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### ACRONYMS AND ABBREVIATIONS

<b>BCE</b>	Banco Central del Ecuador
<b>PUCE</b>	Pontificia Universidad Católica del Ecuador
<b>BMI</b>	Bono Materno Infantil
<b>CAF</b>	Corporación Andina de Fomento
<b>CEM</b>	Centros Educativos Matriz ( <i>School Network</i> )
<b>CEPAL</b>	Comisión Económica para Latinoamérica y el Caribe, ( <i>Economic Commission for Latin America and the Caribbean</i> )
<b>CEPLAES</b>	Centro de Planificación y Estudios Sociales
<b>CONAMU</b>	Consejo Nacional de la Mujer
<b>COPEFEN</b>	Unidad Coordinadora del Fenómeno El Niño
<b>DDSR</b>	Debt and Debt Service Reduction
<b>DINEIB</b>	Dirección Nacional de Educación Intercultural Bilingüe
<b>DL</b>	Decentralization and Social Participation Law (1997)
<b>EB/PRODEC</b>	Educación Básica – Proyecto de Educación
<b>ECD</b>	Early Childhood Development
<b>ECV</b>	Encuesta Condiciones de Vida (LSMS)
<b>FASBASE</b>	Proyecto de fortalecimiento y Ampliación de Servicios Básicos de Salud en Ecuador, ( <i>Basic Primary Health Project</i> )
<b>FGT</b>	Foster – Greer- Thorbecke
<b>FISE</b>	Fondo de Inversión de Emergencia, ( <i>Emergency Social Fund</i> )
<b>GDP</b>	Gross Domestic Product
<b>IDB</b>	Inter-American Development Bank, ( <i>Banco Interamericano de Desarrollo</i> )
<b>IESS</b>	Instituto Ecuatoriano de Seguridad Social, ( <i>Ecuadoran Social Security Institute</i> )
<b>INEC</b>	Instituto Nacional de Estadística y Censo, ( <i>National Institute for Statistics and Census</i> )
<b>INECEL</b>	Instituto Ecuatoriano de Electrificación, ( <i>Ecuadoran Electricity Company</i> )
<b>INNFA</b>	Instituto Nacional de la Juventud y de la Familia, ( <i>National Institute of the Youth and the Family</i> )
<b>JBG</b>	Junta de Beneficiencia de Guayaquil

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<b>LSMS</b>	Living Standard Measurement Survey (ECV)
<b>M &amp; PL</b>	Law of the Modernization of the State, Privatization, and Delivery of Public Services by the Private Sectors (1993)
<b>MEC</b>	Ministerio de Educación y Cultura, ( <i>Ministry of Education and Culture</i> )
<b>MHB</b>	Municipal Health Board
<b>MHCN</b>	Municipal Integrated Health Care Networks
<b>MODERSA</b>	Modernización Gestión Hospitalaria y Reforma Sector Salud
<b>MOH/ MSP</b>	Ministerio de Salud Pública, ( <i>Ministry of Public Health</i> )
<b>MSB</b>	Ministry of Social Welfare
<b>MTI</b>	Medium Term Improvement
<b>NGO</b>	Non-Governmental Organizations, ( <i>Organizaciones No-Gubernamentales</i> )
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>OREALC</b>	Oficina Regional de la Educación para América Latina y el Caribe
<b>ORI</b>	Operación de Rescate Infantil, ( <i>Operation Child Rescue</i> )
<b>PACMI</b>	Programa de Alimentación Complementario Materno Infantil
<b>PAHO/WHO</b>	Organización Panamericana de la Salud, ( <i>World Health Organization</i> )
<b>PCE</b>	Gasto per Capita, ( <i>Per Capita Expenditures</i> )
<b>PDI</b>	Programa Desarrollo Infantil
<b>PPP</b>	Purchasing Power Parity
<b>PRAF</b>	Programa de Asistencia Familiar, ( <i>Family Assistant Program</i> )
<b>PROMECEB</b>	Proyecto de Mejoramiento de Calidad y Eficiencia de la Educación Básica, ( <i>Project for Improvement of Efficiency and Quality of Basic Education (IDB-Financed)</i> )
<b>PRONEPE</b>	Programa Nacional de Educación Preescolar Alternativa
<b>SEDES</b>	Secretaría de Desarrollo Social
<b>SEGEPLAN</b>	Secretaría General de Planificación, ( <i>General Planning Secretariat</i> )
<b>SIMUJER</b>	Sistema de Indicadores sobre la Situación de las Mujeres y de las Diferencias entre Hombres y Mujeres en el País
<b>SIISE</b>	Proyecto de Sistema Integrado de Indicadores Sociales del Ecuador
<b>SISVAN</b>	National System of Nutritional Vigilance
<b>SOLCA</b>	Sociedad de Lucha contra el Cáncer
<b>SSFA</b>	Seguro Social de la Policía, ( <i>Police Social Security</i> )
<b>STD</b>	Standard
<b>TIMSS</b>	Third International Mathematics and Science Study
<b>TQM</b>	Total Quality Management
<b>UNDP</b>	Programa de Desarrollo de las Naciones Unidas, ( <i>United Nations Development Program</i> )
<b>USAID</b>	United States Agency for International Development
<b>VAT</b>	Value Added Tax, ( <i>Impuesto de Valor Agregado</i> )



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## EXECUTIVE SUMMARY

Over the past decade, Ecuador has suffered natural disasters, political instability, and financial crises. These events have occurred in the context of already low economic growth and high income inequality and poverty and have exposed the poor to the risk of irreversible losses of assets, including human capital. This paper updates our knowledge of poverty in Ecuador, examines the effects on the poor and near-poor of the current crisis; discusses Government response to the crisis; reviews the performance of basic social programs—both targeted and universal in coverage—that benefit the poor, including the important role of the Government's innovative cash transfer program—the *Bono Solidario*; and presents policy options for protecting the poor. The analysis builds on the basis of other analytic work carried out by the Government and the World Bank, in particular, the comprehensive 1995 Poverty Report.

**Inequality and Poverty.** Ecuador entered the current crisis with some of the worst inequalities and lowest per capita income in the Latin America region. Ecuador's already high levels of poverty and income inequality have worsened in recent years, with the poverty headcount increasing by 12 percentage points between 1995 and 1998 and the Gini coefficient of income increasing from 0.54 to 0.58. The bottom quintile's share of total consumption decreased from 5.3 percent in 1995 to 4.3 percent in 1998. Using a consumption-based poverty measure for 1998, the extreme poor—those who fall below the food poverty line—were 17 percent of the total population, or 1.9 million people, and the poor were 46 percent of the population, or 5.1 million people. Poverty increased significantly between 1995 and 1998.

The poor are more likely than the non-poor to live in rural areas, to be indigenous, and to have more children that live in extended households. They have low educational attainment, poor sanitary conditions, high malnutrition, and a high incidence of certain illnesses, including malaria. Of particular importance is the very low education level of mothers, given the importance of this variable in explaining the state of nutrition and sanitation of the home and in predicting the educational attainment of children. Some demographic groups are more likely to be poor, including pregnant women and the elderly, but the age group that is most at risk is children and, especially, children under six years of age.

The effects of poverty, especially on pregnant women and young children, may be permanent. One-quarter of all preschool children in Ecuador have stunted growth, and 39 percent of children in the bottom consumption quintile are stunted. Only 12 percent of children in the bottom consumption quintile complete lower-secondary schooling. Children of the poor also are more likely to drop out of school to work; 24 percent of children in the bottom quintile do so.

Interviews with the poor show how they cope with crisis and loss of income. Households are often broken up with some adult members migrating to find employment, or rural parents sending children to live with relatives in urban areas in order to attend school. Assets, including working tools, are sold when it is no longer possible to borrow

money or to obtain credit from small storeowners. The poor substitute food high in carbohydrates and low in nutritional value for protein and fresh vegetables.

*Conclusion:* Some groups are especially vulnerable to the consequences of widening inequality and worsening poverty in Ecuador, and they require programs of social protection that (a) specifically target these groups to reduce the risk of permanent harm and (b) increase the probability of escaping poverty.

**The Effects of Crisis.** The current unprecedented macroeconomic crisis began with the natural disaster *El Niño*, continued with declining petroleum export prices, and was aggravated by a global financial crisis. The result of the crisis has been a large fiscal deficit, exchange rate and price instability, a severe banking problem, and a deep recession. As a consequence, unemployment has doubled to almost 17 percent, per capita GDP has declined by more than 7.3 percent, and household consumption has declined.

The chronic poor have seen their poverty deepen as a result of the crisis. Poor communities that participated in the Bank's efforts to obtain the views of the poor for its *World Development Report* on Poverty and Development were reinterviewed to determine the effects of the crisis. Of particular importance is that nutrition has worsened, especially for children; medical attention is being deferred, especially preventive care for pregnant women and young children; and families report spending less on their children's education. Also, there is evidence of growing child labor, with the percentage of poor children aged 5 to 15 who are working increasing from 8.3 percent to 9.7 percent in the first half of 1999. The urban poor report stronger adverse effects than do the rural poor, though poverty remains high in rural areas.

The near poor, those already close to the poverty line, have been seriously affected; with the share of earned income going to the middle income quintile decreasing from 12 to 10 percent between 1998 and 1999. Also, their debt, which is often denominated in dollars, has increased as a result of depreciation of the sucre. Since a quarter of the near-poor have bank accounts, the real value of their assets decreased with the Government's freeze on bank deposits in March 1999. The crisis is expected to significantly increase the number of the poor. Large numbers of the near poor have been at least temporarily forced into poverty.

*Conclusion:* The frequency of crises in Ecuador and their serious adverse consequences for the poor make it essential that Ecuador stabilize its economy and restore economic growth, while at the same time it puts in place a sound and effective safety net strategy.

**Government Response to Crisis.** Since the Government had limited fiscal and political room to maneuver in setting its policies, its response to the most recent macroeconomic crisis was constrained and not highly effective in dampening the original shocks to the economy. On the side of social expenditures, the Government early on followed a policy of making cuts through salary arrears, leading to serious disruptions in the delivery of basic social services. (Work stoppages prevented schools and health

facilities from functioning one-quarter of the time in the first six months of 1999.) On the other hand, the Government took an important step in the right direction by eliminating expensive and regressive price subsidies for cooking gas and electricity and introducing an innovative cash transfer system (the *Bono Solidario*) to compensate the poor for the resulting price increases. However, at the same time that painful cuts were being made in social expenditures, the subsidies reappeared in 1999, and they grew back to represent at least 1.5 percent of GDP.

As a consequence of the crisis and the shrinking resource envelope, social sector expenditures in 1999 declined by 33 percent in health and 32 percent in education from their 1998 levels. However, despite the fiscal crisis, the Government has attempted to protect targeted spending and even introduced new programs to expand the provision of integrated early childhood care and to provide expanded prenatal and neonatal care; expanded programs have either received external financing or financing from earmarked revenues (the Solidarity Fund).

*Conclusion:* Ecuador's record to date on expenditure protection is mixed, with some targeted programs having been protected. The failure to protect basic health and education services has had serious consequences for the poor and is likely to adversely affect their human capital in the long term. Paying civil service staff on time is an essential element of any crisis response strategy. Poorly targeted subsidy expenditures on cooking gas and electricity should be phased out once and for all to protect expenditures on basic and targeted social services.

**Social Services with Universal Coverage.** The poor lack adequate access to basic social services. Less than 60 percent of the bottom quintile use public health facilities, with the rest relying on home treatment or private services. The lowest quintile's net enrollment rate for lower secondary is 19 percent and for upper secondary it is only 12 percent; comparable rates for the highest quintile are 80 percent and 62 percent, respectively. In both health and education, the poor receive a higher share of low-cost, basic services than they do of higher cost hospital and university services.

The combined result of unequal access and unequal spending across levels of health care and levels of education is a highly inequitable distribution of benefits from social services. The bottom quintile receives only 7.6 percent of public spending on health, compared to 38.1 percent received by the top quintile. Public education is somewhat more equitable, with the bottom quintile receiving 12 percent of public spending on education, compared to 25 percent for the top quintile. Education inequities are considerably starker when looking at the distribution of public plus private spending across quintiles, a better measure of equality of educational opportunity over a child's life; the bottom quintile receives only 4 percent of all education spending, compared to 57 percent for the top quintile.

The social sectors also suffer from inefficiencies stemming from employment rigidities, complicated salary scales unrelated to performance, and highly centralized management of public expenditures. The net result is that front line managers lack

discretionary decision making power and, thus, neither they nor anyone else can be held accountable for poor performance. In the health sector several initiatives are under way to increase hospital autonomy and accountability, to introduce cost-recovery for those who can pay, and to change public sector budgeting and financial management. Reform efforts in the education sector are at an earlier stage.

*Conclusion:* Given that the poor disproportionately depend on the Government finance and provision of basic health and education, quality and efficiency improvements are essential to improve equity. Sectoral reforms are urgently needed to improve efficiency in service delivery, through measures to increase accountability, introduce cost-recovery, and improve personnel and financial management.

**Targeted Social Services.** Ecuador has a large number of targeted programs managed by several different governmental organizations which lack coordination and integration into a unified system. As a result, it is almost impossible to assess the actual level of protection each group of beneficiaries receives from the various programs. In addition, there is an almost complete lack of evaluation as to the impacts of targeted programs, although the Government's creation of the Social Indicators Program (SIISE) and its continuing support of the Ecuador Household Survey (ECV) are important first steps in developing the capacity for monitoring and evaluation.

The *Bono Solidario* is the backbone of the Government's social protection program. Covering 1.3 million Ecuadorian households, this is the only program that is available to some poor groups, e.g., the elderly. However, the low level of benefits combined with targeting problems constrains its impact on poverty. Large numbers of individuals who are eligible for the *Bono* fail to receive it, and half of the individuals receiving the *Bono* are in fact not eligible. At present, there is no administrative and targeting mechanism in place that would permit improved targeting. An improved targeting mechanism is under development.

There exists a wide variety of other programs targeted on the poor and, especially, poor children. Excepting the school snack, none of these programs provides anything approximating adequate coverage. For example, PACMI, a program to provide health and nutritional benefits to poor, pregnant women covers only 5 percent of the target population. While targeting could be improved in most programs, lack of coverage is the major problem. In addition, none of these programs was designed to respond to crisis.

*Conclusion:* Ecuador needs a coherent, consistent social protection strategy that aims at significantly increasing program coverage and, especially in the case of the *Bono*, improving targeting. Further strengthening of the Social Indicators Program and continued support for the Ecuador Household Survey are essential elements in creating the capacity to monitor and evaluate social protection programs.

**Policy Options.** A government strategy to offset the effects of crisis would typically have three basic components—protection of basic and targeted public services, income or consumption support for vulnerable groups, and new or expanded programs to prevent the crisis from doing permanent and irreparable harm to the poor.

The *Bono Solidario* should be improved to provide higher levels of income support to more of the very poor. In the medium-term, the *Bono* should be converted into an efficient income assistance program targeted on the very poor, with the potential for quickly increasing coverage in times of crisis and reducing it when not needed. In the short term, the large number of beneficiaries in the program, the depth and length of the crisis, and the high costs of raising benefit levels make it fiscally and politically difficult to make the required adjustments.

A short-term alternative to adjusting the *Bono* itself is to introduce tightly targeted programs that complement and build on the *Bono*. These programs would provide cash transfers tied to changes in household behaviors that would protect poor children. They could be implemented during the current crisis and downsized or eliminated afterwards, depending on evaluations of their effects on the welfare of the poor. One complement to the *Bono* would be to introduce an additional cash transfer conditional on routine health clinic visits to protect the health of the most vulnerable of the poor—pregnant and lactating women, and children under two years of age.

Another complement to the *Bono* would be to introduce a cash transfer tied to school attendance of the children (aged 6 to 15) of the beneficiaries. This program would also target one of the most vulnerable groups among the poor—school age children who are at risk of failing to attend or failing to enroll in school during the crisis. Implementation of these programs in the short term would require not only using a proxy means test to determine eligibility but also developing a system to ensure the reliability of school attendance statistics and verify health care. Since school attendance does little to protect poor children if teachers are absent or learning materials are not available, other programs would need to be developed to address supply side problems.

