taxation is too low to provide sufficient financing for social investment.

Introduction

Peru shares many of the characteristics of the other Latin American countries but with more severe structural problems than most of them. It has redirected its basic economic strategy several times since the 1950s, when it was one of the more liberally oriented, open economies of the region. The reversals testify to widespread frustration with economic performance: frustration especially over inability to achieve any sustained growth of incomes, persistently high levels of poverty, and worsening employment conditions.

Short periods of high growth have often raised hope for better results but the hopes have repeatedly been disappointed by severe down turns. GDP per capita in 2001 was at almost exactly the same level as in 1970 (BCRP 2002: 210). The 1990s proved for a time to be more successful than the two preceding decades, though only up to 1997: growth up to that year was well above the regional average but then stopped again from 1997 through 2001.

Estimates of poverty are subject to many uncertainties and differences of method, but the series of Peruvian estimates based on living standards measurement studies gives a useful, widely accepted, picture of changes from 1986 to 2000 (PNUD-PERU 2002: 18). They show notably different trends for overall poverty and for extreme poverty, meaning by the latter those families with incomes even lower than the cost of a minimal level of nutrition. Both measures worsened badly in the depression years of the late 1980s but extreme poverty came back down impressively in the nineties, from 24.2 percent in 1991 to 14.8 in 2000. At that point it was distinctly lower than in 1986. Overall poverty, in contrast, fell much less during the boom years up to 1997, and came back up again quickly when growth stopped. By 2000, it was only one percentage point lower than its level of 1991, and was 12.5 percentage points higher than in 1986 (table 2 below).

The relationship between weakness of economic growth and persistence of poverty would seem on the surface to be clear: stronger growth would surely have helped to reduce poverty. But on a more fundamental level the rate of growth itself, as well as the degree of its impact on poverty, are both dependent variables: they are jointly determined by the interactions among persisting structural factors, external impacts, and changing domestic policies. If economic and social policies were directed more toward improvement of underlying structural conditions, they could by that path favor both more sustained growth and lower levels of poverty. If they are not directed to the basic structural conditions —if they are limited to macroeconomic management and emergency relief in response to external shocks and accidents of nature— it will remain next to impossible to achieve any lasting reduction of poverty.

The main structural factors that have worked against reduction of poverty include the distribution and quality of human resources, discrimination against people of indigenous descent, the growth of the labor force relative to land and capital to work with, the pattern of comparative advantage, and the consequent structures of production and trade. Although these factors cannot be changed significantly in any short period, they could be gradually reshaped in ways more favorable for reduction of poverty by appropriate combinations of economic strategy and social programs.

The central hypothesis of this report is that the changes needed for reduction of poverty require a reorientation of policies and programs, with incentives designed to lead producers in new directions; higher social investment, especially in the quality of education; and a stronger tax system to generate adequate revenue for non-inflationary financing of continuing social investment.

1. Changing economic strategies without resolving basic problems

Peru had one of the most liberal open-economy regimes in Latin America in the early postwar years but rejected it in the 1960s, out of widely-shared dissatisfaction with its consequences. An initially mild version of state-led development failed to make any headway and was replaced by a period of drastic intervention under the Velasco government, from 1968 to 1975, intended to change the basic structure of the society. These and following policy reversals are summarized in table 1.

The radical experiments of the Velasco period were broken off when external deficits and rising debt led creditors to stop lending, forcing a severe economic contraction. Most of the new policies were reversed in the following years, though not this government's sweeping land reform. In reaction to this period, the country moved back toward more liberal policies until 1985. But the more liberal regime failed too, as worsening inflation and renewed external deficits once again forced a drastic contraction that turned the country against the prevailing economic orientation. In that context, Alan García was elected in 1985, opening up a costly experiment with an extreme version of populism. When that approach proved to be an even more dramatic failure, the country reversed direction once again and returned in 1990 to much the kind of liberal orientation that had characterized the 1950s (Gonzales de Olarte and Samamé 1994; Sheahan 1999: 1-16).

Many people believe that these repeated changes explain much of the weakness in economic performance. That is an understandable interpretation: the reversals invariably went to extremes that cut off promising as well as mistaken preceding programs, and often created new

Table 1
Summary of changes in governments and policy orientations, 1950-2000

Years	Governments	Policy Orientation
1950-62	Conservative: first military (General Manuel Odría), then civilian (Manuel Prado)	Relatively open economy; tax favors for foreign investors; public investment limited to infrastructure
1962	Intervention by reformist military	Modest land reform; creation of planning department
1963-68	Democratic election of promotional-reformist government (Fernando Belaunde Terry)	Increased public investment and protection; political impasse over land reform and foreign domination of oil industry
1968-75	Radical reformist military (General Juan Velasco Alvarado)	Greatly increased state intervention and protection; nationalization and state firms; thorough land reform; rising fiscal and externa deficits
1975-80	Much more conservative military (General Francisco Morales Bermudez)	Partial reversal of Velasco reforms though continued state ownership and protection; fiscal contraction and strong devaluation
1980-85	Democracy restored and Belaunde reelected, now more conservative and weakened by Sendero Luminoso	Initial "neoliberal" changes; somewhat reduced protection but continued high public investment; excess spending leading to forced contraction
1985-90	All-out populism (Alan García)	Intervention in all directions at once; macro expansion with price controls to block inflation; intense conflict over attempt to nationalize financial system
1990-2000	Neoliberal reforms under government with strong authoritarian strand (Alberto Fujimori)	Thorough reversal of state-led intervention; protection greatly reduced; foreign investors welcomed back; extensive privatizations

Source: adapted from Sheahan 1999, table 1.3.

difficulties of their own. Still, they were attempts, sometimes with partial success, to deal with breakdowns that required a new policy orientation. Perhaps a better way to put the matter is that the core problems of economic structure were not being answered either by these particular experiments in state-led development or by the alternative periods of economic liberalism. The repeated reversals of economic policy were not themselves the cause of weak performance: they were responses to the fact that none of these strategies met the country's problems in any adequate way.

The liberalization program of the 1990s was yet another example of going to extremes. It was one of the most thorough in Latin America. As of 1995, the IDB index of structural reform in the region was highest for Bolivia (0.72 of a possible 1.00), but Peru was just barely below that level at 0.71. These two countries, along with Argentina and Barbados, stood out compared to the more moderate degrees of liberalization in Brazil, Costa Rica, Mexico, and Uruguay (IDB 1997: 96). For a time, Argentina and Peru were considered to be leading success stories. But something was missing in both cases: the new orientation succeeded in ending extreme inflation and spurred a period of rising output, but it did not resolve the structural problems that have made it so difficult to achieve sustained growth.

Estimates of the incidence of poverty at the beginning of the 1970s make clear that it was exceptionally high compared to other Latin American countries but they differ widely over exactly how high it was, and therefore over the nature of the following trend of change. The Economic Commission for Latin America placed the incidence of poverty in Peru at 50 percent for 1970, compared to an average of 40 percent for the region (ECLAC 1994: 158-59). More recent estimates by Peruvian economists place the incidence as high as 64 percent for 1971-72 (Escobal, Saavedra, and Torero 1998: 7). If one relies on the series of ECLAC estimates, poverty went up slightly from 1970 to 1986; if one relies instead on the alternative study, it went down greatly. Given respect for the professional quality of both investigations, it might be best to suspend judgment on what the trend actually was. But the course of changes in real wages during this period, for hourly paid workers in the private sector, gives more support to the trend indicated by the ECLAC studies: real hourly wages

entered a downtrend from 1974 on; they were lower in 1986 than in 1970 (Instituto Cuánto 1990: 717). That evidence is of course subject to question too, but as it stands it does not support a picture of any major decrease in poverty. Without trying to rule out the alternative estimates, the changes reported by ECLAC seem the more useful to include in the summary given in table 2.

For each of the three sets of estimates of overall poverty, the end-year levels are higher than the beginning years. That is not the case for estimates of extreme poverty. It showed no change between 1970 and 1986 but then a downtrend (in the Instituto Cuánto estimates), for 1986-2000. The difference suggests a hopeful thought. Extreme poverty may be more closely linked to specific handicaps than overall poverty: to structural and personal factors like education, health, geographical isolation, and discrimination. It also responds to economic growth but —like overall poverty— received little sustained help from

Table 2
Estimates of the incidence of poverty and of extreme poverty in Peru, 1970-2001
(percentages of families below poverty lines of income)

Years	Poverty			Extreme poverty		
	ECLAC	CUANTO	INEI	ECLAC	CUANTO	INEI
1970	50.0			25.0		
1979	46.0			21.0		
1986	52.0	41.6		25.0	18.4	
1991		55.3			24.2	
1994		53.4			19.0	
1997		50.7	42.7		14.7	18.2
2000		54.1	48.4		14.8	15.0
2001			49.8			19.5

Sources: ECLAC 1994: 158-59; PNUD-PERU 2002: 18; Herrera for INEI, 2002: 82 and 84.
Note: the INEI estimates for 2001 are on a basis comparable to those from the same source for 1997 and 2000. The INEI also gives a different set of estimates for 2001 that are based on new methods intended to give a more complete picture. The new estimates are 54.8 percent for poverty and 24.4 percent for extreme poverty. These are presumably better measures of actual poverty but they are not comparable to the preceding figures for 1997 and 2000.

this source in the last three decades. The fact that it came down considerably points to real possibilities of improvement through social programs and gradual reduction of at least some structural obstacles.

Table 3 relates changes in levels of poverty to changes in GDP per capita for six periods between 1970 and 2001. The relationships are clearly unstable. For the first period, 1970-79, the percentage decrease in the incidence of poverty was practically equal to the percentage increase of GDP per capita. But in the only other period with growth, 1991-97, the percentage decrease in poverty was only 0.3 times the percentage increase in output per capita. Growth in the boom years of the 1990s was not as strongly pro-poor as in the 1970s. For extreme poverty, the percentage reduction during the growth years of the 1990s was much higher than that for overall poverty, but it too showed a decreasing effect of growth when compared to the 1970s. Possible reasons for these weaker relationship in the 1990s are considered in section 3 below.

The degree to which growth in the 1990s was pro-poor can also be compared, if only roughly, to that of the region for the period 1990-97.