The introduction of conditional cash transfer programs for women and children under two and for children aged 6 to 15 leaves two vulnerable groups without adequate protection—children aged 3 to 5, and the elderly. However, the proposed large-scale expansion of childcare services through the *Nuestros Niños* program promises to provide improved nutrition, health care, and education for this group over the short to medium-term. Also, children aged 3 to 5 indirectly benefit from the additional household income resulting from the programs for which their siblings are eligible; 86 percent of poor households with children aged 3 to 5 are located in households also having children aged 6 to 15. Also, 73 percent of the elderly poor live in households with children aged 6 to 15.

Another option for providing income support would be to introduce a temporary public employment program. In the short term, implementation of such a program would be difficult, especially if it were to work through financially and administratively weak municipal governments, like Argentina's *Trabajar*. Looking towards the medium term, a public employment program could be designed to be taken off the shelf for the next crisis. In the short-term, the most feasible strategy for generating employment would be to work with the existing Social Investment Fund and with several existing social

infrastructure projects to put priority on labor-intensive projects, increase the share of costs financed by the Government, and modify procurement and other regulations to facilitate implementation.

**Conclusion:** Improvements in social protection should build on and complement the *Bono Solidario*, which is the backbone of the Government's strategy. Well-targeted, incentive-based cash transfers should be introduced to provide increased benefits and coverage to the most vulnerable groups. Options to introduce a temporary and efficient public employment program should be explored.

**Financing Improvements in Social Services.** Total social sector and social protection spending, including Social Security and the *Bono Solidario*, was seven percent of GDP in 1999. Of this amount, 1.8 percent of GDP was in targeted programs, of which 1.3 percent of GDP was in cash transfers (the *Bono Solidario*). Total expenditures on targeted programs plus cash transfers was US\$260 million, which is \$21 per capita per year. Distributed equally among all the extreme poor, this sum would yield \$139 per person per year, or 43 percent of the annual poverty line of US\$320.

Given the depth of the economic crisis and given the deterioration of social services of the past few years, there is an urgent need to strengthen social protection and raise the coverage and quality of basic education and health. Additional resources will be required to implement both the short-term and medium-term improvements, but the fiscal environment for obtaining these additional resources is a difficult one. Social sector budgets have been constant or declining since 1995, and the combination of increased interest payments and decreased revenues led to a significant reduction in 1999 spending levels.

Short-term improvements to social protection include introducing well-targeted, incentive-based cash transfers to complement the *Bono Solidario*, in addition to ensuring a minimum package of school and medical supplies, and providing financing to implement existing civil works programs. In the medium term, coverage of the incentive-based cash transfers should be expanded, and coverage of the elderly by the *Bono Solidario* should be significantly improved. The additional cost (above the current strategy) of short term improvements is US\$4 per capita, or an increase of 0.3 percent of GDP. The additional cost (above the current strategy) of medium-term improvements is US\$10 per capita, or an increase of 0.9 percent of GDP. A simulation exercise suggests the Government's resource envelope will not soon grow sufficiently to finance these additional costs. Reducing debt service and/or increasing the VAT rate are two options that would be sufficient to finance medium-term improvements.

**Conclusion.** The Government faces stark choices and cruel tradeoffs. Poverty and inequality have increased since 1995 and continue to worsen. In the short term the poor and vulnerable groups require improved protection from declining incomes. In the medium term both social protection and basic social services need strengthening. If inequality and poverty are to decline in the future, the poor will require significantly improved access to basic health and education services of higher quality. Education, in

particular, can play a critical role in raising the future earnings of poor children and, thus, help them to escape poverty. But the extremely low access by the poor to education beyond the primary level now constrains education as a vehicle for social mobility. Increasing that access, along with improvements in quality, will require additional public spending that has not been included in the estimates given here.

The tradeoffs facing the Government are politically difficult ones. Powerful groups resist tax increases, and price subsidies are politically popular and benefit large numbers of people, even if the subsidies are regressive in nature. Targeted social expenditures by definition benefit a relatively small percentage of the population, while financing them affects a large percentage of the population.

The consequences of not making the difficult choices are equally stark—continued high and possibly increasing poverty and inequality; inadequate human capital to confront an economic future that puts an increasing premium on highly skilled labor; and a continued weak capacity to respond to future crises. The Mahuad Government entered office with a pledge to reduce poverty, and the present Government has indicated that it intends to maintain. To make good on this pledge, it now needs to follow up with a strong commitment to improving social protection in both the short- and medium-terms and to make the politically difficult decisions required to find the resources to implement that commitment. Furthermore, to make these short-term and medium-term improvements sustainable will require reforms in the finance and management of the social sectors that will bring about greater accountability and efficiency.

Finally, while this report focuses on the options available to the Government to offset the effects of the crisis on the living standards of the poor and their human capital formation, the most effective thing the Ecuadorian authorities can do to reduce poverty on a sustainable basis is to foster conditions for an early resumption of economic growth. Reduced inflation and unemployment and higher personal incomes not only directly benefit the poor but also generate the revenues that permit the Government to finance improvements in social programs. This macroeconomic diagnosis of the conditions required to stabilize the economy, to complete the structural reform process, and to set the basis for sustainable growth, are beyond the scope of this present report but are treated in depth in other Bank analytic work.



## RESUMEN EJECUTIVO

Durante la última década, Ecuador se ha visto afectado por una profunda crisis en la cual interactúan factores económicos, políticos y sociales. Adicionalmente, ha sido víctima de desastres naturales como El Niño y de una inestabilidad política interna sin precedentes. Todo esto ha ocurrido en un marco de bajo crecimiento económico, desigualdad y pobreza, el cual ha expuesto a los pobres a pérdidas irreversibles de bienes, incluyendo el capital humano. Este documento estudia el impacto de la crisis de 1999 sobre la población pobre y aquellos que están, como consecuencia de la crisis, ingresando a este grupo poblacional. Igualmente, este documento analiza la respuesta del Gobierno Ecuatoriano a la crisis, presenta opciones de política enfocadas a proteger a la población más vulnerable y evalúa la evolución de los programas básicos sociales – tanto los de cobertura universal, como los focalizados – que benefician a la población pobre. Dentro de estos programas básicos se encuentra el Programa del Bono Solidario, iniciativa gubernamental que consiste en realizar transferencias en efectivo a la población pobre. El trabajo analítico de este documento se estructura a partir de otros documentos y estudios analíticos realizados por el Gobierno y el Banco Mundial, en particular el Informe sobre la Pobreza en Ecuador del año 1995.

**Desigualdad y Pobreza.** Ecuador posee uno de los peores niveles de desigualdad y de ingresos per cápita en comparación con los demás países de América Latina. Los niveles de pobreza y de desigualdad en Ecuador han empeorado en los últimos años, el número de pobres aumentó en 12 puntos porcentuales entre 1995 y 1998 y el coeficiente de Gini empeoró de 0.54 a 0.58 puntos para el mismo período. La participación del quintil más pobre de la población en el total del consumo nacional decreció de un 5.3% en 1995 a un 4.3% en 1998. De igual manera, si se utiliza el método del consumo para medir la pobreza en 1998, las personas en situación de extrema pobreza – aquellas que se encuentran por debajo de la línea de pobreza alimenticia - representan el 17% de la población total, es decir, 1.9 millones de personas; así mismo, los pobres equivaldrían al 46% de la población, ó 5.1 millones de personas.

La población pobre tiene más probabilidades que la no pobre de vivir en las áreas rurales, ser indígena y tener un número mayor de hijos que viven en hogares ampliados. Adicionalmente, la población pobre presenta bajos niveles de educación, precarias condiciones sanitarias y altos niveles de desnutrición e índices de contagio de enfermedades, incluyendo la malaria. Resulta de particular importancia el nivel de educación de las madres ya que esta variable determina el estado nutricional y el nivel de escolaridad alcanzado por los niños, así como las condiciones sanitarias del hogar. Algunos grupos demográficos son más proclives a ser pobres, entre ellos se encuentran las mujeres embarazadas, la población mayor de 65 años, y los niños, especialmente aquellos menores de 6 años.

Los efectos de la pobreza, especialmente en las mujeres embarazadas y en los niños pequeños pueden ser permanentes. Mientras que un veinticinco por ciento de todos los niños en edad preescolar en Ecuador tienen una baja talla en relación a su edad, un

39% de los niños que pertenecen al primer quintil de consumo presentan esta misma característica. Sólo el 12% de los niños pertenecientes al quintil más pobre de la población terminan los primeros años de educación secundaria. Adicionalmente, los hijos de la población más pobre son más propensos a abandonar la escuela en búsqueda de trabajo, el 24% de ellos se encuentran en el primer quintil.

En entrevistas realizadas a algunos segmentos de la población pobre se observa como éstos hacen frente a la crisis y a pérdidas de sus ingresos. Los hogares, en algunos casos, se han visto desintegrados debido a que los adultos migran en busca de trabajo, o a que los hijos son enviados a vivir con otros familiares en áreas urbanas a fin de que asistan a la escuela. Los dueños de pequeños negocios se han visto en la necesidad de vender sus pertenencias, incluyendo sus herramientas de trabajo, cuando ya no les es posible pedir prestado dinero u obtener algún crédito. En lo que a la alimentación se refiere, la población pobre sustituye los alimentos proteicos y los vegetales por alimentos altos en carbohidratos y de poco valor nutricional.

*Conclusión:* En Ecuador existen grupos especialmente vulnerables a los altos niveles de desigualdad y pobreza. Estos grupos requieren programas en el área de protección social, los cuales a) se focalicen directamente hacia estos grupos con el fin de reducir el riesgo de daño permanente y b) aumenten la posibilidad de salir de la pobreza.

**Los Efectos de la Crisis.** La presente crisis se inició con el desastre natural de El Niño, continuó con la disminución de los precios de exportación del petróleo y, finalmente, se agudizó con la crisis financiera global. Las consecuencias macroeconómicas directas de la actual crisis han sido el aumento del déficit fiscal, la inestabilidad en el tipo de cambio y en los precios internos, el severo problema bancario y la profunda recesión. Como consecuencia de todo esto, la tasa de desempleo se ha duplicado llegando a un 17%, el producto interno bruto per cápita ha disminuido en un 7.3% y el consumo en los hogares ha decrecido.

Los pobres extremos han visto recrudecerse su situación como resultado de la crisis. Las comunidades pobres que fueron entrevistadas y que participaron en el ejercicio que realizó el Banco para obtener sus puntos de vista e incluirlos en el "*Informe sobre el Desarrollo Mundial*" cuyo tema central es la pobreza, fueron entrevistados nuevamente a fin de determinar el impacto de la actual crisis. A grandes rasgos se observa un empeoramiento en la alimentación, especialmente entre los niños; mayor frecuencia en la postergación de atención médica, en particular la atención preventiva de mujeres embarazadas y de niños pequeños; y disminución del ingreso familiar sobretodo aquella proporción destinada a los gastos en educación. También se evidencia un crecimiento en el número de niños pobres, entre 5 y 15 años, que trabajan, este porcentaje aumentó de 8.3% a 9.7% en la primera mitad de 1999. A pesar que los niveles de pobreza son más altos en las áreas rurales, los pobres de la zona urbana han sido más afectados que aquellos pobres de las zonas rurales.

Los nuevos pobres, es decir aquellos que se encuentran cerca de la línea de pobreza, son los más seriamente afectados ya que la proporción de ingresos recibidos que

va dirigida al quintil de ingresos medios disminuyó de 12% a 10% entre 1998 y 1999. Al mismo tiempo, sus deudas que generalmente se denominan en dólares han aumentado como consecuencia de la devaluación del sucre. Igualmente, el valor de los activos de los nuevos pobres ha decrecido a raíz de la medida gubernamental de congelar los depósitos bancarios en marzo de 1999. Se espera que esta crisis aumente de manera significativa la cantidad de pobres. Un gran número de personas que se encontraban en los límites de la línea de pobreza se han visto forzados, por lo menos temporalmente, a formar parte de los nuevos pobres.

*Conclusión:* La frecuencia de crisis en Ecuador y sus efectos adversos para las poblaciones pobres hace inminente que Ecuador establezca su economía y restablezca el crecimiento económico junto con la creación o diseño de una estrategia efectiva de protección social.

**La respuesta del Gobierno a la Crisis.** A la vez que el Gobierno Ecuatoriano ha visto limitada su capacidad política y fiscal de establecer políticas, su respuesta a las crisis macroeconómicas más recientes ha sido restringida y débil en mitigar los choques originales que afectan a la economía. En lo que se refiere al gasto social, se han hecho recortes presupuestarios atrasando los pagos de salarios, lo cual ha obstaculizado la entrega regular de los servicios sociales básicos. La paralización en la jornada laboral impidió que las escuelas y entidades de salud funcionaran una cuarta parte de los primeros seis meses de 1999. Por otro lado, el Gobierno tomó una acertada decisión de eliminar los subsidios que hicieron aumentar los precios del gas para cocinar y la electricidad, introduciendo el innovador sistema del Bono en efectivo o Bono Solidario para compensar a los pobres por el alza de precios. Sin embargo, al mismo tiempo que se hacían drásticos recortes en el gasto social, reaparecieron subsidios en 1999 alcanzando al menos un 1.5 por ciento del producto interno bruto (PIB).

Como consecuencia de la crisis y del recorte en los recursos del presupuesto nacional, el gasto del sector social en 1999 disminuyó el 33% para salud y un 30% en educación en comparación a 1998. Sin embargo y a pesar de la crisis fiscal, el gobierno ha tratado de proteger el gasto social inicialmente programado y ha introducido nuevos programas con el fin de fortalecer los servicios integrales para el cuidado de la infancia y de intensificar la prestación de los servicios prenatales y neonatales. La expansión de estos programas ha recibido financiamiento del exterior o de ingresos predestinados (El Fondo de Solidaridad).

*Conclusión:* El registro de los gastos realizados a la fecha en el área de protección se suma a otros programas focalizados a los que se ha dado prioridad, como es el Bono Solidario. La falta de protección a las áreas de salud básica y de educación ha acarreado severas consecuencias para los pobres, afectando negativamente el desarrollo de su capital humano en el largo plazo. Pagar al personal de servicio civil a tiempo debe ser un elemento esencial dentro de cualquier respuesta estratégica a una crisis. Aquellos subsidios en el gas de cocina y de electricidad que presentan una focalización inadecuada deberán ser eliminados totalmente con el fin de evitar que el gasto de la población pobre en los servicios básicos sociales disminuya.

**Servicios sociales con cobertura universal.** Los pobres no tienen un adecuado acceso a los servicios sociales básicos. Menos del 60% de la población que pertenece al quintil más pobre hace uso de establecimientos de salud pública, el resto utiliza proveedores privados, o tratamientos y remedios caseros. Para el quintil más pobre de la población la tasa neta de matrícula en el ciclo básico de secundaria es del 19%, y para el ciclo diversificado es solamente el 12%; las cifras comparativas para el quintil más rico de la población son de 80% y 62%, respectivamente. Tanto en salud como en educación, los pobres reciben una mayor participación en servicios básicos de bajo costo, comparado a lo que reciben en servicios hospitalarios y universitarios de mayor costo.

La combinación de un acceso inequitativo a servicios básicos y de un gasto desigual en la atención en salud y educación trae como consecuencia la distribución no equitativa de los beneficios de los servicios sociales. El quintil más pobre recibe sólo un 7.6% del gasto público en salud, comparado con un 38.1% que recibe el quintil más rico. La educación pública es tal vez más equitativa, en donde el quintil inferior recibe 12% del gasto público en educación, comparado al 25% para el quintil más rico. Las desigualdades en educación son más profundas cuando se mira la distribución de los gastos público y privado a través de los quintiles de consumo; permitiendo observar de mejor manera la igualdad de oportunidades de educación en la vida de un niño. Mientras el quintil inferior recibe apenas un 4% del total del gasto en educación, el quintil más rico recibe el 57%.

Las ineficiencias en los sectores sociales surgen, en la mayoría de los casos, como consecuencia de la rigidez en las políticas laborales, las complicadas escalas de sueldos (no necesariamente relacionadas con el desempeño) y la elevada centralización en la administración del gasto público. Como resultado de lo anterior, los gerentes de primera línea carecen de discrecionalidad en el poder de toma de decisiones, y por ende, ni ellos, ni nadie más pueden considerarse como responsables del pobre desempeño. En el sector de la salud existen hoy en día varias iniciativas que tienen como objetivo dar autonomía y responsabilidad a los hospitales, introducir medidas de recuperación de costos para aquellos que pueden pagar, y modificar el sistema público de financiación de los servicios. Los esfuerzos en la reforma al sector de la educación se encuentran en la primera fase.