Table 3
Relationships between growth of GDP per capita in Peru and reduction in the incidences of poverty and of extreme poverty, by sub-periods from 1970 to 2001

Period	(1) % change in GDP/capita	(2) % change in poverty	(3) ratio: (2) / (1)	(4) % change in extreme poverty	(5) ratio: (4)/(1)
1970-79	+ 8.4	- 8.0	- 1.0	- 16.0	- 1.9
1979-86	- 2.2	+ 13.0	- 5.9	+ 19.0	- 8.6
1986-91	- 33.5	+ 32.9	- 1.0	+ 31.5	- 0.9
1991-97	+ 26.0	- 8.3	- 0.3	- 39.3	- 1.5
1997-2000	- 1.7	+ 6.7	- 3.9	+ 0.1	- 0.1
1997-2001	- 3.1	+ 16.6	- 5.4	+ 30.1	- 9.7

Sources: changes in GDP per capita in 1994 prices from BCRP 2002, 210; data for poverty from table 1. Original sources for poverty estimates by period: 1970-79 and 1979-86 from ECLAC; 1986-91, 1991-97, and 1997-2000 from Instituto Cuánto; 1997-2001 from INEI.
Note: changes for the period 1997-2001 are based on the INEI estimates given in table 2, using the estimates for 2001 that are considered to be comparable to 1997.

Regional output per capita increased by 14 percent and the incidence of poverty was reduced by 12 percent (IDB 1999: 209; CEPAL 2000: 270). That indicates an elasticity of poverty reduction of – 0.9: very close to that of Peru for the 1970s but three times as high as Peru for 1991-97.

The apparent decline in the ratio of extreme poverty to overall poverty (table 2), may help to account for the somewhat surprising evidence of a long-term reduction in inequality. From the beginning of the 1970s to the mid-1980s it apparently decreased moderately: estimates of the Gini coefficient (that may not be fully comparable), fell from .55 to .51 (Deininger and Squire 1996; Pasco-Font and Saavedra 2001: 217). Then, in the course of the drastic depression of the late 1980s, the modern sectors of the economy were hit so hard that incomes of people with higher education and salaries were driven down even more sharply than those of the extremely poor. The Gini coefficient fell from .51 all the way down to .44. This was an unhappy example of lessening inequality through losses for everyone, rather than through progress. Table 4 summarizes estimates of income shares by quintiles for 1985, 1991, 1997, and 2000.

Following economic liberalization, recent estimates show an interesting pattern from 1991 to 2000: rural inequality fell while urban inequality rose, with the net effect of an increase in the Gini coefficient from 0.44 to 0.46 (Pasco-Font and Saavedra 2001: 217). The distribution by quintiles shown in table 4 looks modestly favorable: the

Table 4
Distribution of income by quintiles, 1985 to 2000
(family incomes on a per capita basis, percent)

Quintile	1985	1991	1997	2000
I	4	5	5	6
II	8	9	9	11
III	13	14	14	15
IV	21	21	21	21
V	56	50	51	48

Source: Pasco-Font and Saavedra 2001: 214.

income share of the lowest 40 percent increased from 14 to 17 percent, and that of the highest quintile decreased from 50 to 48 percent.[1] This pattern, especially at the poorer end, seems consistent with the trend of change among the half of the population below the poverty line: the percentage in extreme poverty fell greatly relative to the overall incidence of poverty. Naturally, all such estimates are open to possible revision, but as they stand they indicate that Peru was not one of the Latin American cases of severe worsening after liberalization (Berry 1997; Sheahan and Iglesias 1998).

The sharpest popular disappointment with the consequences of liberalization in the nineties was that it did little to improve the country's miserable employment conditions. They had been worsening for a long time. From 1970 to 1990 the real wages of hourly paid workers fell, and the share of workers in the informal sector in Lima increased by a third (Sheahan 1999: 88-103). The share of the labor force trying to survive by selling in the street increased from 3 to 13 percent. The great hope from the new economic strategy was that these trends would be reversed. They did improve somewhat in the years of good growth, up to 1997: employment in the formal sector grew almost as rapidly as the labor force, though not quite, and even the share of street vendors fell slightly, to 11.6 percent by 1995. But then things turned worse again from 1997. Total employment in the formal sector fell by 10 percent from then to 2000, down to 44 percent of the urban labor force (Saavedra 2002: 3). The changes are examined in more detail in section 3 below. Given the evidence of continued weakness in labor market conditions, it is not surprising that the effect of economic growth in reducing poverty was weaker in the 1990s than it was in the 1970s.

The relatively good growth rate from 1992 to 1997 testified to real benefits of better macroeconomic balance and trade liberalization. It also owed a good deal to success in stopping the deadly violence of Sendero Luminoso, in 1992. That release from fear and destruction encouraged an upturn in investment by both domestic and foreign firms, helped considerably by a strong capital inflow. But when international

[1] Taking into account the problem posed by the rounding of figures in table 4, the reported change is too small to be clearly distinguishable from no change at all.

financial conditions turned adverse in 1998-99, that change once more brought Peruvian growth to a stop (Velarde and Rodríguez 2001). A combination of difficult natural conditions for agriculture and fishing, plus extreme political turmoil, prolonged the weakness through 2001. All these factors were important but explanations that stop with them can distract attention from the main questions. What could have been done to make liberalization more helpful for employment and reduction of poverty while GDP per capita was growing? What can be done to strengthen the capacity for more sustained growth, less vulnerable to changes in external financial conditions?

2. Structures of production and trade

Structures of production and trade respond both to a country's comparative advantages in terms of factor supplies and to incentives that can be shaped by economic policies. Peru's comparative advantages have been changing gradually, in directions that offer more positive potential, but they are still not favorable either for sustained growth or for a strong causal link between growth and reduction of poverty. They don't prevent growth but they incorporate a systematic restraining effect that chokes off possibilities to keep it going. The ideal remedy for the long run is to increase competitive strength progressively by investment in human resources, to improve capacities for learning and for taking initiative in new fields. Along with that fundamental requirement, a good deal might be accomplished in even a relatively short period by orienting incentives more toward entry into export competition, especially through relatively labor-intensive exports. It is easy to go wrong if the methods used to redirect initiatives are inappropriate, as they have been for much of the postwar period. But a lot can be done with better methods, as Peruvian experience demonstrated in one particularly interesting period.

The main disadvantages of the present structure of exports are the dominant role of the mining sector and the counterpart lagging development of the industrial sector. The share of the mining sector in total exports remained at 45 percent between 1970 and 1990 but then increased after economic liberalization to 49 percent in 1999 (table 5). A much more promising trend is that exports of manufactures and of other

Table 5
Changes in the structure of exports, 1970-1999
(percentage distribution of commodity exports)

	1970	1980	1990	1999
Traditional exports, total	97	78	70	68
Mining	45	46	45	49
Petroleum & derivatives	1	20	8	4
Agriculture (traditional only)	15	6	5	5
Fishing	29	5	10	10
Non-traditional, total	3	22	30	32
Manufacturing	2	16	18	21
Other	1	6	12	11

Sources: all for 1970-1990 except manufacturing from BCRP 1993, 17; all for 1999 except manufacturing from BCRP 2002: 240; manufacturing shares 1970 and 1980 from World Bank 1983: 521; for 1990 and 1999 from UNDP 2001: 187.

non-traditional exports —both almost non-existent in 1970— have risen to a third of total exports. Still, Peru's gain in the share of manufactured exports has remained behind that of the region as a whole. The region raised its share of manufacturing in total exports from 34 percent in 1990 to 51 percent in 1999; Peru's more modest improvement was from 18 percent in 1990 to 21 in 1999 (UNDP 2001: 186-89).

The mining sector is clearly a major contributor to national income and foreign exchange earnings but its capital-intensive character makes it relatively little help for employment and reduction of poverty. This side of the problem is discussed separately in section 4, with its connection to opportunities for productive employment. Exports of manufactures have often been considered to have a similar defect: they can be capital intensive themselves, or of little help for employment if they constitute processing of raw materials with little value added in the industrial sector. But recent research at the Economic Commission for Latin America brings out a favorable pattern of change in these respects. For the group of Latin American countries studied, only 3.8 percent of manufacturing exports in 1970 could be classified as labor intensive. That share then rose to 9.5 percent by 1990 and to

26.9 percent by 1998 (Barbara Stallings and Wilson Peres 2000: 159). Change in this direction, at such an impressive rate in the 1990s, points to significant possibilities for increasing productive employment through production of industrial exports.

If the competitive strength of the industrial sector could be raised more rapidly, that could offer not only its direct effects on employment but also improved chances for sustained overall growth. Interruption of overall growth has been consistently associated with foreign exchange crises (Dancourt, Mendoza, and Vilcapoma 1997). These crises have had a variety of immediate causes, and one common underlying factor. The immediate causes have sometimes been exogenous shocks, as in the 1998-99 contraction of international finance, and sometimes have on the contrary been related to unsustainable growth of Peru's own deficits and external debt, as in 1975 with the Velasco government. The common underlying problem in every period of prosperity is that rising production and incomes both generate rapidly rising demand for imports and pull primary products away from exports into the domestic market (Tello 1990). The steep increases in imports, when GDP rises, have been consequences of the industrial sector's relatively weak competitive position in newer and better-quality products with high income elasticities of demand.[2] Peru has made considerable progress in raising its competitive strength, but not yet enough to keep growth of spending on imports from outrunning growth of exports whenever the economy goes into an expansionary period. That is a major factor in bringing expansionary periods to a halt so quickly.

Although competitive strength is fundamentally a matter of investment in human and physical resources, it is also a matter of incentives. In this respect, the very success of the mining sector is a problem. On the positive side, the earnings of the sector contribute to the country's potential for growth. On the negative side, its earnings of foreign

[2] One study of Peruvian imports calculated the income elasticity of demand for imports at 1.9, for both the period 1960-88 and 1970-88 (Revilla 1990: 59). The same analysis reported relatively high though varying price elasticities of demand for imports, from -0.3 to -0.5 according to the period. That points to considerable possibilities to restrain excessive import growth by correction of overvalued exchange rates.

exchange keep the value of the currency higher than it otherwise would have been and thus reduces incentives for the development of more diversified industrial exports. That effect is, of course, magnified by the unknown but almost surely high earnings from illegal drug exports.