*Conclusión:* Dado que la población pobre depende enteramente de la financiación y provisión pública de los servicios básicos de salud y educación, mejoras en la eficiencia y calidad de los servicios son esenciales para lograr la equidad. Las reformas sectoriales deben tener como prioridades introducir instrumentos para la recuperación de costos y mejorar la administración financiera y de recursos humanos, con el objetivo de mejorar la eficiencia en la provisión de los servicios y de establecer un mecanismo de rendición de cuentas.

**Servicios sociales focalizados.** Ecuador posee un gran número de programas de servicios sociales focalizados que son manejados por diversas entidades gubernamentales las cuales carecen de coordinación e integración en un sistema unificado. Como

resultado, es difícil evaluar el nivel real de protección que cada grupo beneficiario recibe. Existe una carencia casi completa de información sobre el impacto de estos programas en la población más vulnerable a pesar de la creación del Sistema Integrado de Indicadores Sociales del Ecuador (SIISE) por parte del gobierno y del apoyo continuo de la Encuesta sobre Condiciones de Vida del Ecuador (ECV), los cuales constituyen pasos iniciales importantes hacia el desarrollo de la capacidad de monitoreo y evaluación.

Aunque no fue diseñado como tal, el Bono Solidario, es la espina dorsal del programa gubernamental de protección social. Este, que cubre 1.3 millones de hogares ecuatorianos, es el único programa disponible para algunos grupos pobres, como el de los ancianos. Sin embargo, el bajo nivel de beneficios junto a otras dificultades serias de identificación de beneficiarios restringen el impacto sobre los pobres. Un gran número de individuos que son elegibles para recibir el Bono no lo reciben, y más de la mitad de los actuales beneficiarios no son en realidad elegibles. Sin embargo, en este momento no se cuenta con los mecanismos de administración y de focalización adecuados para mejorar la selección e identificación de beneficiarios. Una mejora de la focalización está en proceso.

Existe una gran variedad de programas dirigidos a la población pobre y en especial a los niños pobres. Con excepción de la colación escolar, ninguno de estos programas posee una cobertura adecuada. Por ejemplo, el programa PACMI orientado a entregar beneficios alimenticios y de salud a las mujeres embarazadas cubre tan sólo un 5% de la población objetivo. El 95% restante no recibe beneficio alguno. Mientras que la identificación y focalización de los beneficiarios podría mejorar en la mayoría de los programas, la falta de cobertura es el principal problema. Adicionalmente, ninguno de estos programas fueron diseñados para responder a la crisis.

*Conclusión:* Ecuador necesita una estrategia de protección social que de manera consistente y coherente se oriente a aumentar la cobertura, especialmente en el caso del Bono Solidario, y a mejorar la focalización e identificación de beneficiarios. Mayor respaldo y apoyo debe dársele tanto al Sistema Integrado de Indicadores Sociales (SIISE), como a la Encuesta de Condiciones de Vida, elementos esenciales para evaluar y monitorear los programas de protección social.

**Opciones Políticas.** La estrategia gubernamental para contrarrestar los efectos de las crisis debe tener al menos tres componentes básicos: protección y focalización de los servicios sociales básicos, apoyo al ingreso y el consumo de los grupos vulnerables y creación de nuevos programas o extensión de los ya existentes con el fin de prevenir que la crisis siga causando daños permanentes e irreparables en la población pobre.

El Bono Solidario debería ser mejorado con el fin de proveer niveles más altos de apoyo económico a un número mayor de gente que se encuentra en extrema pobreza. A medio plazo, debería convertirse en un programa eficiente de asistencia económica dirigido a la gente en extrema pobreza, el cual tendría el potencial de incrementar de forma rápida la cobertura en tiempos de crisis y reducirla cuando no sea necesario. A corto plazo, el gran número de beneficiarios del programa, unido a la profundidad y

duración de la actual crisis y a los elevados costos de aumentar los beneficios hacen que fiscal y políticamente sea difícil realizar los ajustes requeridos.

Una alternativa a corto plazo para ajustar el mismo Bono sería introducir programas de focalización rigurosa que complementen y dependan directamente del Programa del Bono Solidario. Estos programas otorgarían dinero en efectivo asegurando cambios en el comportamiento del hogar que protejan a los niños pobres. Estos podrían ser implementados en la actual crisis y ser revertidos o eliminados más tarde dependiendo del impacto que los programas hayan tenido en el bienestar de los pobres. Un complemento al Bono podría ser la introducción de una transferencia en dinero efectivo condicionada a visitas rutinarias de salud, protegiendo de esta manera, la salud de los más vulnerables dentro de la población pobre - mujeres embarazadas o lactantes y niños menores de dos años.

Otro complemento al Programa del Bono podría ser el hecho de introducir transferencias en dinero efectivo condicionadas a la asistencia a clase por parte de los hijos de los beneficiarios (edad de 6 a 15 años). Este programa también se orientaría hacia los grupos más vulnerables de la población pobre - niños en edad escolar que están en riesgo de abandonar la escuela o en riesgo de no matricularse en las escuelas durante la crisis. La implementación de este programa en el corto plazo requeriría no sólo de un test de comprobación previa de los medios de vida o necesidades a fin de determinar la elegibilidad de los beneficiarios, sino también desarrollar un sistema que asegure la credibilidad de los datos obtenidos sobre la asistencia a clases y la verificación del cuidado que se tiene en salud. Debido a que la asistencia a clases resulta poco beneficiosa para los niños pobres si los profesores no asisten a clases y si no hay materiales didácticos disponibles, es necesario desarrollar otro tipo de programas que atiendan los problemas que surgen del lado de la oferta de la educación.

La introducción de transferencias en dinero a mujeres y niños menores de dos años y a los niños de 6 a 15 años, deja a dos grupos vulnerables sin una protección adecuada - los niños de edades entre 3 y 5 años y a los ancianos. Sin embargo, la propuesta de expansión a gran escala de los servicios de salud a los niños, a través del Programa Nuestros Niños, augura otorgar una mejor alimentación, salud y educación para este grupo a un corto o medio plazo. También se prevé que los niños de edades entre 3 y 5 años se beneficien indirectamente de las transferencias en dinero realizadas a sus hogares, resultantes de los programas para los cuales los hermanos son elegibles; 86% de hogares pobres tienen niños de edades entre 3 y 5 años, coincidiendo también que dichos hogares tienen niños entre 6 y 15 años. Adicionalmente, 73% de los ancianos pobres viven en hogares con niños de edades entre 6 y 15 años.

Otra opción para otorgar un ingreso de apoyo sería introducir un programa temporal público de empleo. A corto plazo, la implementación de dicho programa sería difícil, especialmente si funcionara a través de programas municipales débiles financiera y administrativamente como el de Trabajar Argentina. Mirando hacia el medio plazo, un programa de empleo público podría ser diseñado para prevenir o para atenuar los efectos de futuras crisis. En el corto plazo, la estrategia más viable para generar empleo sería

trabajar con el fondo social existente, el Fondo de Inversión Social, y con otros diversos programas de infraestructura social, priorizando proyectos intensivos en mano de obra, aumentado la financiación del gobierno y modificando las regulaciones de contratación y adquisición a fin de facilitar la implementación de dichos proyectos.

*Conclusión:* Cualquier intento de mejora o fortalecimiento en los servicios de protección social en Ecuador debe realizarse como complemento al Programa del Bono Solidario, el cual se ha convertido en la espina dorsal de la estrategia gubernamental de protección social. Transferencias adecuadamente focalizadas y basadas en un sistema de incentivos, deberán ser introducidas con el fin de aumentar los actuales beneficios y lograr la cobertura universal en los grupos más vulnerables. Alternativas futuras para introducir un programa de empleo público temporal y eficiente deben ser exploradas.

**Financiamiento de mejoras en los servicios sociales.** El gasto social total y el gasto total en protección social, incluyendo el Seguro Social y el Bono Solidario, representaron un 7% del Producto Interno Bruto (PIB) de 1999. De esta cantidad, un 1.8% del PIB se destinó a programas de servicios sociales focalizados, y de ellos, el 1.3% del PIB fueron transferencias monetarias (Bono Solidario). El gasto en los programas focalizados, además de las transferencias en efectivo, fueron de US\$260 millones, lo cual equivale a \$21 anuales per cápita. Si esta suma se distribuyera de manera equitativa entre la población en extrema pobreza, la cifra correspondería a \$139 anual por persona, o a el 43% de la línea anual de pobreza de US\$320.

Dada la profundidad de la crisis económica y el deterioro en la prestación de los servicios sociales en los últimos años, existe la necesidad imperiosa de fortalecer los servicios de protección social y aumentar la cobertura y la calidad de los servicios de educación y salud. Se requerirían recursos adicionales para implementar las mejoras previstas a corto y mediano plazo, sin embargo, la actual situación fiscal hace difícil conseguir estos recursos adicionales. Los presupuestos para los sectores sociales han permanecido constantes o bien han decrecido desde 1995, lo anterior unido al aumento en el pago de intereses y a la disminución de los ingresos fiscales condujo a una reducción significativa de los niveles de gasto en 1999.

El fortalecimiento, en el corto plazo, de los servicios de protección social incluye la introducción de transferencias en dinero adecuadamente focalizadas y basadas en un sistema de incentivos, la posibilidad de garantizar un paquete mínimo de insumos escolares y medicinales, y el financiamiento de la implementación de programas civiles de trabajo ya existentes. A medio plazo, la cobertura de las transferencias en dinero basadas en un sistema de incentivos deberá incrementarse, así mismo, la cobertura para los ancianos del Bono Solidario debería ser notablemente mejorada. El costo adicional (con la presente estrategia) de las mejoras a corto plazo es de US\$4 per cápita, o bien un incremento del 0.3% del PIB. De igual forma, el costo adicional (con la presente estrategia) de las mejoras a medio plazo es de US\$10 per cápita, o bien un incremento del 0.9% del PIB. Un ejercicio simulado sugiere que el presupuesto gubernamental no crecerá lo suficiente para financiar estos costos adicionales. La reducción de los subsidios

de energía y de gas de cocina y/o el incremento del Impuesto al Valor Agregado (IVA) son dos opciones suficientes para financiar mejoras a medio plazo.

**Conclusión.** El gobierno enfrenta difíciles alternativas y disyuntivas. La pobreza y la desigualdad han aumentado desde 1995 y continúan empeorando. A corto plazo los pobres y los grupos vulnerables requieren mejoras que protejan sus ingresos decrecientes. En el medio plazo los servicios de protección social y los servicios básicos sociales necesitan ser fortalecidos. Para que la desigualdad y la pobreza disminuyan en el futuro, la población pobre requiere una mejora significativa en el acceso y en la calidad de los servicios básicos de salud y educación. La educación, en particular, juega un papel crítico en la determinación de los ingresos futuros de los niños pobres, y por ende, en ayudarlos a salir de la pobreza. Sin embargo, el bajo acceso de los pobres a la educación, particularmente más allá del nivel primario, restringe a la educación como vehículo de movilidad social. El incremento en los niveles de acceso a la educación junto a mejoras en la calidad requieren de un gasto público adicional el cual no ha sido considerado en las estimaciones aquí detalladas.

Las disyuntivas que el Gobierno afronta en la toma de ciertas decisiones son temas políticamente difíciles. Grandes grupos de la sociedad se resisten a aceptar aumentos en los impuestos y, los subsidios en los precios son políticamente populares y benefician a un gran número de personas, aún cuando los subsidios sean de naturaleza regresiva. Los gastos sociales focalizados por definición benefician relativamente a un pequeño porcentaje de la población; sin embargo, su financiamiento afecta a un gran porcentaje de la población.

Las consecuencias de no tomar estas difíciles decisiones son graves: incremento en la pobreza y desigualdad; formación de un capital humano no suficientemente preparado para enfrentar el futuro económico el cual premia a los trabajos con alta especialización; y débil capacidad de responder futuras crisis. El Gobierno de Mahuad se comprometió a reducir la pobreza, y el Gobierno actual ha señalado la intención de seguir con el mismo compromiso. A fin de reducir la pobreza, es necesario un compromiso serio para mejorar la protección social en el corto y medio plazo, y para tomar las difíciles decisiones políticas indispensables a fin de obtener los recursos que permitan lograr este compromiso. Igualmente, hacer estas mejoras sostenibles a corto y medio plazo requiere de reformas administrativas y financieras en los sectores sociales que traigan consigo mayores responsabilidades, mayor rendición de cuentas y mayor eficiencia.

A pesar que el presente documento se ha concentrado en las diferentes opciones que las autoridades ecuatorianas poseen a fin de contrarrestar los efectos de las crisis en las condiciones de vida de la población y en la formación del capital humano, la opción más beneficiosa para reducir la pobreza, será aquella mediante la cual el Gobierno impulse y apoye aquellas medidas dirigidas a la recuperación económica en el corto plazo. La reducción de la inflación y el desempleo y el aumento en ingresos del personal no sólo beneficia directamente a los pobres sino que también genera ingresos que permiten al Gobierno financiar mejoras en los programas sociales. Este diagnóstico

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macroeconómico de las condiciones para finalizar el proceso de reforma estructural y el establecimiento de las bases para un crecimiento sostenible, se encuentran fuera del tema de este estudio; sin embargo, son tratadas en profundidad en otros trabajos analíticos realizados por el Banco Mundial.



## I. INEQUALITY AND POVERTY.

Ecuador's already high levels of poverty and income inequality have worsened in recent years, even prior to the Crisis of 1999. The Gini coefficient for income increased nearly four percentage points, from 0.54 in 1995 to 0.58 in 1998, and the lowest decile of the population arranged by income in 1998 received only 1 percent of the total income. Factors which have contributed to poverty and growing inequality were reduced incomes resulting from El Niño, lower prices for agricultural products, increased earnings differentials by level of education, and, more recently, increased unemployment.

Poverty increased from 34% in 1995 to 46% in 1998 as measured by the headcount of people able to buy a basket of basic goods. The increase in poverty can be seen across the board with larger increases for rural areas and the Coastal Region (Costa), where *El Niño* disrupted economic activity. As of 1998, the bottom consumption quintile and the population in extreme poverty were largely synonymous, with 17 percent of the population below the extreme poverty line.

The poor in Ecuador are starkly disadvantaged on other grounds besides the consumption of a particular basket of goods. There is a greater ratio of dependents (the very young and the very old) to economically active household members amongst poor families, the poor are more likely to live in dwellings lacking electricity and running water, and they suffer disproportionately in terms of access to social services in education and health.

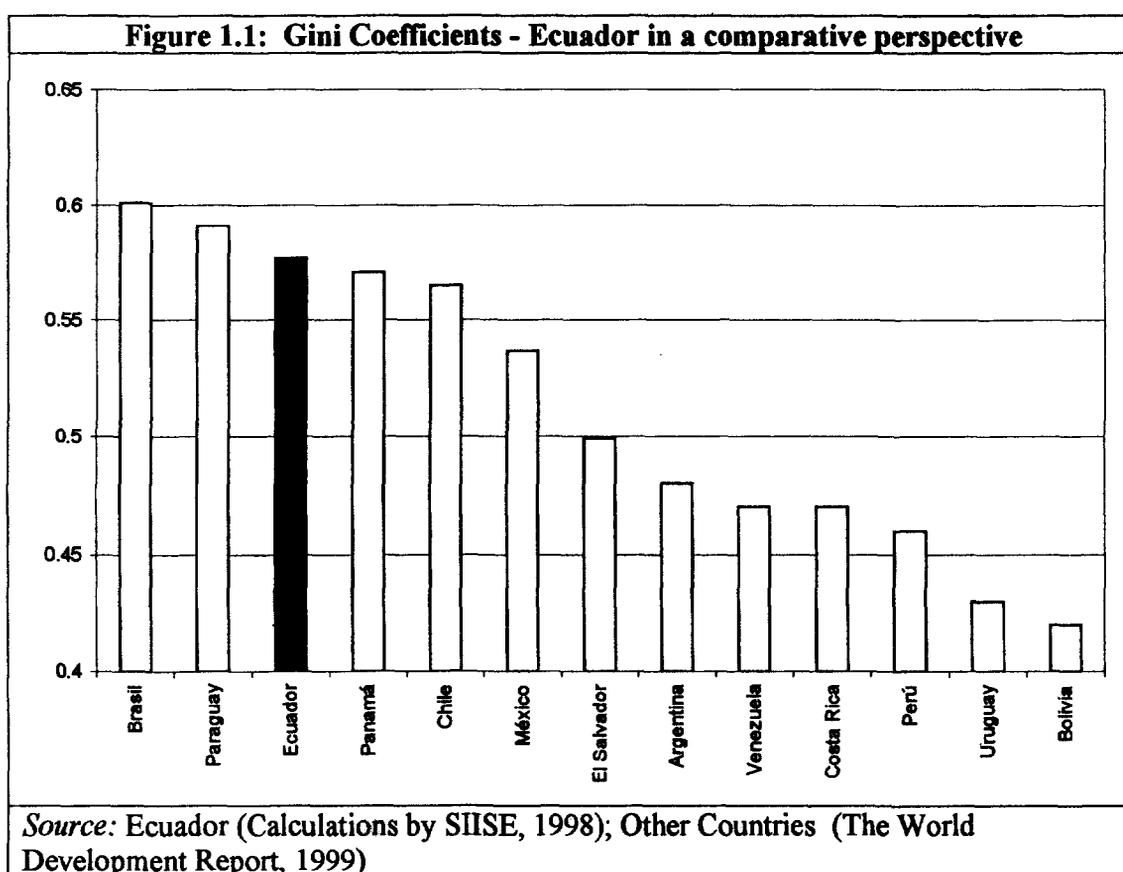
The effects of poverty, especially on pregnant women and young children, may be permanent. One-quarter of all preschool children in Ecuador have stunted growth, and 39 percent of children in the bottom consumption quintile are stunted. Only 12 percent of children in the bottom consumption quintile complete lower-secondary schooling. Children of the poor also are more likely to drop out of school to work; 24 percent of children in the bottom quintile do so.

Interviews with the poor show how they cope with prolonged and deepening poverty. Households are often broken up with some adult members migrating to find employment, or rural parents sending children to live with relatives in urban areas in order to attend school. Assets, including working tools, are sold when it is no longer possible to borrow money or to obtain credit from small storeowners. The poor substitute food high in carbohydrates and low in nutritional value for protein and fresh vegetables.

The first section of this chapter presents measurements of income inequality for Ecuador in a comparative international perspective and over time. The second section provides an overview of poverty in Ecuador, and the third section provides a comparison of social indicators by consumption quintiles. The next section discusses vulnerable groups who have been identified as being particularly at risk because of long term losses in their human capital. A final section entitled 'Voices of the Poor' provides results from a qualitative analysis based on interviews and focus-group discussions with the poor in selected communities.

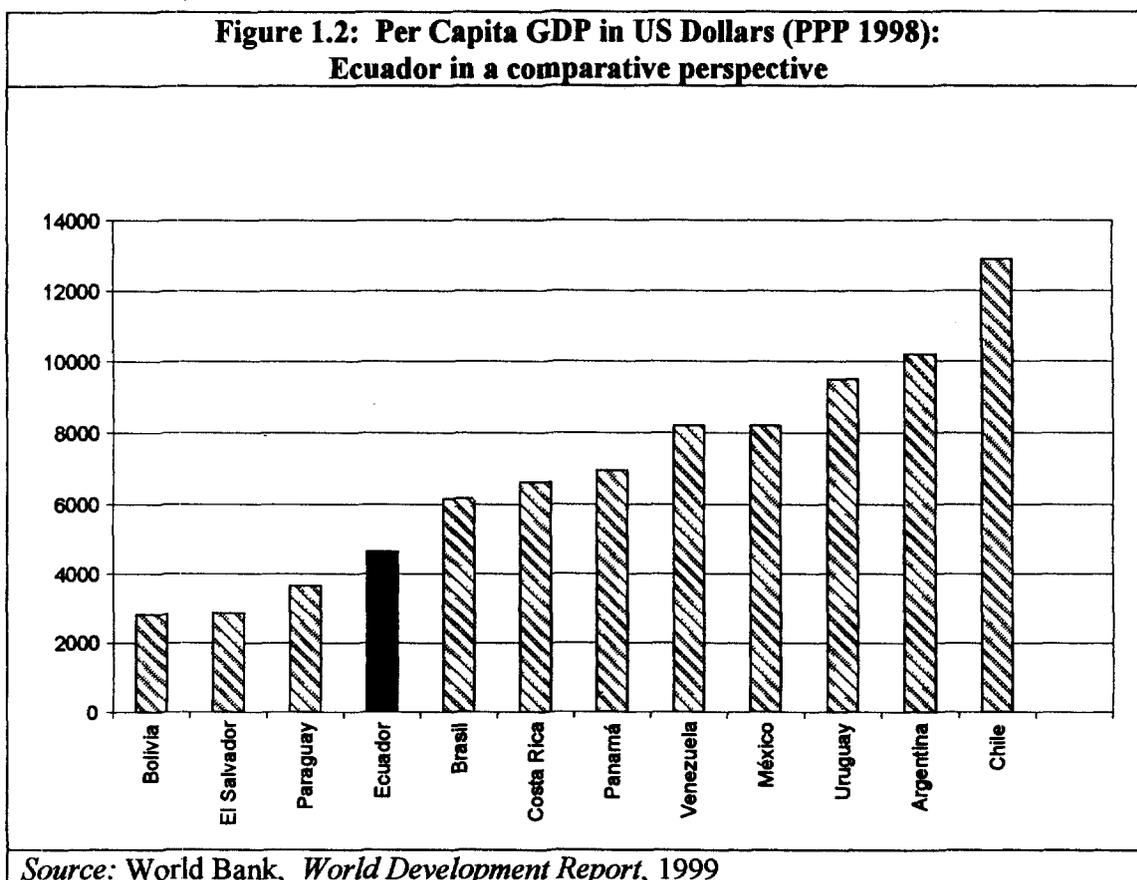
### A. Indicators of Inequality.

**Inequality in Comparative Perspective.** The recent set of crises afflicting Ecuador occur in the context of high poverty and income inequality. While Latin America as a whole has extremely high income inequality compared to other regions of the world, especially Europe and East Asia, Ecuador's record is unenviable even within Latin America. Moreover, Ecuador is unlike some other Latin American countries, which have high inequality but also have a high per capita income. The population of Ecuador appears to be doubly disadvantaged, suffering from both low income as well as high inequality. Figure 1.1 shows the Gini coefficient for income for a set of Latin American Countries.

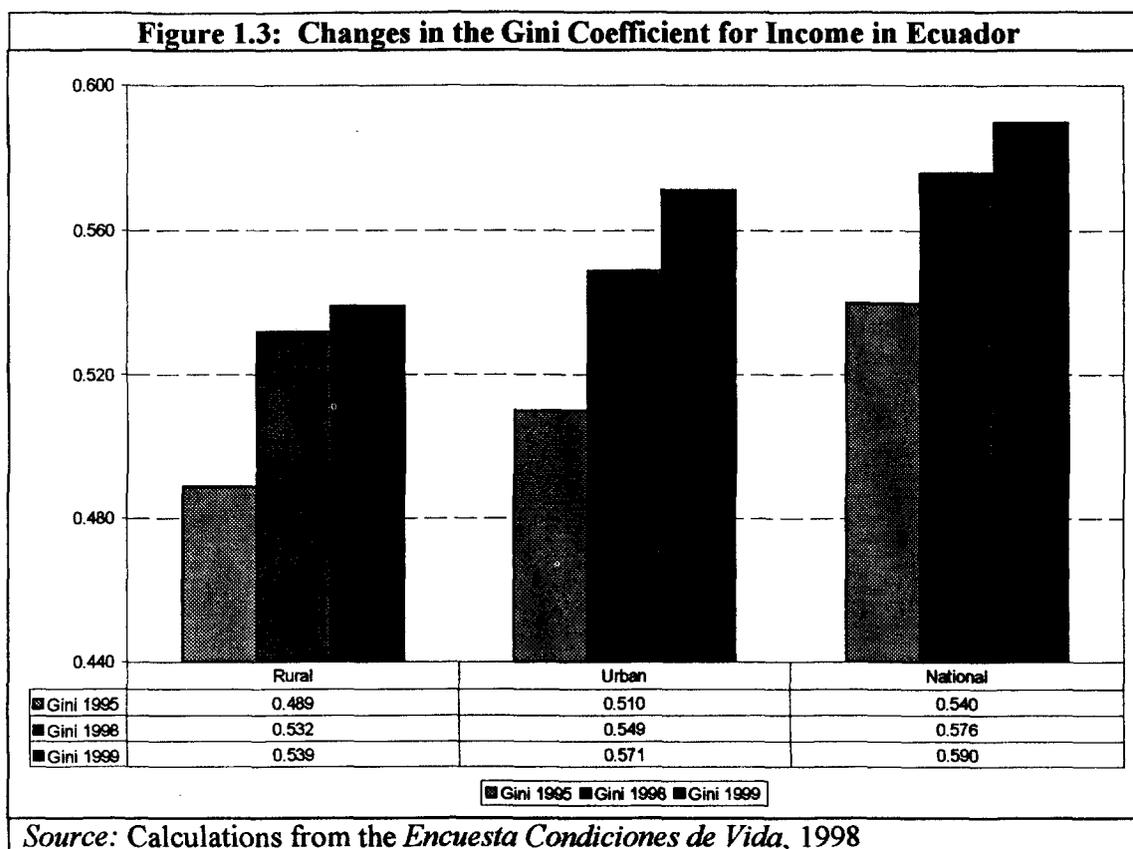


While the Gini coefficient presents an overall picture about inequality, the share of income going to the poorest sections of the population gives a better measure of their welfare. The share of income going to the lowest 10 % of the population in Ecuador in 1998 was only 1 percent. The true impact of inequality in Ecuador can be seen in context of the fact that Ecuador has only about one-third the per capita income of Brazil. The following graph (Figure 1.2) shows the per capita GDP for the same set of nations as in the graph for the Gini coefficient. Unlike some of the neighbors of Ecuador in the list of

nations with high inequity, such as Brazil and Chile, Figure 1.2 shows that Ecuador is at the wrong end of the ranking by income as well.



**Inequality over Time.** Per capita income growth has been stagnant since 1995, and income inequality has worsened since 1995. Per capita GDP went down by 0.1% from 1995-1996, increased by 1.3% from 1996-1997, and went down again by 1.6% from 1997-1998, before the current crisis. The income distribution became more unequal in the period 1995-1999, as shown in Figure 1.3. The Gini coefficient increased in both urban and rural areas over that period of time.



## B. Indicators of Poverty.

**Methodology.** The methodology used to construct consumption-based poverty lines closely mirrors that used in the 1995 *Ecuador Poverty Report* to analyze the 1994 *Encuesta de Condiciones de Vida* (ECV 94). Changes in the structure and content of the ECV questionnaire between 1994, 1995 and 1998 necessitated the computation of a new consumption aggregate and a new poverty line.<sup>1</sup> The estimation of extreme poverty and poverty is based on a household-level aggregation of consumption expenditures on food and non-food items, as reported in the ECV. The consumption aggregate for the household was then measured against an extreme poverty line and a poverty line to arrive at poverty rates. The extreme poverty line used here is based on the computation of the cost of a basic basket of food items which would provide an average of 2237 calories per person per day. The poverty line is based on a calculation of the share of food expenditures of households which are at the margin of food expenditures equal to the line of minimum calorific needs. Adjustments were made to the consumption aggregate to account for geographic differences in prices across the three regions of Costa, Sierra and Oriente, as well as Urban and Rural areas within each of the regions.

<sup>1</sup> The numbers in the Ecuador Poverty Report of 1995 (which were based on the 1994 ECV) are not comparable with the ones presented in this Social Sector Review. Annex 2 describes step-wise details in the construction of poverty estimates.

The poverty line used for 1995 was Sucres 59,170 per person per fortnight. The corresponding line for 1998 was Sucres 126,535 per person per fortnight. Each of these poverty lines were endogenously calculated from the two ECV data sets for each of the respective years, using matching definitions for the two years. The change in the poverty line between these two years closely mirrors the change in consumer prices over the same period of time. While the poverty line increased by a factor of 2.13 between 1995 and 1998, the National CPI figure for the corresponding period increased by a factor of 2.10.

**Extreme Poverty.** Table 1.1 indicates that the headcount index of extreme poverty increased from 12 % in 1995 to 17 % in 1998. A household was classified as being extremely poor if the total consumption expenditure of the household was lower than the food poverty line. The headcount index is not sensitive to changes in the distribution of expenditures below the food poverty line, a shortcoming which is overcome by measures of the Poverty Gap and Severity. These are the Foster-Greer-Thorbecke (FGT) measures with  $\alpha=1$  and  $\alpha=2$  respectively.<sup>2</sup> Table 1.1 shows that the poverty gap increased between 1995 and 1998, as did the severity of poverty. The picture of extreme poverty in Ecuador is stark - there were nearly 1.9 million living in extreme poverty in 1998 as derived from the indicators presented in Table 1.1. The increase in Poverty Gap and Severity measures indicates a worsening distribution of consumption even within the extremely poor households which lie below the food poverty line.

**Table 1.1: Extreme Poverty in Ecuador**

	Headcount		Poverty Gap		Severity	
	1995	1998	1995	1998	1995	1998
National	12	17	3	5	1	2
Urban	4	7	1	2	0	1
Rural	23	30	6	9	3	4
Costa Region	7	14	2	4	1	1
Urban	3	8	1	2	0	1
Rural	15	26	4	7	1	3
Sierra Region	17	20	5	6	2	3
Urban	6	5	2	1	1	0
Rural	31	34	1	1	4	6
Oriente	15	21	4	5	1	2
Urban	9	5	2	1	0	0
Rural	17	25	4	6	2	2

*Source:* Calculations from the Encuesta Condiciones de Vida, 1995 and 1998

<sup>2</sup> Annex 3 provides a short definition of the Foster-Greer-Thorbecke measure of poverty.

Table 1.1 indicates that extreme poverty is much worse in rural areas as compared to urban areas, across the three regions of the country, though levels of extreme poverty in the Rural Sierra areas have been the highest, and rural poverty has increased most sharply in the Costa region.

**Poverty.** Table 1.2 indicates that the headcount index of poverty increased from 34 % in 1995 to 46 % in 1998, a figure which implies the number of poor grew by 1.45 million people. The patterns reported in Table 1.2 are similar to the ones reported in Table 1.1 for extreme poverty. Rural poverty is much higher than urban poverty, and the Costa region experienced the largest increase in poverty between 1995 and 1998. The Urban Sierra and the Oriente are the only areas which did not show a significant increase in poverty.

**Table 1.2: Consumption Based Comparison of Poverty in Ecuador**

	Headcount		Poverty Gap		Severity	
	1995	1998	1995	1998	1995	1998
National	34	46	11	18	5	9
Urban	19	30	5	9	2	4
Rural	56	69	20	29	10	16
Costa Region	29	47	8	16	3	8
Urban	18	35	4	11	1	5
Rural	49	70	15	27	7	13
Sierra Region	39	46	15	19	7	10
Urban	21	22	6	6	3	3
Rural	63	69	26	32	13	18
Oriente	46	53	15	20	7	10
Urban	31	28	9	7	4	3
Rural	49	59	17	23	8	12

*Source:* Calculations from the Encuesta Condiciones de Vida, 1995 and 1998

### C. Characteristics of the Poor.

Consumption expenditures represent only one facet of living conditions of the poor in Ecuador. Table 1.3 below shows how household characteristics vary across consumption quintiles. (Social indicators across income indicators are reported later, in Chapter 3.) It shows that household size and the dependency ratio (The ratio of those below the age of 15 and above the age of 65 expressed as a ratio of the number of household members between the ages of 15 and 65) are both larger in lower as opposed to higher quintiles. The percent of households headed by women does not vary greatly

across quintiles, although other empirical work shows that it is increasing over time (SIMUJER-SIISE, 1999).