Intervention to raise incentives for the industrial sector can be either harmful or helpful, depending on how it is done. In common with most other Latin American countries, Peru tried to do it for a long time by protection against import competition. That can stimulate investment, but investment that is aimed primarily at the domestic market rather than external competition. It raises costs of domestic producers rela tive to outside firms, and reduces pressures to make strong efforts toward innovation and technical progress. Continuance of that stra tegy limited the possibilities of sustained growth. The promising direc-tion is to link incentives to competitive performance, both in export markets and against imports in the domestic market. Exchange rate management is the best way to achieve this. Exchange rate effects are generalized rather than selective to particular industries and so can minimize conflicts with criteria of efficiency. They also avoid the kind of conflict associated with export subsidies and possible retalia-tion by importing countries. That does not mean that a policy of pro-moting exports through competitive exchange rates is free of problems. Still, if the goal is to reduce poverty more effectively, it can do a great deal of good.

The potential for stimulus through exchange rate incentives was de-monstrated vividly in the one period in which this approach was given any sustained chance to operate, in the second half of the 1970s. The foreign exchange crisis of 1975 forced Peru to accept a stabili-zation program that included strong devaluation. The government of this period opted to continue devaluation up to 1979. During these years the real price of foreign exchange doubled, and non-traditional exports started a dramatic expansionary trend (Seminario and Boui-llon 1992). Between 1975 and 1980, exports of manufactures increased from a mere 3 percent of total exports to 16 percent, and total non-traditional exports from 7 to 22 percent. These exports included products that would seem relatively labor intensive: both non-traditional agricultural and fishing products, and textiles as the most important

industrial product. The increase of textile exports was 28 percent of the total increase for all non-traditional exports (Tello 1990: 99).

Apart from questions of relative labor-intensity, the increase of non-traditional exports in this period must have contributed a net increase for both production and employment. This period was one of domestic contraction, with GDP per capita falling for three years. In such conditions, rising non-traditional exports do not imply reduced output in other activities so much as net additions to output. Higher labor intensity would be more favorable, but even moderate to low intensity could still mean better employment conditions. In the different macroeconomic conditions of the mid 1990s the net gains of increased non-traditional exports might have been less. But it is striking that estimates for 1994 indiate that exports of manufactures accounted for 11 percent of all employment in manufacturing (Saavedra 1997: 72-73). Had such exports been given more favorable incentives, employment conditions could have been made more favorable.

This experience with a promotional exchange rate policy could have been a success story —it did initiate a new long run trend— but in the near term it raised severe problems. The most evident were that inflation worsened and that real incomes of the poor were cut back more than necessary to restore external balance. Those negative effects were caused, or aggravated, by two factors: devaluation was prolonged past the need for it, and monetary policy failed to provide accompanying restraint. By 1978 the original import surplus had been corrected and changed to a an export surplus equal to 3 percent of GDP. That was the time to stop devaluation: it was becoming too potent. But it was continued instead, and led to an unmanageably high export surplus equal to 13 percent of GDP in 1979 (Sheahan 1987: 266-67). From that side, demand was overstimulated. At the same time, monetary growth was allowed to get out of hand: the growth of the money supply rose from 21 percent in 1977 to 71 percent in 1978, adding a powerful thrust to inflation. Those were avoidable errors: failures to pay attention to feasible limits for increases in production and exports. Unhappily, the net result fed into the mistaken conviction that devaluation necessarily worsens inflation. It clearly can do so, if mismanaged, but need not if carried out in reasonable degree within an appropriate context.

So many things went wrong in the 1980s that mismanagement of exchange rates can hardly be blamed for falling incomes and greatly worsened inflation. But the perverse direction followed in this decade surely was no help: the real price of foreign exchange was allowed to fall greatly. Exports, correspondingly, fell by 15 percent. To make things worse, the new government of the 1990s started off by allowing a sharp further appreciation in real terms. The purpose was to check inflation by holding down prices of imports: an understandable goal in emergency conditions, but a costly policy if not soon corrected. It was not corrected for many years, though at least it was not allowed to worsen: the real exchange rate was kept in narrow bounds, with practically no further change, until 1998. In the troubled conditions of that year, with external finance cut back and reserves falling, the real price of foreign exchange was at last increased, by 10 percent (BCRP 2002: 234). Given accompanying monetary restraint, that devaluation did not have any inflationary impact at all: the rate of inflation decreased.

The consequences for competitiveness and export diversification of the exchange rate regime followed in the 1990s come out clearly in a comparison with the experiences of other Latin American countries in this period. The following section discusses Peru's limited results, and Argentina's impending collapse, in contrast to the markedly better performances of those countries that used more promotional exchange rate policies.

3. Export diversification: an international comparison for the 1990s

Peru's chronic problem of insufficient opportunities for productive employment is shared to varying degrees by nearly all Latin American countries, and so is the weakness of high vulnerability to external shocks. All of them stand to gain from increased competitiveness of their industrial sectors, both for employment and for more sustained growth. The region made notable progress in this direction in the course of the 1990s: the share of manufactures in total exports increased from 34 to 51 percent (UNDP 2001: 189). But some

countries did much better than others in this respect, and Peru was not among the most successful.

Two factors were especially favorable for growth of industrial exports in the 1990s. On the external side, growth of demand for imports of manufactures by the industrialized countries, especially the United States, was exceptionally high up to and including 1999. External demand weakened in 2000, and has not shown much strength since, so the countries that went furthest toward a new comparative advantage emphasizing industrial exports have had unusual trouble in the last few years: to gain position in industrial exports is no cure-all if the whole world slows down. Still, the long-term prospects remain more promising than those for primary products: few countries will lose by the gains in industrial competitive strength achieved in the 1990s.

On the domestic side, the special positive factor in this decade was the regional shift toward trade liberalization. That changed incentives toward exports by reducing the prior gap between domestic and external prices, by increasing access to lower-cost imported inputs, and by putting greater pressure on firms to reduce costs and improve product quality. That change would have favored higher exports of manufactures even if the growth of external demand had been closer to its long run trend, rather than exceptionally high. But a crucial complicating factor also intervened: real exchange rates changed in very different ways among countries, accelerating the shift in export composition for some of them and holding it back for others.

Table 6 gives changes in real exchange rates and in shares of manufactured exports for Peru and ten other Latin American countries. The changes in real exchange rates are measured from 1990 to averages for 1995-97, and the change in export shares from 1990 to 1999. This is an attempt to allow for differences in the timing of reactions to changes in exchange rates, by emphasizing multi-year trends rather than year-to-year effects. The correlation between changes in exchange rates and in export shares indicates that these differences in the course of exchange rates could account for 62 percent of the variation in export performance. Deeper examination of the determinants would clearly need to consider additional variables, including selective national efforts to promote new exports (as in Costa Rica),

Table 6
Relationships between changes in real exchange rates and changes in the shares of manufactures in total exports, eleven Latin American countries, 1990-1999

	Percent of manufactures in exports, 1990	Changes in real exchange rate, 1990 to 1995-97	Change in share of manufactures, 1990 to 1999
	percent	percent	percentage points
Argentina	29	- 42	3
Bolivia	5	+ 6	36
Brazil	52	- 12	2
Chile	11	- 21	6
Colombia	25	- 31	6
Costa Rica	27	+ 9	41
Ecuador	2	- 24	7
Mexico	43	+ 4	42
Peru	18	- 20	3
Uruguay	39	- 38	-1
Venezuela	10	- 26	2
Latin America and Caribbean Region	34		17

Sources: real exchange rates from IDB 1999: 251; export shares from UNDP 2001: 186-89.
Note: the change in Argentina's real exchange rate is from 1990 to 1995 only.

differences in rates and character of FDI (heavily into mining in Peru and not into manufacturing), and differences in rates of growth of domestic absorption.[3] All these increases in manufacturing shares

[3] The simple regression between exchange rates and export shares is significant at the 5 percent level, with an adjusted r-square of 0.62. To add the initial export shares as an independent variable is not helpful: they have no systematic relationship to the changes during the 1990s. Special thanks are due to Samira Salem for these calculations and for emphasizing the need to take additional variables into account for any complete explanation.

would surely have been lower if the trend of external demand had not been so favorable. But even this simple picture supports two important facts: economic liberalization does not mean that the scope for independent management of exchange rates is ruled out —countries still have room for choices— and these choices can be expected to have important consequences for the structure of exports.

By these UNDP measures, the share of manufactured exports for Peru in 1990 was slightly above half the average share for the region. It increased by 3 percentage points from 1990 to 1999, compared to an increase of 17 percentage points for the regional average. That was a relatively weak performance that kept the growth of productive employment lower than it could have been. The most important negative factor holding back progress on this score was the 20 percent appreciation of Peru's real exchange rate shown in the second column of table 6.

The appreciation for the Peruvian currency in real terms does not look drastic if compared to Argentina, which led the list with an appreciation of 42 percent. That was of course a consequence of Argentina's determination to hold its nominal exchange rate absolutely constant (relative to the dollar), as it continued to do until the collapse that this policy made inevitable. Compared to Argentina, Peru did not do badly. The heavy capital inflow that followed liberalization, once the threat from Sendero Luminoso had been ended, exerted constant pressure toward greater appreciation but that pressure was countered by central bank sterilization. Peru accumulated reserves on a large scale, and that helped soften the contractionary effect of the capital outflow that set in during 1998.

Although Peru's exchange rate management was less harmful than that of Argentina, it was much less helpful than the effective devaluations in Bolivia, Costa Rica, and Mexico. These three countries, the only ones that raised the real price of foreign exchange, all achieved increases in their shares of manufactured exports that greatly exceeded the average for the region. In Costa Rica's case, the second best performance after Mexico, manufacturing exports were aided not only by the exchange rate but by direct assistance to industrial exporters by tax incentives through its Export Processing Zones, and by aggressive promotion of foreign investment in fields of advanced

technology (IDB 2001: 258), These efforts drew some criticism for being departures from purely market-determined policies. They were departures that increased Costa Rican growth and helped it maintain one of the lowest levels of poverty in Latin America (CEPAL 2000: 269-70).

Perhaps the most surprising positive performance shown in table 6 is the great increase of the industrial export share for Bolivia, the lowest income country in this group. A major factor in that result is that Bolivia carried out a substantial real devaluation from 1988 to 1995. Rhys Jenkins calculated that, for Bolivia in this period, a devaluation of 10 percent in real terms increased manufactured exports by 13 percent (Jenkins 1996).