**Gender.** Female-headed households are different from male-headed households in that female-headed households are generally single-parented, whereas male heads of households usually have a spouse. Thus, most female-headed households have to rely on only one adult salary, and that salary is often lower than that received by male household heads as female heads seek out jobs which allow them to balance their income-earning and domestic responsibilities. The recently completed *Ecuador Gender Review* for Ecuador provides further, detailed analysis about linkages between poverty and gender. Data from the Encuesta Demográfica y de Salud Materna e Infantil (ENDEMAIN-94) indicates problems due to early-age pregnancy, and its relation with the level of education of mothers. Data from the ENDEMAIN-94, also, indicates that access to family planning services continues to be a problem, especially in rural Ecuador.

**Table 1.3: Household Characteristics by Consumption Quintile**

Household Characteristics	Q1	Q2	Q3	Q4	Q5
Family size	7.40	6.28	5.65	4.84	4.29
Female Headed	16.22	17.89	17.57	18.64	21.32
Average Age	23.08	24.01	25.57	25.90	29.91
Dependency Rate	3.47	2.62	2.28	2.02	1.63
Years Schooling					
Mothers	3.64	5.21	6.43	8.26	10.90
25 Year Olds	6.31	7.10	8.89	10.04	12.43
Household Head & Spouse	3.37	4.87	6.14	7.96	11.17
Percent Lacking Electricity	22.31	10.27	4.44	1.38	0.61
House Has Mud Floor	34.13	14.58	7.54	3.66	1.50
Percent Lacking Piped Water	75.41	58.56	41.00	31.34	12.13
Overcrowded	0.37	0.51	0.58	0.71	1.09
Enrolled in Daycare 0-2	1.96	1.58	0.57	1.33	4.64
Enrolled in Preschool 3-5	17.37	26.12	29.17	38.41	51.24
Percent Formal Sector	25.88	27.20	33.90	37.90	50.53

Source: ECV 1998

**Living conditions.** The high incidence of poor sanitary conditions, lack of clean water, dirt floors, and overcrowding are factors conducive to health problems, especially for young children. Table 1.3 provides evidence of significant differences in living conditions – 22 percent of households from the poorest quintile lacked electricity, compared to a negligible proportion in the richest quintile without electricity. Three out of four people in the lowest quintile did not have access to piped water supply, compared to about 12 percent without piped water in the richest quintile.

#### D. Correlates of Poverty.

Some demographic groups among the poor—especially, pregnant women and young children—are especially vulnerable. These same groups are also somewhat more likely to be poor. Table 1.4 reports the proportion of poor households among those households which have a) pregnant women, b) children in the age groups 0-2, 3-5 and 6-15 and c) the elderly. Comparison of the poverty rate between households which *do* possess such members with households which *do not* possess such members provides one indication of the relationship between poverty and membership in the vulnerable groups.

Table 1.4 shows that membership in these groups is indeed correlated with poverty. For instance, amongst households which did have at least one child below the age of 2, the poverty rate is 53 % as compared to a rate of 37 % for those households which did not have a child below 2 amongst its members.

**Table 1.4: Correlates of Poverty**

Characteristic	Poverty Rate (Headcount Index)	
	Household Does NOT Possess Characteristic	Household Does Possess Characteristic
Exists Infant Below 2 Years of Age	37 %	53 %
Exists Child 3 to 5 Years of Age	35 %	56 %
Exists Child 6 to 15 Years of Age	33 %	48 %
Exists Old Aged Person at Home	39 %	49 %
Exists Pregnant Woman	41 %	45 %

Source: ECV 1998

Another approach to answer the question of correlation between poverty and the vulnerable groups is the estimation of a regression equation where the dependent variable is the probability of being poor, with memberships in each of the vulnerable groups being the regressors. Table 1.5 presents the marginal effects from a probit regression. Each of the right-hand-side variables are 0-1 dummies, and the marginal impacts are the percentage impacts on the probability of being poor if a household does possess the particular characteristic, as opposed to not possessing that characteristic. All the variables are statistically significant, with the exception of pregnant women, which has no independent marginal effect on the probability of being poor. The results presented in Table 1.5 corroborate the simple descriptive statistics presented in Table 1.4. For instance, if a household has a child below 2 years of age, the probability of that household being poor increases by 16 %. Two factors contribute to this finding: (a) young households are more likely to be poor than older households, and (b) fertility rates are higher among the poor.

**Table 1.5: Impacts of Vulnerable Group Membership on the Probability of being Poor.**

<b>Characteristic of Household</b>	<b>Percentage Increase or Decrease in Probability of Being Poor</b>	<b>P-level of Statistical Significance Based on Chi-Squared Distribution (H<sub>0</sub> that the Marginal Effect is 0)</b>
Exists Infant Below 2 Years of Age	+ 16 %	0.000
Exists Child 3 to 5 Years of Age	+ 14 %	0.000
Exists Child 6 to 15 Years of Age	+ 11 %	0.000
Exists Old Aged Person at Home	+ 13 %	0.000
Exists Pregnant Woman	0 %	0.781
Dummy for Rural Area	+ 30 %	0.000
Dummy for Region: Costa	- 17 %	0.000
Dummy for Region: Sierra	- 11 %	0.000

Source: ECV 1998.

#### **E. Vulnerable Groups Among the Poor.**

Table 1.6 provides a set of characteristics which describe each of the vulnerable groups in the first consumption quintile. Each group is discussed in turn.

**Pregnant Women and Young Children.** Poor households in Ecuador adjust to low incomes by reducing food consumption and delaying medical attention, especially for women and children. This household coping mechanism poses many risks for women and children. Since women are usually the major care-providers in households, their health is particularly important for the welfare of the household. The effects of maternal mortality on surviving children are large and negative. Malnutrition and lack of medical attention cause children to suffer reduced mental and physical development, including higher risks of childbirth complications for women who were malnourished as girls. All these effects lower the chances that poor children will be ever be able to escape poverty as adults. Table 1.6 shows that households having pregnant women and mothers with children under two years of age in the first consumption quintile have worse living conditions, a higher incidence of stunting, and significantly lower health expenditures than the average for the entire population.

**Children Aged 3-5.** The tendencies noted for children aged 0-2 are repeated for children aged 3-5. Malnutrition is even more serious for children in this age group in the first quintile. The percentage of children in the first quintile attending preschool is one-third that of children in the highest quintile.

Table 1.6: Characteristics of Vulnerable Groups

Pregnant Women and Mothers with Children Under Two	Q <sub>1</sub>	Q <sub>5</sub>	Total	Q <sub>1</sub>	
				Rural	Urban
Mother's Years of Education	4.81	8.89	6.21	4.73	6.00
Access to Sewerage	8.21	82.09	30.08	9.13	na
Percentage of Children Malnourished					
Stunting	32.58	22.63	26.33	30.28	49.93
Underweight	24.26	5.89	18.99	27.47	na
Household Per Capita Expenditure in Health	11,335.56	54,575.32	24,936.94	12,413.48	1,806.50
Percentage of Households with Children aged 0-2	51.32	18.82	34.86	48.96	59.45
<b>Children Aged 3-5</b>					
Mother's Years of Education	3.49	11.91	6.85	3.14	4.41
Percentage Mother's Working					
all of them	60.30	62.90	57.53	66.18	44.56
Earning a salary	33.79	50.88	40.70	30.05	43.81
Access to Sewerage	8.33	77.38	32.96	5.28	15.66
Percentage of Children Malnourished					
Stunting	43.85	11.51	28.97	42.12	48.02
Underweight	23.35	4.16	14.63	28.78	10.28
Household Per Capita Expenditure in Health	11,940.82	81,228.41	31,400.69	11,474.09	13,065.92
Percentage of Children in Preschool	17.37	51.24	29.90	15.23	22.54
Percentage of Households with Children aged 3-5	57.74	22.02	37.16	54.22	69.84
<b>Children Aged 6-15</b>					
Mother's Years of Education	3.12	11.64	6.79	2.77	4.50
Access to Sewerage	9.13	76.91	35.08	4.65	26.22
Percentage of Children Malnourished					
Stunting	35.29	10.62	26.51	38.32	24.86
Underweight	24.96	12.15	22.07	24.96	12.15
Household Per Capita Expenditure in Health	11,079.22	74,335.72	32,330.20	11,214.57	10,562.99
Household Expenditure per Children in Education	16,959.85	292,204.80	81,223.02	15,395.76	22,549.58
Percentage of Children Enrolled in School	78.11	96.41	87.49	75.06	89.72
Percentage of Children 10-15 Working and not in School					
all of them	20.99	4.20	10.89	24.47	7.33
Earning a salary	6.95	2.27	4.59	7.41	5.16
Percentage of Households with Children aged 6-15	82.08	55.33	70.12	84.32	74.39
<b>The Elderly</b>					
Years of Education	1.43	7.17	3.46	1.37	1.98
Household Per Capita Expenditure in Health	17,859.88	170,419.50	70,423.52	15,531.18	37,931.78
Access to Sewerage	11.89	78.73	39.89	7.84	46.76
Percentage of Households with Elderly	23.30	14.77	18.22	26.17	13.41

Source: Calculations from the Encuesta Condiciones de Vida, 1998

**Children of School-Age.** One particular response of poor households to low income is to reduce their educational spending. The high private cost of public schooling and the income foregone in order for children to attend school combine to create strong incentives for poor families to take their children out of school. Unfortunately, high rates

of school non-attendance contribute to high rates of grade repetition and premature school dropout. Reduced enrollments reduce the human capital of children, resulting in smaller earned income and an increased probability that children will themselves eventually be heads of households in poverty.

Table 1.6 confirms that school-age children in the first quintile are at educational risk. The educational level of mothers is an especially important determinant of whether children enroll in school and how much they learn. Mothers of children aged 6-15 in the first consumption quintile are on average functionally illiterate (defined as less than four years schooling), especially in rural areas. Poor households also spend less on books and other supplies that children are expected to use in the school. The consequence is a lower quality of education, lower school attendance, higher child labor rates, and a lower probability that children will complete primary school.

**The Elderly.** The elderly are vulnerable because they are almost entirely dependent on small amounts of pension income and on the donations of other members of the household or extended family. They are also vulnerable because they are more frequently ill and more frequently require the attention of a health professional, as opposed to home remedies. As shown in Table 1.6, the elderly in the bottom quintile are much more likely to live in an extended family than are the elderly in other quintiles, but this is much more a rural than urban phenomenon. Within the first quintile, the health expenditures of the elderly are considerably higher than the health expenditures of the non-elderly, but the elderly poor spend less than one-quarter the national average for the elderly, suggesting the quality of their care is far less, too.

#### **F. The Voices of the Poor.**

As part of the background research for the World Bank's forthcoming year 2000 World Development Report on poverty, the Centro de Planificación y Estudios Sociales (CEPLAES) was commissioned to conduct interviews and focus groups in fourteen poor communities in Ecuador to obtain their perspectives and views. This qualitative research was carried out prior to the March 1999 events that sharply increased the effects of the crisis. Table 1.7 profiles six communities which provide the basis for the results reported below.

Table 1.7: Characteristics of Communities Surveyed

NEIGHBORHOOD	REGION	PROVINCE	ZONE	POPULATION
ATUCUCHO	Sierra	Pichincha	Urbano	Approximately 2,100 families (84,000 people). Ninety percent of the population of Atucucho is white-mestizo.
TUMBATU	Sierra	Imbabura	Rural	Tumbatu has 500 people, organized in 90 families. Ninety eight percent of the population is Afro-Ecuadorian.
ISLA TRINITARIA	Costa	Guayas	Urbano	The total population is approximately 75,000 people, organized in 360 families. People originally migrated from either Manabi or Esmeraldas provinces. Twenty five percent of emigrants are African-American.
PAJAN	Costa	Manabi	Rural	The neighborhood has a total population of 6,731 mestizos, organized in 2,100 households
10 DE AGOSTO	Amazon	Napo	Rural	The total population is approximately 640 people, organized in 92 families (an average of 7 people per family). The majority of the population is indigenous.
PEPITA DE ORO	Amazon	Napo	Urbano	The total population is 350 people, organized in 50 families. There is a high percentage of the population under 15 years. Most of the families are part of the Quichua culture.

Source: CEPLAES, 1999.

People from urban and rural areas have differing perceptions of the economic crisis. Urban people have experienced a qualitative and quantitative deterioration in income, fewer employment guaranties and benefits, and delays in payments. In contrast, rural populations have been affected more by the lack of employment opportunities, work instability, and less access to education. Agricultural activity is sustained by the extensive use of free family labor.

In the rural areas, a striking differentiation regarding land ownership defines who is and who is not poor. For example, in the 10 de Agosto neighborhood, the concentration of land ownership in the hands of those who have been in the neighborhood since 1979 has resulted in a generational conflict. Land ownership is also related to gender – land reform and distribution in the Costa was biased towards men, and even though the Sierra has more gender-equitable inheritance practices, these are being undermined by population pressures and land scarcity. In the rural coast, especially at Pajan, there are also difficulties in starting the typical crop productive cycles since El Niño, because land was devastated and coffee cultivation implied higher costs and greater need for investments. As a result, rural residents have opted for less labor-intensive and cheaper crops such as rice and corn, regardless of the fact that they are less profitable.

In general, urban residents and public employees in rural areas associate the intensification of the crisis with the recent economic adjustment decisions made by the government. In contrast, for Pajan residents, the crisis began with the *El Niño* phenomenon. Among farmers from both the Coast and Sierra the crisis is older, but the higher costs of gas and transportation are intensifying its negative effects.

### 1. Family Composition

Poverty causes changes in family composition mainly through two factors: migration of family members seeking better economic opportunities, and alteration of family members' roles (with men no longer being the sole income provider and women and children working to compensate for diminished household revenues). The migration process of more and more people relocating to cities has contributed to worse urban living conditions such as overcrowding and less access to water, latrines, and food. For instance, a woman from Isla Trinitaria reported 6 families living in the same house, each with approximately 4 or 5 children. The reasons for these families migrating to the urban area were either job-searching or illness.

The location of the poor and the lack of access to basic services can also result in parents and siblings living apart. Children are sent to urban areas in order to attend school. At the same time, parents stay in the rural areas working in agriculture, as this is the only available source of income and the only way to afford sending their children to school. In Pepita de Oro, a father had to leave the family because the only place where he could find a job was in the rural areas. The rest of the family stayed in the urban area so that the children could go to school.

### 2. Income and Expenditures

In order to afford everyday expenses, poor families have to reduce the quality and quantity of goods they consume. Health, transportation, and clothing purchases are either postponed or restricted. Public services, education, and food require a larger share of the total family income of the poor. Residents from 10 de Agosto claim to be *sharing poverty* among several families through inter-household transfers, loans, and sales of family assets. Additionally, they are said to be selling their cattle since it is becoming unaffordable to keep it. Residents from Pajan reported the same. In Atucucho, a farmer reported selling his working tools as a way to get money to feed his children. Illegal connections to both electricity and water conduits are one response to poverty. Crime and violence associated with theft of food and animals are more frequent as poverty worsens.

### 3. Nutrition

The poor population has been characterized as having deficient nutritional practices which are associated with their cultural and economic activities: hunting, fishing, food collection, and "policultivos" (various food crops). The most affected by income loss and poverty are the urban inhabitants and the farmers who depend mainly on the commodities market. At the household level, the families that show more difficulties in satisfying their

nutritional needs are those headed by single women or elderly people. In other cases, nutrition priorities within the household are given to the father or the principal earner, leaving children and pregnant women with few nutritional opportunities.

Nutrition standards of the poor are affected more in urban areas than in rural ones, although rural populations continue to show deficient consumption patterns. As a way to replace missing or unaffordable food products, the rural population has the possibility to substitute food they cultivate on their own lands. The nutritional complement received by those children who attend school, in many cases, represent the children's sole daily meal.

#### **4. Health**

People from the rural areas are more affected by poverty than urban residents due to their limited access to public health facilities. People from both the Coast and the Sierra have access to farmers' health insurance, which covers the entire family and has low co-payments. However, people from the Amazon lack access to any health services, except through sporadic campaigns that take place twice per year at the most. In urban areas, the health situation is more difficult since hospitals do not have sufficient supplies or medicines to attend to patients.