In the opposite direction to Bolivia, Colombia allowed its real exchange rate to appreciate by 31 percent in this period. That was a sharp reversal of a key component of its economic strategy through the preceding two decades, when the country used a crawling peg ex change rate to limit real appreciation. The prior strategy had helped sustain external balance and growth, making Colombia an outstanding exception to the regional debt crisis of the late 1980s and helping it to achieve the rare success of a significant reduction of inequality (Londoño de la Cuesta 1995). The reversal from 1991 was a deliberate policy choice of the central bank, explained and defended by its chairman, Miguel Urrutia (Urrutia 2002). The purpose was to free monetary policy from its prior role in management of the exchange rate in order to concentrate on restraint of inflation. The consequences included a modest reduction of inflation, a sharp decrease in the rate of growth of income per capita, greatly increased trade deficits and external debt, and a foreign exchange crisis that forced Colombia to go to the IMF for emergency help, for the first time in three decades (Kamas 2001).

Either devaluation in real terms or sector-specific incentives to stimulate non-traditional exports can be helpful for growth and reduction of poverty, or can be harmful in particular contexts. Peru overdid its devaluations of the late 1970s and then overly prolonged appreciation in the 1990s. The highly legitimate concern of central banks for inflation is more likely to be helpful if it takes the form of monetary restraint to

support effective devaluation —as it did in Peru in 1999— than when it takes the costly form of favoring appreciation as the answer to inflation.

Central banks may not pay as much attention to negative consequences for real wages as they do to inflation. But negative effects on real wages are practically inescapable in the immediate period of effective devaluation: it is bound to increase prices of tradable goods relative to existing wage rates. The more positive effect is that, if sustained, it should promote demand for labor and thereby favor gradually rising real wages. Few Latin American countries have demonstrated the possibilities more clearly than Chile from 1983 (when the country's economic strategy was changed to favor export promotion), to 1992. The real price of foreign exchange increased by 67 percent in that period. Unemployment in Santiago fell from 28 to 6 percent. Real wages fell in the first two years but then began rising steadily as unemployment came down. The incidence of poverty fell from 38 percent at the start to 35 percent by 1990, then came down more swiftly to 28 percent by 1992 as the democratic government's social programs began to add their help (Sheahan 1997: 12-20).

It does not seem likely that Peru could reach conditions close to full employment as rapidly as Chile did in this period, even with the best of economic policies: the depth of sub-employment in Peru is too great, and the potential of the labor force is handicapped by weak education that limits its learning power and flexibility. That is the subject of section six of this report. The greater structural obstacles facing Peru strengthen the case for new policies directed to change them, especially including more promotional management of exchange rates.

4. Employment

The problem of inadequate opportunities for productive employment has become the leading complaint of the Peruvian people: complaint against the government, all governments, and especially against the structural reforms associated with economic liberalization in the 1990s. That last direction of complaint is in part unfair. The lack of employment opportunities is not due to economic liberalization: the

problem was serious and kept getting worse through the preceding quarter century, with precious little liberalization. But it has been disappointing to everyone that liberalization and accompanying structural reforms have done so little to improve the balance between people seeking work and opportunities for them. This section reviews four aspects of the issues: (a) the nature and magnitude of the problem, (b) the adverse role played by the particular structure of growth in the 1990s, (c) programs introduced to promote employment, and (d) effects of legislative changes during the 1990s intended to introduce greater flexibility in labor markets and thereby to raise both efficiency and employment.

4.1 The nature and magnitude of the problem

The unrelenting rise of the share of the labor force in the informal sector is an imperfect but meaningful indicator of a growing deficiency of opportunities for employment sufficiently productive to allow workers to escape poverty. That rise has been common to nearly all Latin American countries though it was reversed in one country, Chile, when it managed to approach conditions of full employment in the late 1980s and early 1990s (García 1993; Sheahan 1997).

With many different definitions and ways to measure the informal sector, its level at any given time can always be disputed. But the trends are clear, no matter whose measures are used. The work of Francisco Verdera indicates an increase in the share of workers in the informal sector from 32 percent in 1970 to 41 percent in 1990 (Verdera 1994: 21). The period of better economic growth from 1992 to 1997 slowed down the adverse trend but failed to stop it. For Metropolitan Lima, the share of formal sector workers in total employment fell from 54.4 percent in 1990 to 46.4 percent by 1997, and then to 45.5 percent by 2000 (Pasco-Font and Saavedra 2001: 173).[4]

A more positive way to put the matter is that employment in the formal sector rose more rapidly in the 1990s than it had in the preceding

[4] For a particularly helpful discussion of alternative measures and their definitions, see Pasco-Font and Saavedra 2001: 142-74.

two decades, and nearly kept up with the growth of the active labor force for the best years, from1992 to 1997. But even in the best years, the country made no headway in reducing the enormous overhang of workers caught in jobs with productivity too low to escape poverty. And at the end, from 1997 to 2000, formal sector employment fell not only relatively but even in absolute numbers. By the beginning of the year 2000, it was 10 percent lower than it had been in October 1997. Two years later, in early 2002, it had not made up any of that decrease (Saavedra 2002).

The Chilean experience of the late 1980s and early 1990s, achieving a labor market close to full employment after a long period of very high unemployment, suggests a possible target for reduction of the informal sector. If measured with exclusion of household employees, it came down from 29 percent in 1982 to 24 percent by 1990. If measured including household employees, it was 32 percent in 1990. With the adoption of active programs to promote employment by the new democratic government, the combined total (including household workers), came down to 23 percent by 1992 (García 1993: 103 and 141). If Peru were able to raise the share of the formal sector by 5 percentage points a decade, starting from about 45 percent in 2000, it would take something over six decades to reach the Chilean level. If it seems unthinkable that Peru would need more than 60 years to get to where Chile was in 1992, even if it managed to reduce the informal sector about as rapidly as Chile did, what does that say about the effect of growth in the 1990s? It not only failed to reduce the informal sector at all: by the measures for Lima it allowed an increase of 9 percentage points (Pasco-Font and Saavedra 2001: 173). Peru is still going in the wrong direction.

Of course, some workers in the informal sector achieve decent earnings, above the poverty level. But collectively they gained little from the economic growth of the 1990s. Real earnings in the informal sector increased slightly in 1991, before the boom started, but from that point on they went nowhere (Pasco-Font and Saavedra 2001: 168-69). At least, that was not as bad as the 1980s when everyone's earnings fell. In the 1990s, hourly paid production workers gained higher earnings from 1991 to 1994, then lost most of that gain in the next three years. By the year 2000 they were back down to the level of

1991. The better-educated salaried workers did much better: their earnings rose slightly faster than hourly paid workers up to 1994, fell less than they did from 1994 to 1997, and then came back up again. By 2000 their earnings were about 70 percent higher than in 1991. The more favorable trend for them opened up a much wider gap relative to hourly paid workers than at any time since 1985 (Pasco-Font and Saavedra 2001: 169).

4.2 The adverse role of the structure of growth

A favorable structure of growth, for the goal of reducing poverty, would be one led by sectors able to combine high labor absorption —high elasticity of employment relative to output growth— with high proportions of employment in activities sufficiently productive to earn in comes above the poverty line. If the number of workers were the only criterion, the question would seem simpler: the desirable path would be the one that gives the most employment. But that might not be a good bet for reduction of poverty: a high number of workers relative to value of output in a given sector suggests that this is a field with low productivity and incomes. Commerce and other services are large employers in Peru, but disproportionate growth of employment in these areas may well mean increasing stress in labor markets. In perhaps the worst period in modern Peruvian history, 1985-91, workers in commerce and services increased from 24 to 34 percent of total employment. That was a bad sign, not a good one. Their joint share fell to 29 percent in the more favorable period from 1991 to 1997: that was a better sign (Pasco-Font and Saavedra 2001: 155).

Given the complications of these issues, it is not surprising that capable investigators can come to conflicting conclusions. The World Bank team that reviewed poverty and social conditions in Peru for the period 1994-97 concluded that the structure of growth "was pro-poor over the time period because it was driven by the sectors in which severe poverty was highest" (World Bank 1999a: 34). This is a disconcerting kind of logic. If the people working in a given sector are disproportionately poor, is that a sector in which increasing employment is particularly desirable? Is it more helpful to have people move

into the agricultural labor force, where poverty is exceptionally high, than into the manufacturing sector where it is relatively low?

Pedro Francke points in a different and more understandable direction. He calculates that a primary export model for Peru, with emphasis on mining exports, is adverse to poverty reduction (Francke 1996). With its low use of labor, growth of the mining sector is much less help for poverty reduction than growth in the manufacturing sector.[5] The World Bank team failed to make that distinction because they combined the two radically different sectors, along with the oil industry, into one single category for their analysis. That effectively wiped out a crucial distinction.

The comparisons of growth and poverty reduction in section one indicated that, although growth was certainly helpful for reduction of poverty in the 1990s, the degree of its effect was much weaker than it had been in the period 1970-79. Similarly, the elasticity of poverty reduction relative to growth in Peru in the 1990s was only one third as high as the average for Latin America. To call this a «pro poor» growth pattern is misleading. Contrasting patterns of sector growth help account for this relatively weak result. In the period 1970-79, the growth rate of the manufacturing sector was 46 percent greater than that of the mining sector, and 78 percent greater than that of GDP (IDB 1982: 351 and 355). In the period 1990-2000, the growth rate of manufacturing was only two-thirds that of the mining sector. Manufacturing fell from 15.6 to 14.9 percent of GDP (BCRP 2000: 172; BCRP 2002: 218). The structure of production became less favorable.

The manufacturing sector was able to raise its output during the more prosperous years of the 1990s but not nearly as rapidly as the market for industrial products: its modest gains on the export side were lower than the increases in domestic sales of imported manufactures. That was a natural consequence of allowing the real exchange rate to appreciate, making foreign goods cheaper relative to

[5] Even though the growth of the mining sector was faster than the growth of GDP in 1990s, its share of private salaried workers fell from 2.5 percent in 1994 to 1.4 percent by 2000. In 2000, it had fewer employees than it had in 1985 (Pasco-Font and Saavedra 2001: 153 and 159).

domestic products. Jaime Saavedra calculated that, as of 1994, if the rate of growth of manufacturing output had matched the rate of growth of the sales of manufactures, employment in the industrial sector would have been 12 percent higher than it actually was (Saavedra 1997a). It would have been feasible to achieve something like that degree of improvement in employment if exchange rates had not been allowed to move perversely.

4.3 Employment programs

The Peruvian governments of the 1980s and 1990s responded to the weakness of employment conditions with a variety of special programs, including nutritional aid, temporary employment, worker training, housing construction, and improvements in rural infrastructure. Some of these measures were conceived as short-term emergency responses: they helped people in deep trouble but did not improve ongoing possibilities. It has taken time to realize more fully that the inadequacy of openings for productive employment is not a matter of temporary strain: it is a long-term problem of worsening strain (Morley 2002). The greatest need is for programs that promote enduring changes, supported by more adequate financing and, if possible, better protection from political manipulation.

The country's imaginative efforts to make more headway on employment have been implemented through too many programs to discuss in this report. It considers only four of them, all very briefly: PAIT (Programa de apoyo de ingresos temporales, the largest such program under the García government), ProJoven (Programa de Capacitación Juvenil), FONCODES (Fondo Nacional de Compensación y Desarrollo Social), and the new «A Trabajar».

It matters considerably whether a program to promote employment does so by creating additional capacity for productivity and sustained employment, or simply by short-term jobs that help people for specified periods but don't change their ongoing opportunities. This distinction is not meant to disparage programs of temporary employment, like the PAIT program (Graham 1992: 180-96). That provided work (in three-month stretches), to 374,000 people from 1985 to 1987. It provided

useful output, particularly in the form of improved infrastructure and living conditions in the poor areas of large cities (the «pueblos jovenes»). Although the wages paid were well below formal market earnings, they still provided better earnings for many women in particularly low-pay jobs. That was surely worthwhile as long as the program operated but it did not create any lasting gains in productive capacity. And the temporary workers were all stranded abruptly when the government's mismanagement on the macroeconomic level led to a brutal collapse of output and employment: the programs that were even more needed at that point were simply cancelled.

ProJoven is a different and appealing effort to gain enduring advantages for its participants. Its focus is on worker training and job placement for young people from lower income groups. It was established in 1996 and had worked with six cohorts by 2002, with a total of nearly 20,000 participants. Most of the participants come from low-wage employment in the first place but nearly half had been either "inac tive," or unemployed. The program puts them through a three-month training course and then places them in firms for trial employment of at least three months, under contracts with the firms. ProJoven pays for all the training and firms pay the workers they accept. Drop-out rates from the training program and from the trial employment have been very low.

Projoven was the first such program to start out with provisions for systematic external evaluation. Early evaluations estimated exceptionally high internal rates of return, on the order of 60 to 70 percent. Debates on methods of evaluation and changing procedures have led to lower estimates, though the «conservative» estimate of the most recent evaluation still indicates a rate of return on the order of 20 percent (Ñopo, Robles, and Saavedra 2002: 57-66).

The benefits clarified by this evaluation (for the sixth cohort of the program), are impressive. Compared to a selected group with similar characteristics who were not in the program, the post-program employment rate of participants was 6 percent higher, their earnings per hour were 18 percent higher, and they were able to work on average 2.7 more hours per week. The results for earnings suggest genuine gains in productivity. And the sector composition of their employment

changed favorably: away from services, commerce, and construction, toward higher participation in manufacturing consumer goods (Ñopo, Robles, and Saavedra 2002: 39-56).

Projoven has been helpful in most respects and deserves continuation. But it has been small, it has been concentrated on cities, and the gains in earnings it has made possible still leave many of its participants below the poverty line. To help 20,000 young people in this way is very much worthwhile but in a labor force of about 12 million it does not change the national employment situation. Extension to cover rural areas is intended but the possibilities are limited by the scarcity of potential employers in areas of high poverty. The average beneficiary has been able to move up from an annual income of about US $980 to about $1200: that is a big gain for them but it still leaves their families below the poverty line (Ñopo, Robles, and Saavedra 2002: 69).[6] The dominating factor is the great imbalance between the number of low-skill people seeking employment and the opportunities open for them.

FONCODES is a vastly larger-scale program, directed particularly toward help for rural districts characterized by exceptionally high incidence of extreme poverty. Its consequences for rural infrastructure are discussed in the following section on rural poverty; it is noted here only for its effects on employment. It generated a total of nearly 600,000 temporary jobs through 1998, continuing at a rate of over 100,000 a year (Saavedra and Maruyama 1999: 26). The temporary employment probably does not have the lasting value of worker training under ProJoven but the improvements of rural infrastructure offer a different kind of long run gain: the possibility of increased productivity in rural employment (see discussion in section 5).

The new program introduced by the Toledo government, «A Trabajar», follows closely the model of FONCODES, though now divided into

[6] The per-capita income calculated as necessary to rise above the poverty line in 1997 was US $948, or $4740 for a family of five. Assuming the average of 2.2 income earners per family, each worker would need earnings of $2125. Successful employment after the training programs gave average earnings of $1200 at the time of this study (Ñopo, Robles, and Saavedra 2002: 69, note 45).

separate rural and urban programs, with increased emphasis on the latter. It projects an ambitious target of 400,000 temporary jobs over two years, about twice the preceding rate of FONCODES. Continuing work on rural infrastructure includes many small-scale irrigation projects, water and sanitation, roads, and construction of community buildings. A special new training program is aimed at helping rural communities take active roles in the process of decentralization this government is also promoting. An added component is aimed at reconstruction of housing in zones of southern Peru that were badly damaged by recent earthquakes. The consequences are to be evaluated systematically by external review. They can hardly fail to be positive, if the program is given dependable financing and protection from political manipulation. Both of these issues remain to be resolved.

4.4 Labor market reforms in the 1990s

The Fujimori government swept away a host of laws and rules previously established to protect workers from arbitrary discharge, to require high indemnities for lost jobs, to limit the use of short-term labor contracts, and to restrict the ways in which employers could use subcontracting to farm out work to the informal sector. The changes also included new measures to lessen the scope and power of organized labor, such as allowing multiple unions within single firms rather than certifying a single bargaining unit, and removing any restrictions on replacing workers who go on strike (Pasco-Font and Saavedra 2001: 99-103). The legislation still provides for severance payments, but only for cases of firing that can be demonstrated to be arbitrary, not required by economic conditions. Employers who wish to avoid even that potential problem are now free to do so by refusing to give long-term contracts to anyone: workers with three-month contracts can simply be let go at the end of the stated period, with no severance pay. Of course, if labor markets were in any sense tight —if workers had actual choices— they could insist on longer term contracts. As things stand, that would leave them selling balloons on street corners.

The stated purpose of these changes was to give employers more flexibility in order to reduce labor costs and improve efficiency. The expectation was that more flexible labor markets would work in favor

of growth in output and employment: they would lower the cost of labor relative to other factors of production and thereby raise incentives to hire workers. The logic is familiar and relevant: prior restrictions on employers probably were adverse for employment. That does not mean that the miserable employment conditions that have prevailed for so many years in Peru were any more than marginally explicable by labor market restrictions. That context was the result of far more fundamental factors.

The new legislation had rapid effects on ways of organizing production. The share of employment in large firms fell notably, as they contracted out labor-intensive operations to the informal sector and discharged many of their own employees (Saavedra and Díaz 1999). Cutbacks in employment focused particularly on workers with seniority and higher wages, who could now be readily replaced by younger workers with much lower wages. The composition of the labor market changed to favor younger workers at the expense of older, of smaller firms, and of short-term employment contracts. By age groups, men of 50 years or older suffered the sharpest decrease in employment relative to the their numbers: i.e., the greatest rate of dis appearances from known participation in the labor force. Short-term employment in the formal sector —workers with a «contrato temporal»— increased from 20 percent of total employees in 1990 to over 50 percent by 2000. In the formal sector, the average duration of work with the same firm fell from 9.5 to 7 years. It has remained at about 2.5 years in the informal sector (Pasco-Font and Saavedra 2001: 141, 164). In every sense, job insecurity increased.

No one has yet demonstrated that these changes had any significant positive effect on employment, efficiency, and growth. The reduction of labor costs should have had some favorable effects for employment, but at least two factors went the other way. One is that the great increase in job insecurity and turnover must have undercut the interests of both firms and workers in any long-term investment in skills relevant to the particular job. Gains in efficiency that might have been possible through such investment have been lost. The other problem is that the government accompanied its drive to cut labor costs with directly contrary incentives by raising the taxes and required contributions to social funds that were placed on wages —labor costs that do

not go to wages received by the workers themselves. This set of issues is too thorny for any short treatment here (Hunt 1997). The combination of such contradictory policies suggests that the government's main interest was in weakening labor organization.

The renewed worsening of labor markets that set in during the second half of the 1990s took place after practically all restrictions on employers were removed. That does not prove that they were irrelevant, but it is a reminder that they were not the fundamental problem. The problem is far more one of overwhelming numbers of low-skill workers relative to the demand for them. That demand depends much more on investment and growth than it depends on the costs of firing workers.

Whatever the degree of gain or loss from removing restrictions on treatment of labor by employers, the method of doing so was unfortunate. The changes were imposed by an anti-labor government with no gesture toward negotiation and no sign of concern that workers had so little bargaining power in the first place. That made a sorry contrast to the approach of the more democratic government in Chile at the beginning of the 1990s. Exactly the same issues were openly debated in three-way negotiations allowing voice to labor as well as to business and to government. The resolutions adopted left a great deal of flexibility to employers, though with stronger indemnification to workers who lose their jobs (Sheahan 1997). The Chilean economy and labor markets seemed to operate quite well under those compromise arrangements. Perhaps more importantly, labor relations were treated as a democratic issue, to be resolved by allowing voice to all parties. The Fujimori government imposed its drastic changes in a manner calculated to deepen hostility between employers and workers, not to foster any joint interest in the welfare and growth of their firms.