The high cost of prescriptions makes people opt for home-made medicines, instead of going to the doctor. For instance, one mother from Pepita de Oro is said to cure them with homemade herb infusions. Children are taken care of more than before so that they do not get sick, and hospital or health centers are only used when illnesses become chronic.

#### **5. Education**

The deteriorating physical infrastructure of classrooms coupled with a lack of didactic materials creates a sub-standard learning environment for poor students. For poor families, especially those of the ethnic minorities in the East, education is one of the few mechanisms to secure a better future for their children. For example, in 10 de Agosto, a father from the Quichua family emphasized the importance of learning Spanish as the only way to obtain a decent job. "They (the children) can learn the Quichua culture and language at home," he said. The high social value placed on education serves as a mediating factor in the face of poverty, causing many poor families to forego income in the hope that education will afford improved economic opportunities for their children in the future. School nutrition programs implemented by the state, including feeding programs in the preschools, are also highly valued by families and provide an additional incentive for parents to keep their children in school.

**Box 1.1: Atucucho**

Located in the Sierra Region, northwest of the city of Quito, Atucucho is an urban area of approximately 2,100 families. Ninety percent of the population of Atucucho is white-mestizo and the remaining is Afro-Ecuadorian. The better-off have both electricity and phone service, and tend to live near the main road, the only area in Atucucho where transportation is accessible. As there is no universal access to sewerage or potable water, there are common faucets in every block of the neighborhood, but the water is not potable. Trash is collected twice a week.

Men are frequently employed on a temporary basis as electricians, plumbers, pipe fitters, carpenters, and joiners; whereas women tend to work as street vendors and laundresses. The few public employees and those women working as domestic helpers and cleaners have more stable employment. Child labor has emerged as a strategy to augment family income in the face of uncertainty. Children work as street vendors, and vehicle, window, and shoe cleaners. Some of the children who work during the day, do so in order to pay fees for schools which they attend at night. In other cases, children are left alone in their houses while their parents go to work, since they can not afford to send them to the Infant Rescue Operation Program centers (ORI).

Atucucho has daycare centers that belong to both the ORI program and to the Family and Children Institute (INNFA) program that attends working children, a school with 18 teachers, a community center (Casa Barrial or Casa Comunal), a primary health center (Servicio Público de Atención Básica), and a hospital (Pablo Arturo Suárez Hospital).

Eighty percent of Atucucho's men and 65 percent of its women are literate. The majority of the population aged 15 to 17 is still attending primary schools at night. Only the better-off can afford to keep their children in school for the whole academic year. In addition to the school and the daycare centers, there is a distance education program, which is widely known in the neighborhood and is more affordable as well. Visits to the health center are common, even for the poor. Children's health is affected by the poor quality of the water, bringing illnesses such as diarrhea and respiratory infections. The most frequently experienced illnesses are colds, parasitism, measles, and chronic malnutrition, especially among the poorest. The poorest families spend almost all their income on food and rent; as a result, they can not afford the prescribed treatments and medicines. In Atucucho, eight of 26 families selected for the study undertaken to review the targeting mechanism and impact of the *Bono Solidario*, are beneficiaries of this program. The study reveals that there are four families who were not covered by the program that should have been beneficiaries.

The effects of the economic crisis on Atucucho residents lives are diverse. According to vendors, sales have decreased by anywhere from 50 percent to 70 percent. Permanent workers have suffered wage reductions, while others have been fired, or simply not paid. Temporary jobs are fewer during periods of crisis, and employment contracts are issued for shorter periods. Self-employed workers have suffered workload reductions of about 80 percent. Women working in domestic service are paid less for more hours, while 80 of them have been already fired.

With regard to social services access and provision, users argue that quality of daycare centers has decreased, whereas costs have increased. Likewise, the centers were better equipped and there were more mothers in charge of the children, prior to the crisis. School drop-outs and teacher absences have become quite common as well. Not everybody can afford school fees, and the household income of the average family is no longer enough for subsistence. Although the illnesses reported after the crisis are the same as the ones before, the population is no longer able to go to the doctor because of the high cost of treatments, appointments, and medicines. Additionally, in the hospital, patients are now charged for the basic medical items which were provided at no cost to patients before. As a consequence of higher costs in health, the population is relying on curative medicine and home remedies, and births are being attended by midwives or "parteras".

Source: CEPLAES, 1999



## II. THE HUMAN CONSEQUENCES OF CRISIS.

Ecuador is in the midst of another crisis. The crisis is the result of natural disaster (*El Niño*), declining petroleum export prices, and the global financial crisis, has resulted in fiscal deficits, exchange rate and price instability, a severe banking crisis, and a deep recession with high unemployment. As a consequence, household income and consumption have decreased. The crisis has increased the flow of households into poverty by reducing both the real earnings and assets of the near-poor. Those households already in poverty also have had to reduce their consumption, especially of food, health care and medicines, and education.

While the events of 1997-1999 have affected everyone, some groups appear to have been hurt relatively more. The rural poor on the coast have been strongly affected by *El Niño*, but elsewhere the rural poor have been less adversely affected than the urban poor, although part of the reason for this is that the rural poor lacked access to paid employment and public services even prior to the crisis. The near poor may have suffered the largest welfare decrease, losing jobs, assets, and public services and, most likely, having been forced into at least temporary poverty. And some groups among the poor—pregnant women, young children, and the elderly—appear to be more vulnerable and to be at greater risk from crisis than other groups.

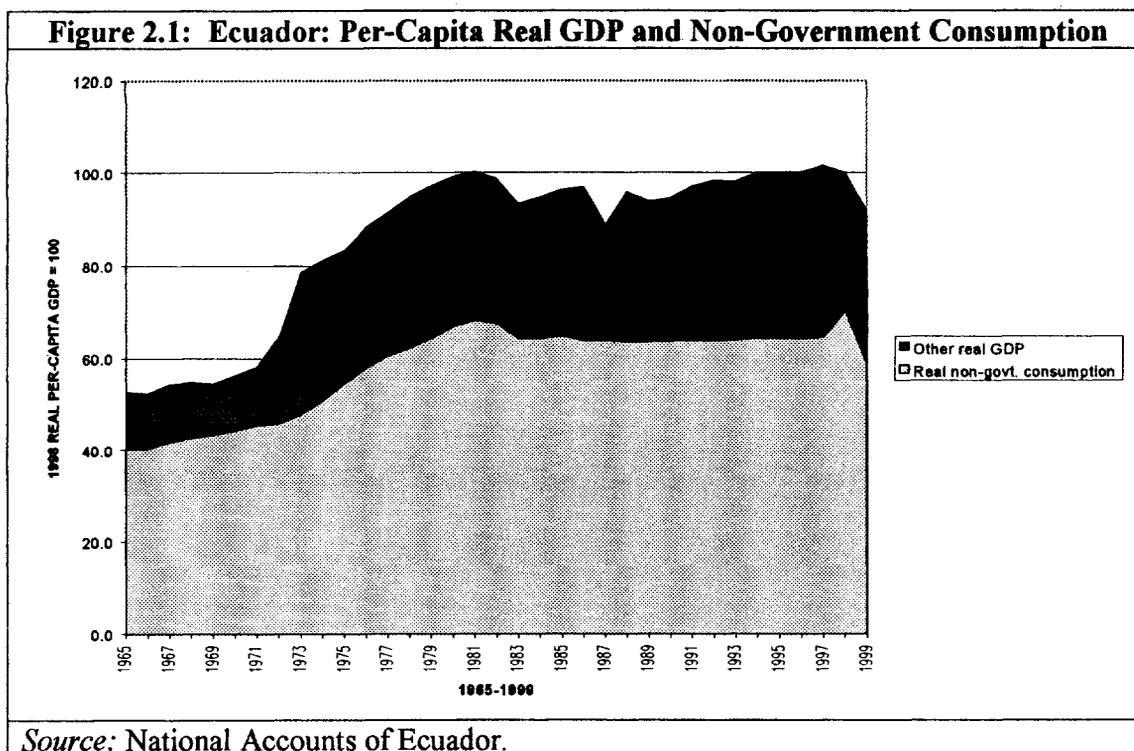
While the Government has had limited fiscal and political room to maneuver in setting its policies, its response to the crisis failed to dampen the original shocks to the economy. On the side of social expenditures, the Government has attempted to protect the expenditures of programs targeted on pregnant mothers and young children, but salary arrears in the social sectors had serious consequences for the delivery of basic social services. At the same time expensive and regressive price subsidies for cooking gas and electricity reappeared. This is after having previously eliminated the subsidies and having introduced an innovative and transparent cash transfer system to compensate the poor for the resulting price increases.

Chapter I described the high poverty and income inequality in Ecuador, and how both poverty and inequality have been increasing in recent years. It also portrayed the characteristics of the poor and, especially, of the most vulnerable groups among the poor—those most at risk of suffering irreversible harm. In this Chapter, we describe the current crisis, the effect of the crisis on the poor and the near-poor, and Government stabilization efforts in response to the crisis.

### A. Ecuador's Current Economic Crisis.

**Antecedents to the Crisis.** Ecuador's current crisis resulted from several simultaneous internal and external shocks to the economy. This crisis is particularly severe, but Ecuador has suffered many crises of this kind throughout its 170-year history. Over the past two decades its economy has essentially stagnated. After growing impressively in the 1970s as a consequence of the oil boom, Ecuador fell victim to the

debt crisis in the early 1980s, and has essentially never recovered: per-capita real GDP remained below its 1980 level until 1997, and then declined in 1998 and again in 1999. A heavy external-debt burden, continuing vulnerability to natural disasters and to world markets for its commodity exports, and lagging, uneven structural reform all prevented resumption of high growth rates. Payments arrears to external commercial bank creditors lasting from 1987, when an earthquake interrupted oil flows, to 1994 discouraged capital inflows and private investment.



In the early 1990s, the Government carried out a series of reforms intended, *inter alia*, to improve control of the public accounts and to liberalize the financial system. In 1994 it secured a debt and debt-service reduction (DDSR) agreement with commercial-bank creditors, with support for structural reform through adjustment lending from the World Bank and the IDB. Progress on structural reform was interrupted in 1995, however, by conflict with Perú, an extended drought, a banking crisis (resulting in part from excessive lending and inadequate bank supervision following financial liberalization) and the resignation of the leader of the Government's economic team under corruption allegations. A period of political instability ensued. The Bucarám (1996-1997) and Alarcón (1997-1998) Governments both failed to advance the structural-reform process.

**Shocks since 1997.** The present crisis began part-way through the Alarcón Government, when oil-export prices collapsed (reducing public-sector oil revenues by 1 percent of GDP in 1997 and a further 2.7 percent of GDP in 1998) and severe El Niño

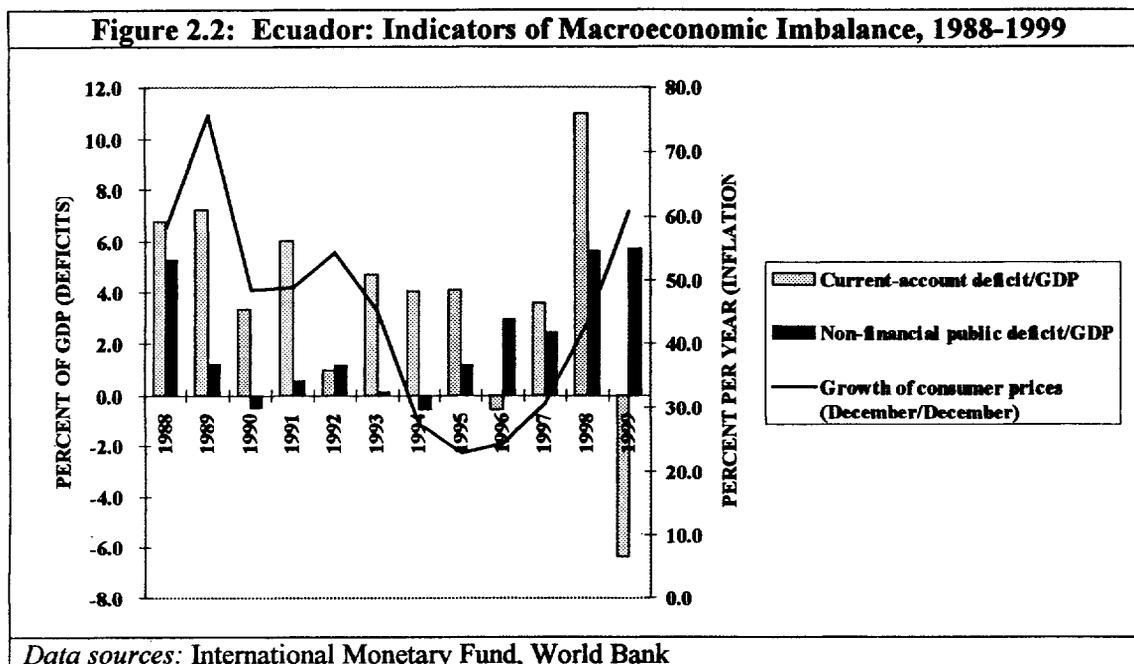
rains caused massive damage.<sup>1</sup> Through the rest of 1998 the effects of these shocks were compounded by the financial crises in East Asia, Russia, and Brazil, including recession in export markets, intensified competition from economies whose exchange rates had depreciated sharply, and virtual closure of access to international financial markets. Over the course of 1998, these shocks widened the fiscal and external deficits, intensified exchange-rate and price instability, and contributed to a system-wide banking crisis and recession.

Declining oil revenue, diminishing tax revenue, and heavy relief and reconstruction expenditure widened the non-financial public-sector deficit during 1998. Partly because 1998 was a presidential election year, but also because there is very limited scope for discretionary management of taxation and public expenditure (because of the large public payroll and massive external debt-servicing burden), the Government failed to carry out sufficient offsetting fiscal policy. The monetary authority attempted to assume the stabilization burden, limiting credit expansion and forcing up interest rates in an effort to prevent money creation and to defend the crawling-peg exchange rate. Declining export proceeds and surging imports led to a steady international reserve loss over the year, however.

As shown in Figure 2.2, the current account deficit reached 11 percent of GDP (compared with 3.8 percent in 1997). Twice, during 1998, in March and September, the monetary authority was forced to devalue outside the crawling-peg band. Real GDP grew only 0.4 percent during 1998, continuing the long-term trend of stagnant growth (see Figure 2.1). The overall non-financial fiscal deficit reached 5.6 percent of GDP (it would have been higher, had the Central Government not booked Central Bank dividends amounting to 0.7 percent of GDP) and the current-account deficit surged above 11 percent. While neighboring Andean countries also underwent similar shocks, Ecuador's long-standing failure to implement structural reform made its crisis far more intense.

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<sup>1</sup> In 1997 and 1998, the *el Niño* phenomenon produced devastating effects in Ecuador, including flooding, landslides, and damage to infrastructure, and resulted in large economic losses. The phenomenon cost the lives of at least 286 people; an estimated 30,000 people lost their homes; and about 25 percent of the population incurred a serious increase in health risks associated with the spread of infectious diseases, resulting in part from reduced access to drinking water and sewerage. The magnitude of the damage is estimated at between 2.7 percent and 13.6 percent of GDP (Vos, et.al., 1998; CEPAL, 1998). While almost everyone in the coastal region suffered some loss from the crisis, the poor were, in general, more adversely affected than the non-poor. As a result, poverty rates increased, with the worst impact being in Los Rios province where the rural poverty rate increased from 75 percent prior to *El Niño* to 94 percent afterwards (Vos, et.al., 1998).



During 1999 the crisis reached catastrophic proportions, partly as a consequence of miscalculated economic policies. By the end of 1998 the banking system had become the core of the problem, because of (i) the effects of the shocks on the banking system's asset quality; (ii) reductions in external credit lines to commercial banks; (iii) the consequences of the restrictive monetary policy; and (iv) exchange rate depreciation, which affected the quality of the dollar-denominated loan portfolio because many borrowers had insufficient dollar earnings. Deeper structural problems lay beneath these problems: banking practices were undisciplined and regulation overly permissive.<sup>2</sup> Several banks had failed during 1998, including the largest in December 1998. In that month the authorities extended a full guarantee to all deposits in the system. Several smaller banks failed in early 1999.

In February 1999 international-reserve loss forced the authorities to float the exchange rate, which then depreciated massively, setting off an incipient hyperinflation and sharply increasing banks' non-performing assets. In mid-March, in an (ultimately unsuccessful) attempt to prevent another large bank from failing, President Mahuad announced a one-year freeze of all bank deposits. This led to a virtual suspension of bank credit activities, which was an important part of the reason why real GDP collapsed by 7.3 percent in 1999. The deposit freeze, the credit drought, the recession and the depreciating exchange rate combined to reduce merchandise imports by half in 1999. This, combined with recovering oil prices, lifted the 1999 current account to a surplus amounting to 6 percent of GDP. Despite the oil-price recovery, however, the fiscal deficit remained high, at 5.6 percent of GDP.

<sup>2</sup> On December 1, 1998, the Government approved legislation guaranteeing most bank deposits and creating a Deposit Guarantee Agency to manage the resolution of troubled banks. Since December 1998, ten banks and financial institutions have failed.

Having frozen deposits, the Government spent the remainder of the year attempting to return the banking system to normal operations. It contracted foreign firms to carry out audits of all operating commercial banks, to determine their capital adequacy. Working with the IMF, World Bank, IDB and CAF, it used the audit results to formulate and implement a recovery and recapitalization strategy. From December 1998 through the end of 1999 the Treasury issued about US\$1.6b in bonds to fund payments of deposit insurance and bank recapitalization. Several banks passed to the Deposit Guarantee Agency on July 30, when the banking authority announced decisions based on the audit results, and four larger banks with positive but deficient capital were required to undergo recapitalization programs. Three of these four banks failed within two months, and were taken over by the authorities (but remained open and operating).

Throughout 1999 the Government worked to develop a stand-by program with the IMF. Such a program would have increased confidence in the Government's economic and financial-sector program and opened the way for multilateral lending. Although the Government signed a Letter of Intent in September 1999, and then carried out prior conditions in the banking sector, the tax reforms approved by the Congress in November 1999 fell short of what the IMF had sought, and so the year ended with Ecuador having failed to secure a stand-by. In August 1999, its cash flow under intense pressure, the Government decided to suspend interest payments on some of its Brady bonds, making Ecuador the first nation in the world to do so. Ecuador has asked bondholders to agree to a bond exchange with a "haircut." Bondholders refused to consider this offer, however, and have effectively brought the nation's external bonds to a state of default. Although Ecuador has initiated a dialogue with bondholders, and they have thus far refrained from litigation, the consequences of this action are likely to be unfavorable for its foreign investment and vital international business relationships generally.

Meanwhile, during 1999 the authorities accelerated the unfreezing of checking and savings deposits – although not the voluminous time deposits, which the authorities kept frozen until one year past their original maturities (beginning March 2000). A large proportion of the unfrozen deposits were withdrawn. The Central Bank found it had little choice but to provide credit to those banks kept open to enable them to pay withdrawals of unfrozen deposits. As a consequence, the monetary base grew 136 percent over the year. This led in turn to pressure on the exchange rate and price level. By early January, the exchange rate had gone into apparent free fall, and the economy faced the threat of hyperinflation.

Early in January 2000, under heavy political pressure, President Mahuad announced that the exchange rate would be fixed and that the Government would submit legislation to dollarize the economy. Less than two weeks later, the President was forced from office in the course of an attempted coup brought on mainly by widespread discontent regarding economic policy. International pressure forced the coup leaders to stand down, however, and the Vice President, Gustavo Noboa, took office as President in a constitutional transition. The new Government decided to press on with dollarization: in February it submitted draft legislation to the Congress and in early March signed it into

law. The previous currency, the sucre, is now being withdrawn from circulation. The Central Bank retains some circumscribed liquidity-management and lender-of-last-resort functions, but will no longer have any money-creation power.

## **B. The Consequences of the Crisis for Income and Consumption.**

While direct measures of the effects of the crisis on household income and consumption are not yet available, there is supporting evidence on unemployment and imports. There is more detailed evidence on the effects of *El Niño*, which damaged transport and sanitation infrastructure, destroyed some 15,000 homes, mostly of poor families, and damaged the land, trees, and other productive assets of another 200,000 households.

Incomes decline with loss of employment, reduced hours of work, or a shift to lower-paid jobs, including the informal sector. While data from the crisis period in Ecuador are not available on all these variables, there is evidence showing that unemployment rates have risen sharply. Data released by the Central Bank for Ecuador's three largest cities (Quito, Guayaquil, and Cuenca) indicate that urban unemployment and under-employment have been rising sharply from mid-1998 through August 1999. Unemployment doubled from 8.5 percent in May 1998 to a high of 16.9 percent in August 1999. Under-employment rose from 46.5 percent to 54.7 percent over the same period. In succeeding months these figures oscillated and by April 2000 had decreased somewhat.

Increased unemployment not only reduces income, it also creates social problems. The loss of work creates problems of self-esteem, threatens men's role as family providers, and may result in substance abuse and violent behavior (Correia, 1998). For young men, it often results in criminal or gang activities. For women, the reduced family income associated with unemployment forces them into the labor force, with consequent reductions in effort to maintain the household, including the care of children.

The crisis and rising unemployment have occurred in the context of a long-term employment shift away from modern sector wage labor into informal sector and self-employed employment, a phenomenon that Ecuador shares with the other countries of Latin America. The share of wage earners in the urban labor force declined from 65.7 percent in 1982 to 55.1 percent in 1990 and to 53.6 percent in 1995 due to falling employment opportunities in manufacturing, construction, and government services. Rising unemployment also occurs in the context of growing wage inequality. The wage differential between skilled and unskilled workers as well as the coefficient of variation of wages has been increasing in Ecuador in the 1990s (Vos, 1999).

Along with unemployment, consumer prices have surged as well. In the first five months of 1999, prices rose at an annual rate of over 50 percent. The rate of increase has slowed since March 1999, partly because of exchange-rate appreciation as a consequence of the deposit freeze, but also because the recession has been so severe that demand has

declined sharply. Nevertheless, it is clear that prices have risen faster than most people's earnings, leading to reduced real income and reduced consumption.

### C. The Consequences of Crisis for the Poor.

Crises usually result in declines in real income and consumption, reduced assets and wealth, and reductions in quality and/or quantity of basic public services. While the empirical evidence on the effects of the 1998-1999 crisis is still weak, what information exists is consistent with the usual pattern. The evidence to date on changes in social indicators between 1998 and the first six months of 1999 is given in Table 2.1. Poverty, unemployment, and the percentage of households reporting they have deferred medical attention have all increased significantly. In addition, while the percentage of children not enrolled in school has remained almost constant, there has been a large increase in the average number of days that enrolled students were absent from school, from 5.4 in 1998 to 10.5 in 1999. Most of the increased absenteeism is attributable to strikes and work stoppages (an increase from 0.9 to 3.9 days per month) and the for children to work (an increase from 0.7 to 2.2 days per month).

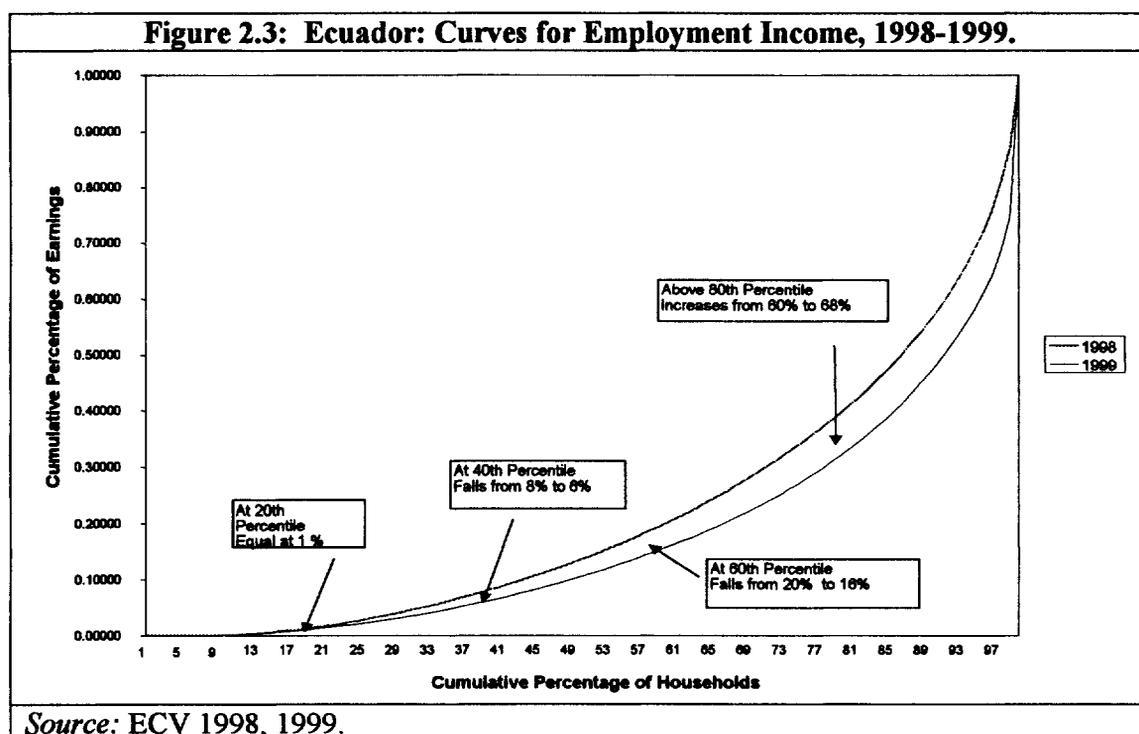
**Table 2.1: Impact of the Crisis on Social Indicators (Percentages)**

Indicators	1998	1999
Poverty Rate (income-based)	37.9	43.8
Extreme Poverty Rate (income based)	14.3	17.5
Unemployment Rate for Age 15-28 (May)	15.3	27.8
Unemployment Rate for Age 29-44 (May)	5.4	11.0
Boys 10-15 Working & Out of School (urban)	4.5	4.5
Boys 10-15 Working & Out of School (rural)	20.9	23.3
Defer medical attendance due to cost	51.5	72.0
Children less than 5 years old who received "Alimentos Gratuitos"	1.9	1.9
Percent of children aged 6-15 not enrolled in school.	12.5	12.7
Average number of days of school missed per month.	5.4	10.5

Source: BCE-PUCE. ECV 98 & 99.

**The New Poor.** While most of Ecuadorian society has suffered from the crisis, it is those who were near poverty prior to the crisis and those who were already poor whose welfare loss is most visible. Loss of employment, reduced earnings and income, and reduced purchasing power resulting from inflation are consistent with the hypothesis that

the crisis is increasing the “flow” of individuals and households into poverty in Ecuador. Figure 2.3 below shows the Lorenz curve for employment income in 1998 and 1999 and provides evidence that the labor incomes of middle income workers have deteriorated significantly. While these “new poor” have more assets, more human capital, and greater capacity to cope with reduced real income than do the chronic poor, the longer the crisis and the longer they remain under the poverty line, the higher are the odds that they will suffer permanent damage that converts temporary into permanent poverty. Using an income-based measure, the national poverty rate had already increased by 5.9 percentage points (equal to more than 700,000 people) by April 1999, and the worse effects of the crisis occurred after that date.

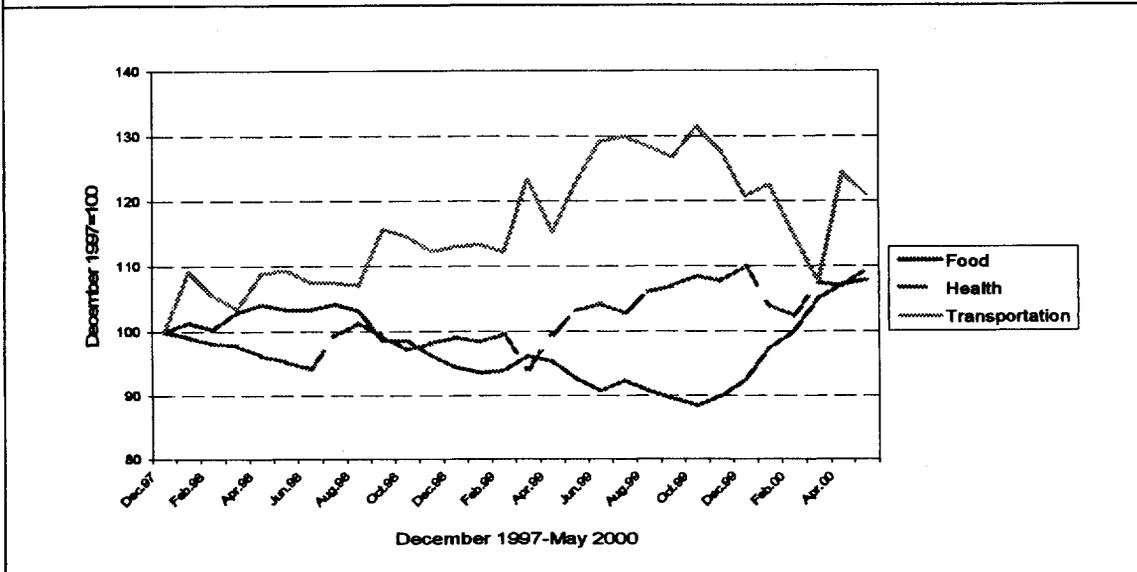


While data are not yet available to conclude definitively how the crisis has actually affected different levels of society in Ecuador, evidence on real price changes in 1999 suggests the impact on the extreme poor of inflation was less than that on the near-poor and the non-poor, but the impact of inflation on the extreme poor worsened in 2000. In particular, since the extreme poor spend most of their income on food, the trend of real food prices relative to other prices in the household’s market basket determines the effect of inflation. As shown in Figure 2.3, the real price of food declined over the period 1997-1999 but increased sharply during 2000.

In addition to reduced real income and consumption, the near poor have been adversely affected by changes in the value of their net assets. Their debt is often denominated in dollars, meaning indebtedness in sucres has increased dramatically,

especially after the rapid depreciation of the sucre after the Central Bank floated the exchange rate in February 1999. The near-poor often have small savings to cushion the effects of lost income, with 24.7 percent of households in the third consumption expenditure quintile reporting having bank accounts in the 1998 household survey. However, the Government's decision in March 1999 to freeze a substantial portion of bank deposits, combined with the high inflation (13.5 percent in March alone) resulting from the sucre depreciation, rapidly eroded the real value of their savings.

**Figure 2.4: Ecuador: Real monthly evolution of consumer-price-index components, 1998-2000**



Source: Ecuadorian National Census and Statistics Institute (INEC)

Finally, the near-poor, like the poor themselves, typically use publicly provided basic social services. Disruptions in service delivery, combined with reduced real spending have, at least temporarily, reduced the quality of the services they receive.

**The Poor and Extreme Poor.** The poor have their own views of the impacts of the crisis. CEPLAES conducted interviews and focus groups were conducted in six poor communities (described earlier in Table 1.7) in February and July of 1999 to find out how their views changed as the crisis deepened. The comparison of the results from these two time periods permits a rich assessment of the effects of crisis on the poor. As summarized in Table 2.2, the poor report that unemployment has increased, wages and benefits have declined, and workloads have increased for those fortunate enough to have jobs. Decreased income has led to worse nutrition, especially for the urban poor, the elderly and female-headed households. In both rural and urban areas, a decrease in proteins and mineral consumption was reported as one consequence of worsened poverty. Carbohydrates are more often consumed, and low-quality, less-expensive food products are bought. Owners of small local markets reported decreases in sales, especially of

fruits, vegetables, bread, eggs, cheese, and meats. In Pepita de Oro, a woman reported not using her kitchen appliances anymore since she had no food to put in them and since they cause higher electricity consumption. It was also reported that food is no longer purchased in big quantities (quintals), but on a daily basis. Some families report that children, are given lower priority than adults when it comes to nutrition, in part because they receive free snacks at school.

In addition to the health-sector strikes and the decline in public health services, the poor have been affected by increased costs and decreased availability of medicines that were readily accessible in the past through private and public social programs. The higher cost of imported medicines and the higher private cost of public care (including families now responsible for providing meals in hospitals) have led families to defer medical care, especially for preventive care for pregnant women and young children. Rural families' health care is less affected than that of urban residents, mainly because many of them have always lacked access to health clinics.