5. Rural poverty, programs to reduce it, and signs of progress

The incidence of poverty, and even more markedly that of extreme poverty, has historically been much higher in rural Peru than in urban areas. That is equally true for Latin America as a whole, though the ratios of rural to urban poverty are notably lower in Costa Rica (CE-

PAL 2000: 269-70). Costa Rica has never discriminated against its rural population, in education or anything else, to the degrees prac ticed in most of the region. Peru notoriously neglected human investment in its rural areas through most of its history, but has in recent years been making progress to reduce this kind of discrimination.

Between 1986 and 2000 the national incidence of poverty in Peru increased by 30 percent, and that of poverty in Lima by 65 percent (table 7). The incidence in the area with the largest number of people in poverty, the rural sierra, increased by a third: dismal in itself, but only half as rapidly as in Lima. Still, two-thirds of the people in this and the other rural areas remain in poverty, and almost one third in extreme poverty. Seventy-one percent of all the people in extreme poverty live in the rural areas.

Table 7
Estimates of the incidences of rural and urban poverty, and extreme poverty, for major regions in Peru, 1986, 1994, and 2000
(percentages of the population in each area)

	1986	1994	2000
Overall poverty			
National	41.6	53.4	54.1
Lima	27.4	42.4	45.2
Rural			
Coast	50.0	63.4	64.4
Sierra	49.2	64.7	65.5
Selva (jungle)	68.0	70.1	69.2
Extreme poverty			
National	18.4	19.0	14.8
Lima	3.4	5.5	4.7
Rural			
Coast	26.6	26.5	27.3
Sierra	32.3	37.7	30.2
Selva (jungle)	43.9	38.6	31.5

Source: PNUD-PERU 2000: 18.
Note: estimates for 1991 are given in this source for Peru and for Lima but not for the rural regions.

Three powerful factors aggravated rural poverty in Peru until the beginning of the 1970s, but two of them subsequently changed for the better. The one that has not changed for the better is the country's low availability of arable land relative to its agricultural labor force. There are too many people trying to survive on too little land. That remains true despite a gradual increase in the amount of arable land, mainly through increased irrigation, and a high rate of emigration from rural areas to the cities. The ratio of arable land to the agricultural labor force was only 1.56 hectares per worker in 1965 and fell to 1.46 by 1996. In the latter year, the ratio for South America as a whole was more than twice as high, at 3.74 hectares per worker (Sheahan 1999: 59-60).

Some areas permit relatively high earnings with small landholdings, given the right crops in favorable conditions. Cocaine is the evident champion. Some legal crops can also do well, if not that well. Once Peruvians realized the scope for exports of asparagus from near-desert conditions on the coast, the yield on that land surely increased a good deal. The rural sierra is a less forgiving place: hard work is rarely enough to get out of poverty using infinitesimal holdings of land. Unless non-agricultural activities can be developed, it will remain very difficult to reduce poverty in the sierra, even with the help of high rates of emigration.

The constraint of the overall scarcity of arable land was worsened for many years by an exceptionally high concentration of land ownership, leaving the great majority of the agricultural labor force with much lower land and productive possibilities than imposed by adverse natural conditions. That problem was greatly changed, if not at first corrected, by the land reform of the Velasco government in 1969. The large landowners were removed from the scene, though at first the structure of holdings changed very little: the haciendas were turned over to their former workers as cooperatives, still in the same or larger units, with three-fourths of the rural labor force left out of the picture. Production and income from the cooperatives failed to grow at all well in the 1970s. The main problem was a matter of incentives: individual workers did not stand to gain in any proportion to individual effort. That problem generated increasing pressures to break up the cooperatives into individual holdings, in a process that became practically

complete in the course of the1980s. Even with an inevitable following trend toward somewhat higher concentration, agricultural landholding has become probably the least unequal in Peruvian history (Sheahan 1999: 61-70 and 176-77). Still, the majority of families in agriculture have too little land to give them much chance of escaping poverty: the 55 percent with the smallest landholdings have less than three hectares (PNUD 2002: 19).

The third factor worsening rural poverty has been the weakness of public investment in rural social development, particularly for education. A great deal of progress has been made in recent decades but the gaps between rural and urban areas remain striking. As of 1961, 59 percent of the rural population was illiterate, compared to 18 percent for urban areas. That proportion for rural areas has been greatly reduced but in 1997 it was still as high—at 18 percent—as it had been in urban areas back in 1961 (Instituto Cuánto 1990: 136; World Bank 1999a: 10). As of 1985 the average education for heads of households in rural areas was 2.9 years. By 1996 that had been brought up to 5.0 years. Although still well below the average of 8.4 years for those in urban areas, the rate of improvement was faster in rural than in urban areas (Pasco-Font and Saavedra 2001: 230-32).

Indicators of the quality of education in public schools also reflect more difficult problems in rural areas. As of 1997, «survival rates» dropped off sharply after grade 4 in rural areas, contrasted to grade 11 in urban schools. Tests of fourth-grade mathematics outcomes show averages for public schools in rural areas 15 percent below the national average for all schools. Urban public schools also scored below the national average, though by only 3 percent. The winners were the children in private schools, who scored 37 percent above the national average (World Bank 1999b: 32 and 38).

Nutritional programs including school lunches have helped keep rural children attending school more dependably, and probably helped them learn more effectively with the aid of better nutrition. But the most powerful program acting to improve rural living conditions in the 1990s was the social investment fund noted in the preceding section for its provision of temporary employment: FONCODES. It became the largest-scale social program of the Fujimori government, despite

a rocky up-and-down record. It was little more than a symbolic gesture from 1991 to 1993 but was then given an effective director —a non-political business executive— and given much more significant financing. Its initially objective technical approach was subsequently undercut to some degree as it became subject to extensive political manipulation, like practically all the other agencies of that government. But the political motivations had at least one helpful side: they led to a major effort to reach the relatively isolated rural areas that had not initially supported the government (Graham and Kahn 1998). The resources of FONCODES were concentrated on rural districts of high poverty, particularly with high levels of extreme poverty.

FONCODES has implemented a wide range of community based projects, including school facilities, water and sewer projects, rural electrification, roads, irrigation, and integrated community development. The last category began on a relatively small scale as the PAD: Proyectos Articulados de Desarrollo. Late in the decade that approach was replaced by a more ambitious program of larger scale area development, the RED: Racimos Estrategicos para el Desarrollo. Except for the RED projects, FONCODES did its best to induce cooperation and complementary investment by other government agencies (Morley 2002: 10-12).

An evaluation of achievements under FONCODES as of the mid-1990s concluded that its targeting toward rural poverty had been impressively successful. It managed to direct most of its resources to «the traditionally marginalized rural population» (Graham and Kane 1998: 76; Francke 1997). A more recent review of results for specific kinds of projects supports that positive evaluation (Morley 2002). The schools brought within FONCODES programs demonstrated significant increases in enrollment, in retention rates, in educational quality, in access to water, and in number of teachers, as compared to similar schools outside these programs. Community water and sewer projects achieved reductions in child diarrhea and severe diarrhea, and in infant mortality, contrasted to comparable communities outside these programs. Water quality was greatly improved in the communities affected. Sewer and latrine projects, and electrification, did less well. Their initial achievements were often lost because of poor maintenance leading in many cases to non-functioning equipment. On a

practical level, the FONCODES projects had a consistent weakness in that they did not include follow-up training and maintenance. Des pite that weakness —a characteristic which might be remedied in the future— they did a good deal to improve life conditions for many of the rural people in extreme poverty, and especially for children (Morley 2002).

The key to that achievement was the use of geographical targeting: to concentrate resources on specific rural districts with exceptionally high levels of extreme poverty. The agency uses «poverty maps» locating districts with severe deficiencies in terms of basic needs for health, nutrition, education, access to water and sewer, and housing. This required hard work to gather and organize information about the location of desirable target areas, and has involved some dispute about how well this was done. The Ministry of Economy and Finances came up with a new approach to such targeting in its own proposals of 2001 (MEF 2001). There clearly remain problems of identifying and reaching the most needy, while limiting the leakage of resources going to the non-poor. But at least as indicated by a comparison of several such programs in 1995, FONCODES was the only one to be rated as highly effective for its geographical targeting (Saavedra and Maruyama 1999: 20-21). Estimates of the distribution of its spending indicated that 43 percent went to help the extremely poor, and an additional 32 percent to others in poverty (Francke 1997).

Some 77 social programs were directed at narrow or wide problems of poverty at the beginning of 2002. Only one of them, PRONAA (Programa Nacional de Asistencia Alimentaria), used poverty maps for geographical targeting in the style of FONCODES. This program provides nutritional help through its «comedores populares», and other crucial food assistance through school feeding programs. Of the people helped by the program in 1998, 77 percent were in poverty and 29 percent in extreme poverty. Even with the help of the program, 33 percent of the children in families of extreme poverty still suffered chronic nutritional deficiency. But that was at least some improvement over the situation for the country as a whole, with 44 percent of the children in extreme poverty suffering chronic nutritional deficits (Saavedra and Maruyama 1999: 25). Leakage of resources from this and other social programs, into help for people who are not

in poverty, inevitably remains a problem, as it is everywhere. Still, as of 1996, they provided help to 85 percent of the families in the rural sierra who were in extreme poverty, and to 76 percent of such families in the country as a whole (Saavedra and Maruyama 1999: 21).

It would be a happy conclusion to find that rural poverty actually went down in the 1990s, either in absolute terms or relative to urban poverty, with the help of these social programs. A rough test is possible by comparing poverty levels in 2000 to those in 1994, when FONCODES was first under way. Overall poverty at the national level increased by one percent in this period, reflecting the poor economic conditions at the end of the decade. Unfortunately, rural poverty did not do any better: it went up by one percent in the sierra and by two percent in the coast and the *selva* (table 7).

For extreme poverty, the picture is better. Incidence at the national level actually decreased, by an impressive 22 percent. Two of the rural areas did just about as well as the national average, though the third did not. The incidence of extreme poverty fell by 20 percent in the sierra and 18 percent in the *selva*, the main areas targeted by FONCODES, but increased by 3 percent on the coast where it was less active. The paths by which the programs may have helped reduce poverty include both the creation of considerable temporary employment (discussed in the preceding section), and improvement of the productive potential of the rural poor through improved health, education, better roads and access to markets, and irrigation facilities to increase possible output from small landholdings. Some of the potential gains may not be realized fully for a long time to come, but many must have helped the rural poor increase their current production and income. The gains may be regarded as small relative to the needs but that does not make them of low relevance to the poor. Furthermore, the sharp reduction in the incidence of extreme poverty in the rural *selva* and sierra, compared to the almost unchanged incidence of overall poverty, may help explain the decrease in rural inequality noted earlier for 1991-2000, when urban inequality did not decrease (Pasco-Font and Saavedra 2001: 217). It looks very much as if serious effort directed to relieving extreme poverty, as the most pressing target, paid off by actually reducing it in both absolute and relative terms.

6. Trying to improve public education

Investment in human resources, other than those of a privileged minority, was the most grievously neglected side of development in most Latin American countries until recent decades. The southern cone countries and Costa Rica were far ahead of the rest of the region in the 1960s; Peru was among the majority that did not start significant effort in this direction until much later than the leaders. In 1960, the adult illiteracy rate ranged from 9 to 16 percent for the southern cone countries and Costa Rica; in Peru, with a higher GDP per capita than Costa Rica, it was 39 percent (World Bank 1983, individual country pages). That lag, now partially remedied, has held down the possibilities both for growth and for reduction of poverty. Illiteracy, or the borderline-literacy still so common, is a potent ally of poverty: it limits awareness of opportunities, mobility, productivity, and potential for learning. Even with Peru's progress in the last thirty years, its remaining problems in public education have left the economy in a distinctly weaker competitive position than Chile, or Costa Rica, or Mexico: less able to respond to new opportunities, and less able to resist the downward pressure on earnings that is forced by such competitive weakness.

Countries with higher and better distributed levels of education do not necessarily grow exceptionally fast, or achieve higher levels of income than those with weaker education. As just noted, Costa Rica did not have as high an income level as Peru in 1960, despite its greatly better level of education. That should not be seen as a failure on the Costa Rican side: rather, it demonstrated that public concern for shared educational opportunities was exceptionally strong. And it subsequently turned out to be the case that Costa Rica's income grew much faster than that of Peru: from a lower level of income in 1960 it reached a level about 75 percent higher than Peru by the year 2000.

Highly educated countries can do poorly in terms of growth if they suffer from weak economic management, wars, corruption, or any of the many negative accidents that fate always holds in store. But wide access to decent education surely means that more people can participate productively in the opportunities that may be open to the country, and that inequality is not aggravated by blocking the life chances of significant shares of the population. Relationships between better

education and better chances of escaping poverty have been clearly demonstrated in Peru, as in many other countries. In 1994, families in which the head of the household had gone beyond secondary education constituted 17 percent of all families but only 1 percent of those in extreme poverty (a ratio of 0.06 between the proportion in extreme poverty and the proportion in the population). At the other end of the distribution, in 50 percent of all families the head of the household had not gone beyond primary education, and these families constituted 78 percent of all those in extreme poverty. That is a ratio of 1.56, 26 times the ratio for the group with highest education (Instituto Cuánto and UNICEF 1995: 41 and 49).[7]

Of the basic problems in education —getting children into school, keeping them there, and giving them education of decent quality while they are there— Peru has made considerable progress on the first and some on the second, but little on the third.

Extension of access to education brought the rate of adult illiteracy down from 29 percent at the beginning of the 1960s to 12 percent by 2000: a great improvement, though still a high rate compared to the range of 2 to 4 percent for the southern cone countries (UNDP 2001: 174-75; PNUD-PERU 2002: 32). Between 1961 and 2000, the share of the population with secondary education increased from 11 to 42 percent, and the share with higher education from 2 to 19 percent. The number of university students multiplied 12 times in this period.

These increases in levels of education testify to a strong public will to give greater life opportunities to the country's children, and to the ability to make considerable headway despite the lack of any significant increase in average incomes. But the process has had major weaknesses that remain difficult to correct: poor quality of the public education available for the majority compared to private education for the upper-income minority, lower levels of education in rural than urban

[7] For the middle range of the distribution, families in which the head of the household had completed secondary education but not gone beyond it constituted 33 percent of all families and 21 percent of those in extreme poverty. Secondary education apparently provided a better than even chance of escaping extreme poverty, but not an over whelmingly favorable probability.

areas, and particularly low levels for children of indigenous descent. These differences continue to contribute greatly to inequality and to rural poverty.

The quality of public education is a common problem in Latin America (as it is for much of inner-city public education in the United States). No country is going to solve that quickly. But test score comparisons indicate that Peru is not doing as well as other Latin American countries. UNESCO tests of third-grade achievement show Peruvian language scores in tenth place among the twelve Latin American countries covered, and math scores in last place. Both Bolivia and Colombia had higher scores on both tests; Cuba did best of all (Hunt 2001: 31-33).

Studies of the characteristics of the educational system emphasize high rates of student dropouts, repetition of grades, long delays in graduating, poor training of teachers, miserable salaries, inadequate infrastructure and teaching materials, and a centralized administration of public education that fails to respond to local problems or to stimulate interest and participation by parents (Arregui 1995: 217-31; Hunt 2001). These problems are widely recognized and have led to a great variety of efforts to do more about them. One of the most far-rea ching is the program initiated in 1993, later named the Programa Especial Mejoramiento de la Calidad de la Educación Peruana (MECEP). Its goals include provision of needed infrastructure and teaching supplies, reorganization of educational administration, training of principals and teachers, decentralized school systems, a national data base for schools and students, and development of measurements for student achievements (Hunt 2001: 8-10).

By 1999, these efforts had some observable effects, including considerable improvements in infrastructure and modest progress in providing teaching materials, a new structure of decentralized teacher-training programs, and some—though sporadic—gains in administration and actual teaching (Hunt 2001: 10-19). The problems of reorienting the whole teaching profession, away from the only kinds of teaching they had ever experienced, oriented toward understanding and problem solving rather than memory work, is clearly an uphill struggle. Possibilities of doing better have been shown by the

FONCODES program in rural areas and by the Jesuit-run Fe and Alegría schools that have been deliberately located in particularly difficult urban areas. Both of these programs have helped reduce grade repetition and dropout rates. They make a promising contrast to the trend shown in a study of earlier years: the dropout rate had risen in Peru between 1972 and 1984, while it was being brought down in all the other Latin Countries compared (Schiefelbein 1997: 40).

These serious and promising efforts to create a more effective system of public education have been supported at many points by international agencies and domestic NGOs. But they have not had the degree of financial support from the Peruvian government that they need. Public expenditures for current functions of the educational system have oscillated widely, in direct relation to cyclical changes in the economy, with no increase in real terms between the beginning of the 1980s and the mid-1990s. Expenditures per pupil fell approximately in half during these years (Saavedra, Melzi, and Miranda: 1997). In the period 1995-97, while making considerable show of building new schools in rural areas, the Fujimori government's spending on education was a smaller share of GDP than that of any of the other ten countries compared in table 4 above: even below Bolivia and Ecuador. The median shares for these 11 countries were 3.4 percent of GDP for 1985-87 and 4.5 percent for 1995-97. For Peru, the shares were an above-average 3.6 percent in the 1980s but an abysmal 2.9 percent in the 1990s (UNDP 2001, 170-72).

Government spending in support of education in the 1990s was of course constrained by efforts to hold down fiscal deficits, in contrast to the frequent disregard of such limits by earlier governments. Different priorities within that constraint could have been more helpful. But the fundamental problem is that Peru needs greater tax revenue to provide non-inflationary financing for the country's many social needs, including education and its other social programs.

7. Financing investment in human development

All countries have to deal with never-ending conflicts between desirable goals for social spending and difficulties of financing it, either

because of entrenched public resistance to taxes or because of the temptation of governments to court political support by cutting taxes no matter what other goals may be lost. Peru has never reached the levels of taxation needed to support social investment to the degree that should be possible. Social expenditures were raised relative to GDP through the early 1990s but as of 1997 they were still only 6.3 percent of GDP, barely more than half the average of 12.4 percent for Latin America (Pasco-Font and Saavedra 2001: 111). The main constraint is that tax revenue has remained too low relative to GNP, despite an initially suc cessful institutional innovation at the beginning of the decade: the creation of a new and greatly more effective tax collection agency.

Taxation fell to a ridiculously low level under the populist government of Alan García, which simply threw up its hands at any attempt to maintain adequate tax revenue. Revenue fell to 6.5 percent of GDP by 1989. That was the second lowest ratio in Latin America (just 0.1 above the lowest, Bolivia). It made a sad comparison to ratios over 20 percent in Brazil and Chile, or 17 percent in the much poorer Ecuador (IDB 1999: 220). That pitiful showing was the result of unchecked fiscal favors for a variety of selective goals, plus almost equally unchecked corruption.

The Fujimori government inherited a near-hopeless tax administration and responded sensibly by closing it down. It was replaced by SUNAT, a new agency with new methods and, more importantly, a new spirit. SUNAT was given a non-political director and the financing needed to recruit a staff that included many young college graduates with computer skills and with dedication to a clear goal: identifying and collecting taxes legally due. It was also given the authority to shut down any business found to be evading taxes, with very public notices posted on the premises to drive home the point. That was a revolution. SUNAT proved to be more successful than any such agency in Peruvian history at finding and effectively following up failures to pay taxes due. By 1996 the number of taxpayers increased from 287,000 to 1.6 million, and the ratio of tax revenue to GDP from 8.8 percent in 1990 to 14.2 percent (Gonzales de Olarte 1997; IDB 1999: 220).

The changes initiated with SUNAT were heading in the right direction, almost as a model of institutional reform for other countries to

consider and learn from. But they stopped heading in the right direction as the corruption of the Fujimori government took hold on all its agencies. SUNAT was turned over to political manipulation, used to attack critics of the government and reward friends, and to extort blackmail. One of Peru's most fundamental needs is to find safeguards against such corruption by the executive branch of the government. That is a tough problem to deal with, in all countries

Current revenue of the public sector as a whole reached a peak of 15.9 percent of GDP in 1997, then decreased slowly to 14.1 percent by 2001 (BCRP 2002: 258). It was perhaps surprising that the ratio did not drop further, given the weakness of the economy in this period. Could there be a good case for raising taxes even in such a period? Clearly yes, if they are in fact devoted to increased spending on highly desirable social programs. To raise taxes in order to finance equal increases in spending is not deflationary: venerable principles of public finance suggest that it is likely to be expansionary. It might would it be possible to win public acceptance for such a strategy, but that was exactly what Chile accomplished at the beginning of the 1990s.

When the democratic government led by President Aylwin came to office in 1990, it was firmly dedicated to creating active social pro grams to make up for social deficits accumulated during the preceding dictatorship. The rare and effective method used was to negotiate joint agreement for such a change with leaders of the business community and of labor, rather than push through tax increases as if it were a matter of one political party versus another. In the event, business and financial leaders agreed to increased taxes on profits provided that the revenue was earmarked explicitly for increased social programs. Chile got a wave of imaginative new programs financed without inflationary deficits, the economy continued to prosper with higher taxes, and the incidence of poverty was cut impressively (Pizarro 1995). It would be of high interest, and just possibly successful, if President Toledo were to lead such an effort in Peru.

In the absence of adequate taxation in Peru, the pressing needs for social investment create an understandable temptation to raise deficit spending. That need not be seen as immoral or suicidal, but it still might not be a very happy course to follow. Inflation can be lived with

but Peruvians suffered badly when the rate of inflation ran over 7000 percent, after the García government's loss of any sense of limits. The IMF is now actively on the scene, reminding the government about limits. That is not a wholly undesirable restraint. Still, it might be questioned if the limits that were considered necessary in conditions of relative prosperity in the 1990s need to be kept on as tightly when GDP per capita goes down, as it did in the following years.

In general, it must be a mistake to try to drive down fiscal deficits by cutting expenditures when incomes and employment are falling seriously. This has clearly been a sensitive issue for the IMF itself. It has been caught at times in the role of making economic conditions worse in countries undergoing severe contraction, by insisting on tax increases and monetary restraint when the contraction reduces tax revenue. Better to moderate the restraints at times, rather than kill the patient. Peru is not undergoing severe contraction at present: just limping along without being able as yet to start the kind of recovery it needs. This would seem to be a case for allowing slightly more room for fiscal deficits than during the mid-1990s. If the IMF and the country could live with deficits of 2 to 3 percent of GDP while reducing inflation then, they could probably live as well, or better, with limits raised to 4 or 5 percent now. Not 10! That kind of flexibility could be some help in the short run. It would not change the main need: to negotiate agreement on higher ratios of both tax revenue and social investment.

8. Incomplete answers, their limits, and implications for Latin America

Peru has been among the least successful of the Latin American countries in terms of achieving sustained economic growth and reduction of poverty. Still, it has initiated a number of policy and institutional changes that were at least temporarily helpful, and could be more so in the future. This report has suggested possible answers to three problems that have been particularly serious for Peru and common to other Latin American countries as well: (1) transformation of the structures of production and trade to foster more sustained growth of output and employment; (2) strengthening government

revenue to permit more nearly adequate investment in human resources without provoking inflation; and (3) increasing opportunities and reducing poverty in the rural areas where the incidence of poverty, and especially of extreme poverty, has remained much higher than for the population as a whole.

With respect to (1), the structural changes that could make a fundamental difference would require a more competitive industrial sector, and modern services as well, able to compete in world markets and to grow at home without high levels of protection. That would not be any guarantee of effective results —bad luck or poor macroeconomic management can hurt any economy for a time— but it would have positive consequences both for long-term growth and for the power of growth to reduce poverty. It would permit more sustained growth by lessening the pressures that generate excessive external deficits in periods of prosperity, and lessening the country's vulnerability to adverse external changes. And a structure of growth that included greater gains in the output of manufactures, modern services, and non-traditional agriculture, would be distinctly more favorable for reduction of poverty than the 1990s structure, with its unfortunate overbalance toward the mining sector. Peru's good years from 1992 to 1997 were not nearly as helpful for poverty reduction as they could have been, mainly because of the high share due to mining and the falling share from the manufacturing sector.

That unfortunate pattern was in a sense the direct consequence of Peru's strong comparative advantage in mining: so strong that its exports can grow well, as long as external markets are favorable, des pite the braking effect of exchange rate appreciation. Some branches of manufacturing would also have comparative advantages if the exchange rate were consistent with external balance on current account. But the industrial sector cannot thrive against the obstacle of exchange rates that undercut its export earnings and in effect subsidize imports. The appreciation of the real exchange rate at the beginning of the 1990s cut down incentives for exports of manufactures, and cut down on the sector's ability to compete with imports in the context of a more open economy. That combination reduced the growth of employment and thereby lessened the effect of GDP growth on poverty reduction.

A possible answer, favorable for both growth and employment, would be to use exchange rate management actively to promote incentives to export. Peru used this approach in one period, the second half of the 1970s, and it worked: it stimulated an extraordinarily rapid rise in the exports of manufactures and of non-traditional exports in general. Peruvian industrialists learned for the first time that they could compete effectively in external markets, and started on a path they have never abandoned since. That approach broke down because the export stimulus was carried on past the point of generating a current account surplus, and combined with excessive monetary expansion: it started under conditions of domestic contraction that made productive resource readily available but as the balance changed to an export surplus with rising domestic demand at the same time, the neglect of monetary restraint proved fatal. That was not a necessary outcome. Chile demonstrated the power of focused effort on promoting exports within a context of fiscal and monetary restraint, through the decade from 1983, with notable success and without aggravating inflation. That came to a stop only when its very success led to such a strong capital inflow that even capital controls could not keep the real exchange rate from falling (Sheahan 1997). If the world insists on pouring too much capital into a country, its scope for independent management is necessarily limited.

Excessively strong capital inflows up to 1997 tended to pull real exchange rates down for nearly all Latin American countries but did not eliminate room for countering action. For the period covered in table 6, Costa Rica and Mexico raised their real exchange rates, Peru and many others allowed moderate decreases, and both Argentina and Colombia allowed very steep decreases. For the eleven countries considered, changes in ratios of manufacturing exports to total exports proved to be closely correlated with this pattern of exchange rate changes. The damage of seriously falling real exchange rates was especially severe in Argentina and Colombia.

Although the growth of the manufacturing sector can be stimulated by competitive exchange rates, the possible gains will remain limited unless they can be supported by a better educated labor force, with greater flexibility and learning capacity than in the past. Peru has made considerable headway in extending access to education but

not much in raising its quality. The private education available to children of higher income families is clearly much more effective than that available to the majority. Peru started an ambitious program for reform of public school education in1993, the MECEP, with a great deal of help from international agencies. It has made some headway in the provision of teaching materials, improvements in infrastructure, and decentralized teacher training programs. But educational reform in any fundamental sense requires a great deal of time and also requires adequate financing. That was not made available in Peru in the 1990s. The ratio of public spending on education to GDP was barely half the regional average.

The second problem —the inadequacy of financing for investment in human resources— requires reasonably high tax revenue. An initially successful institutional change by the Fujimori government, the creation of SUNAT, helped considerably to raise the ratio of current revenue to GDP. But even at its peak of 15.9 percent in 1996 the ratio looked woefully unimpressive compared to Chile: the latter kept its ratio steadily in the range of 25 to 27 percent. That is how it could finance exceptional levels of social investment without inflationary consequences.

SUNAT made a major difference in Peru by demonstrating that it is possible to collect taxes, or at least a high fraction of the taxes legally due. The numbers of people and firms paying taxes, and the ratio of government revenue to GDP, increased notably. But so, unhappily, did the temptation for government officials to start using the agency to threaten political enemies, to blackmail firms, and to fix problems for those who were either political allies or willing to pay for protection. The Fujimori government corrupted one of its own best institutional innovations. But that government is gone and the agency is not. It could still, presumably, carry on with its previously effective conversion of national habits from near-automatic tax evasion to actual payment of taxes legally due.

Peru also initiated promising changes for dealing with problem (3): high rural poverty. The land reform of 1969 eliminated the traditional domination of the rural population by large landowners who controlled local politics, the judiciary, and the police. Under their regime, public education in rural areas remained extremely weak, illiteracy rates

high, and land ownership concentration among the highest in Latin America. The reforms of the Velasco government effectively eliminated the power of the large landholders and led to the first decade of real progress in extending public education to the rural society. The results of land reform were undercut at first by placing the affected land in poorly functioning cooperatives rather than promoting more equal family holdings but that was changed by gradual breakups into individual holdings. Two more resistant problems have remained: there is not enough arable land to allow more than a minority of rural families to escape poverty through farming, and the quality of rural education remains well below urban education. Still, when economic conditions are favorable for rising earnings from agriculture, the benefits are much less unequally distributed then they ever were before the land reform. Between 1979 and 1986, when urban poverty increased by 10 percentage points, rural poverty fell by one percentage point (CEPAL 2000: 271).

The García government in its first two years made a major effort to reduce rural poverty, and succeeded very briefly, but did that mainly through credit expansion that relied on an explosion of central bank lending. That was a major factor behind the wild rise of inflation from 1987 to 1991, and the collapse of the whole economy. Temporary reduction of poverty by unsustainable methods can be a costly process.

The government of the 1990s made more durable headway through its social programs to combat rural poverty. The largest program, FONCODES, was able to direct resources primarily to rural areas characterized by exceptionally high degrees of extreme poverty. It coordinated successful efforts of other government agencies to improve rural school facilities, water supplies, sanitation, and road transport. Some of the potential gains were lost through failures of the affected communities to maintain new facilities but the program surely contributed to reductions of extreme poverty in the rural sierra and *selva* between 1994 and 2000.

As in the successful case of SUNAT, the temptation to use FONCODES for political purposes led to distortions in its decisions, the resignation of the effective director appointed in 1993, and his replacement by people more amenable to political manipulation. All

governments face such temptations. The Fujimori government did not stand out for any capacity to resist them. This case, like that of SUNAT, suggests that reform programs would have a better chance to serve their purposes if political-administrative protection could somehow be built into them at the outset, to limit the damage of executive interference. When international agencies provide support for such valuable programs, it would be worthwhile to do as much as possible to build in more protective measures at the start.

Perhaps the most general conclusion from this country's troubled experience is that economic liberalization is only a permissive step toward better performance, not an adequate answer. Adequate answers require more activist programs to promote structural change in directions more favorable for employment and reduction of poverty, more investment in human resources than anything yet attempted in Peru, and at least some recourse to negotiation among political and economic leaders to reach agreement on stronger tax systems to provide the non-inflationary revenue needed for such investment.

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