Social services for the poor have been profoundly impacted by Ecuador's crisis, and education is no exception. There are, however, factors that serve to mitigate the impact of the crisis on participation of the poor in education. In some instances, schools have even come to serve as a point for addressing health and nutrition problems that have arisen from or been exacerbated by the crisis. These factors suggest a unique potential role for education in recovery from the crisis. For example, one teacher in Pepita de Oro reported giving children two or three portions of the school nutrition provision since this food represents the only daily meal they have access to. For poor families on the coast, the current financial crisis is viewed as being part and parcel of the *El Niño* crisis (see Box 1.1), while urban families and families in the Sierra generally view the current crisis as a result of Government adjustment policies.

Irregular attendance by the teachers, largely due to lack of funds, impassible road conditions, or lack of access to transportation – results of the *El Niño* crisis compounded by economic crisis – have led to frequent cancellation of classes, especially in rural areas. Even when classes are held, student performance tends to be poor, as the students are affected by unmotivated teachers and significant declines in health conditions and nutrition in the wake of the crisis. In Pepita the Oro one of the teachers reported that the crisis has not affected repetition rates. However, he said academic performance is poorer. In addition, frequent delays in payments to teachers complicate the management of human resources and distort incentives within the system.

**Table 2.2: Main Effects of The Crisis as Reported by The Poor**

Area	Effects of the Crisis
Family Composition	<ul style="list-style-type: none"> <li>• Fragmentation of families</li> <li>• Migration of family members seeking better economic opportunities</li> <li>• Alteration of family members' roles: men are no longer the sole income provider</li> <li>• Deterioration of living conditions: overcrowding and less access to water, latrines, and food</li> </ul>
Economic Activity and Employment	<ul style="list-style-type: none"> <li>• Increased unemployment</li> <li>• Worse labor conditions</li> </ul>
Income and Expenditures	<ul style="list-style-type: none"> <li>• Increases in prices of food, gas, transportation, and public services</li> <li>• Reduction of quantity and quality of goods consumed</li> <li>• Spending on health, transportation, and clothing is either postponed or restricted</li> </ul>
Nutrition	<ul style="list-style-type: none"> <li>• Decrease in consumption of proteins and minerals</li> <li>• Decrease in sales especially of fruits, vegetable, bread, eggs, cheese, and meats</li> <li>• Fewer meals per day</li> <li>• Food priority within the household is to the income-provider</li> <li>• Families headed by single women or formed by elderly people face difficulties in satisfying nutritional standards</li> <li>• Urban residents and farmers who depend on the commodities market are the most affected</li> </ul>
Health	<ul style="list-style-type: none"> <li>• Increase in costs and decrease in availability of medicines and treatments</li> <li>• Patients have to purchase their own medical supplies since hospitals do not have enough supplies to attend them</li> <li>• Food for patients and medical staff is no longer provided by hospital.</li> <li>• Vaccination campaigns are less frequent, especially in the Coast and Amazon regions</li> <li>• High costs of prescriptions cause people to opt for home remedies instead of visiting to the doctor</li> <li>• Deferral of medical attention, especially for children</li> <li>• Health centers are used only when illnesses become severe</li> </ul>
Education	<ul style="list-style-type: none"> <li>• Deterioration of physical infrastructure and lack of didactic materials</li> <li>• Irregular attendance by the teachers due to lack of funds</li> <li>• Poor student performance due to unmotivated teachers and a decline in health and nutrition conditions</li> <li>• Schools address health and nutrition problems that have arisen from or been exacerbated by the crisis</li> </ul>

Source: CEPLAES, 1999.

**Box 2.1: Community of Pajan**

Located in the Coastal Region, Pajan has a total population of 6,731 mestizos, organized in 2,100 households. This community has both urban and rural areas. Men typically work as seasonal agricultural workers, farmers, and merchants. Currently, twenty percent of the male population claims to be unemployed. Among women, eighty five percent describe themselves as unpaid domestic workers; the remaining fifteen percent work as artisans, dressmakers, and small vendors. The economy of Pajan is mainly based on coffee cultivation, and on short cycle crops such as rice and corn. The better off own big pieces of land, cars, and luxury houses, while the poorest do not have private property and work as "jornaleros" (farmers paid on a per day basis). Teachers, shop owners, public employees, and stockmen make up the middle class.

Pajan's urban area has a hospital (Israel Guzman Hospital), a health center (Health Municipal Patronato), technical and regular schools, and two daycare centers managed by the Family and Children Institute (INNFA). The rural area has four primary health centers and one single teacher school. The squatter settlements have one daycare center that is run by the INNFA as well. In urban Pajan, 60 percent of children aged six to 12 years old are enrolled in primary school, whereas 40 percent of the children between 12 and 18 attend secondary school. Among the urban population, seven percent is illiterate. Fiscal primary education schools have free tuition and fees. There are two teachers who attend regularly, but no didactic supplies are available for students. As a result of economic resource scarcity, most children both study and work.

The most frequently experienced illnesses are diarrhea, malaria, cholera, and parasitism. Illnesses caused by water are typically found in the squatter settlement families which live in the areas at high risk for flooding. Although the hospital provides some free services, it is characterized as inefficient and as giving preferential treatment to some users. The Health Municipal Patronato provides free medicines and has low co-payments. Additionally, eye exams and pap smear tests for women are free. There are complaints in Pajan that the *Bono Solidario* fails to reach all the people who are truly eligible.

Between March 1997 and May 1998, Pajan was strongly affected by *El Niño*. The coffee crops, which were the basis of the economy and the most important source of employment, were completely destroyed. Many were damaged by the landslide, and the provision and access to public services were severely affected as well. After *El Niño*, potable water in the urban areas was found only in communal wells built in response to the emergency, whereas in the rural areas, water was only accessible in nearby rivers or when it rained. Roads were destroyed too. At the present, all urban area households have access to electricity, sewerage, trash collection, and phone service. In the rural areas, although the electrical infrastructure is accessible, not all households have a connection. Squatter settlements do not have access to any public services, except that some do have latrines. Likewise, transportation from the rural areas to the urban areas is provided by private parties in their own trucks. Trash collection is done only during the summer due to the poor condition of roads.

Since Pajan habitants consider that they have been affected economically by *El Niño* phenomena, when they talk about the impact of the crisis, they are referring to the effects and impact of the natural phenomena in addition to the current economic crisis. The major change which occurred in education services is an increase in dropout rates in secondary schools. The reasons given for dropping out were either migration for job search or, in the case of girls, work in harvesting. With regards to health services access and provision, users claim that the hospital medical supplies have to be bought by the patients. Additionally, health care centers are no longer able to provide free pap smear tests, and costs of post-natal care for newborn children have risen. Births are attended depending on family's income both in the hospital and by midwives. Rates for all public services, especially electricity, have increased. Although a water connection has already been implemented, not all households have access due to the high costs of supplies and connection. Transportation fees have increased and service is less regular.

#### D. Government Stabilization Efforts.

Since early January 2000, Ecuador's stabilization effort has been built around dollarization. As noted, the dollarization legislation (the Economic Transformation Law) approved in early March provides for the repurchase of sucres in circulation and the conversion of all accounts to U.S. dollars. Because the exchange rate was fixed at a highly depreciated value, and because domestic motor-fuel, cooking-gas and electricity prices had been frozen and would therefore have to be adjusted upward, a substantial price-level increase was anticipated for 2000 before dollarization produced stability. In the event, consumer prices have risen almost 60 percent over the first five months of the year. Substantial increases in motor-fuel prices and electricity rates were announced for June (the politically sensitive price of cooking gas remained unchanged, however), along with partially compensating wage increases. These can be expected to raise consumer prices still further. The exchange-rate depreciation preceding the dollarization announcement was so deep that even after the inflation since the beginning of the year the real-effective exchange rate remains well below any level Ecuador has experienced since 1970.

These changes have and will have significant redistributive consequences. Although there was widespread political opposition to dollarization at the time it was announced, by and large Ecuadorian society is coming to accept it as a *fait accompli*. Nevertheless, the price and wage increases have generated widespread social protests, and the Government has had to tread a narrow policy path between economic-policy necessity and political feasibility.

In March 2000, the IMF, World Bank, IDB and CAF issued a public statement promising to support Ecuador's stabilization and structural-reform efforts with lending totaling more than US\$2b over 2000, 2001 and 2002. In April 2000 the IMF approved the long-sought stand-by program, a US\$300m program running for twelve months. The IDB has disbursed some adjustment loans that had been delayed for years, and the CAF has provided a new US\$200m loan to support financial-system recovery. On June 22 the World Bank approved a US\$150m Structural Adjustment Loan, with conditionality supporting tax reform, public-sector management improvement, banking-sector reforms, and protection of social expenditure.

Like the Government of President Mahuad (and indeed like all Governments since the restoration of democracy in 1979), the Noboa Government does not enjoy majority support in the (unilateral) Congress. This has meant that economic policy requiring legislation has had to be negotiated with political parties. Strong regionalism, predominance of regional parties, and various other circumstances have made for fragmentation of Congress: at present, ten parties are represented, none of which are near a majority. This circumstance is not unusual. Indeed, strong regionalism, the predominance of regional parties, and the process of electing congress and the president at different times all contribute to a politically divided congress.

**Protecting Social Sector Spending.** The Government has not had a policy to protect overall social sector spending in the present crisis. As shown in Table 2.3, social sector spending was fairly stable from 1995-1998, increasing slightly in some years and decreasing slightly in others in real terms. The effects of the most recent crisis are reflected in the changes between spending in 1998 and 1999. In the two largest sectors – health and education – spending declined 33 percent and 32 percent respectively. These estimates may understate actual declines in real spending, given the delay in paying government salaries and the fact that extra salary payments are bunched towards the end of the calendar (and fiscal) year. Social welfare expenditures include those on the *Bono Solidario*. Table 2.3 shows that even with the very large expenditures on the *Bono* in 1999, social spending fell.

**Table 2.3. Central Government Social Sector Expenditure by Sector, 1995-1999**  
In real terms at 1999 prices, converted to US\$ million  
at the average 1999 exchange rate

SECTOR	1995	1996	1997	1998	1999
Education	460.7	487.5	457.1	497.1	337.0
Social welfare (incl. <i>Bono Solidario</i> )	55.1	91.0	47.8	29.7	193.4
Labor	5.8	8.8	7.2	7.2	2.7
Health	159.6	158.0	149.7	143.5	96.0
<b>Total</b>	<b>735.4</b>	<b>773.9</b>	<b>702.4</b>	<b>716.0</b>	<b>633.6</b>

Source: Ministry of Finance

There are no reliable data at this point on the composition of actual spending in 1999-2000, but by reports of Government officials and service beneficiaries alike, Government employment has been protected, while real salaries have declined and spending on investment and non-personnel recurrent items have been sharply reduced from their already modest levels. The social sector ministries and their implementing units have not been given the autonomy to manage their own budget reductions. In addition, as has been noted earlier, spending was controlled in 1999 by running arrears in public sector salaries, most of which are in the social sectors.

**Social Protection Spending.** While overall social sector spending has not been protected as a result of the crisis, targeted social protection spending, including the *Bono Solidario*, has been maintained constant or increased. The Government has implemented three new initiatives in 1999: (1) expansion of early childhood care through a program called *Nuestros Niños*; (2) introduction of free maternity care in public hospitals, as required by law; and (3) provision of free medicines to hospital and clinic patients who are beneficiaries of the *Bono Solidario*. Of these three initiatives, the first is financed through an IDB loan; the second is financed through earmarked proceeds derived from the Solidarity Fund, a fund which receives proceeds from public enterprises that are already sold or will be sold in the future; and the third, yet to receive public funding.

### III. HUMAN DEVELOPMENT IN ECUADOR.

The poor lack adequate access to basic social services. Less than 60 percent of the bottom quintile use public health facilities, with the rest relying on home treatment or private services. The lowest quintile's net enrollment rate for lower secondary is 19 percent and for upper secondary it is only 12 percent; comparable rates for the highest quintile are 80 percent and 62 percent, respectively. In both health and education, the poor receive a higher share of low-cost, basic services than they do of higher-cost hospital and university services.

The combined result of unequal access and unequal spending across levels of health care and levels of education is a highly inequitable distribution of benefits from social services. The bottom quintile receives only 7.6 percent of public spending on health, compared to 38.1 percent received by the top quintile. Public education is somewhat more equitable, with the bottom quintile receiving 12 percent of public spending on education, compared to 25 percent for the top quintile. Education inequities are considerably starker when looking at the distribution of public plus private spending across quintiles, a better measure of equality of educational opportunity over a child's life; the bottom quintile receives only 4 percent of all education spending, compared to 57 percent for the top quintile.

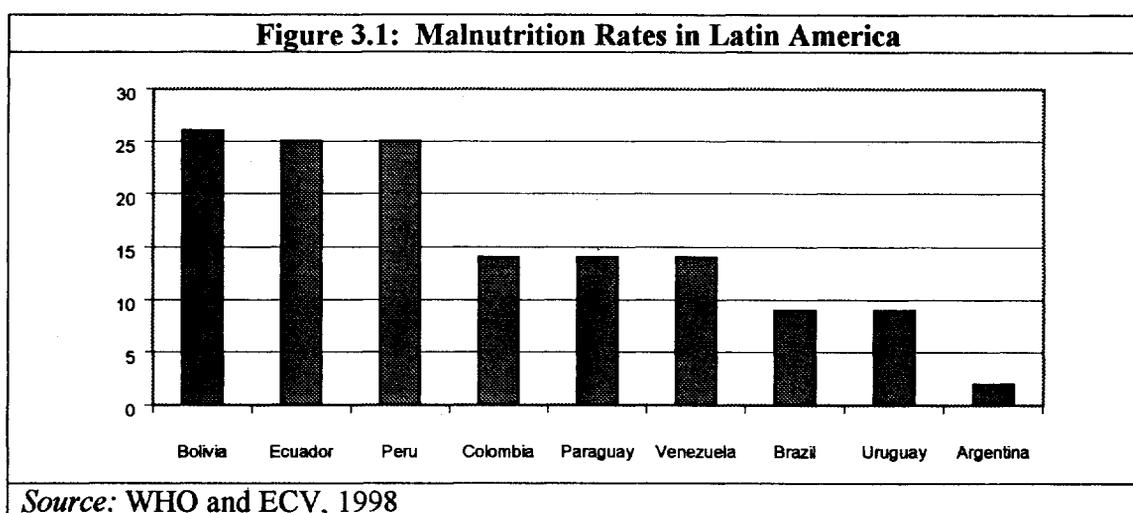
The social sectors also suffer from inefficiencies stemming from employment rigidities, complicated salary scales unrelated to performance, and highly centralized management of public expenditures. The net result is that front-line managers lack discretionary decision making power and, thus, neither they nor anyone else can be held accountable for poor performance. In the health sector several initiatives are underway to increase hospital autonomy and accountability, to introduce cost-recovery for those who can pay, and to change public sector budgeting and financial management. Reform efforts in the education sector are at an earlier stage.

Chapter I described Ecuador's worsening income inequality and poverty between 1995 and 1998, profiled the poor and extreme poor, and described the living conditions and characteristics of especially vulnerable groups among the poor. Chapter II provided evidence on the impacts of the current crisis on the poor, including continued increases in the number of the poor. This current chapter focuses on the provision of basic public services of nutrition, health, and education to the poor. The first section puts Ecuador's performance in a comparative and time-series perspective. The second section provides evidence on access by the poor to basic social services. The third section analyzes issues in the public provision and finance of those services, and the final section lays out a possible reform agenda.

## A. Indicators of Human Development.

In general, Ecuador's nutrition and health indicators correspond to its income level within Latin America. Malnutrition, infant mortality and maternal mortality rates are lower than Bolivia and higher than Colombia.

**Nutrition and Health.** Ecuador has had considerable success in reducing the rate of malnutrition. The incidence of stunting (defined as the height-for-age ratio being two or more standard deviations below the WHO/NCHS/CDC reference median) declined from 49.4 percent among preschool children in 1986 to 25.2 percent in 1998. Despite the progress, malnutrition in Ecuador is still considerably higher than that found in several other countries in Latin America, including Colombia and Paraguay, as shown in Figure 3.1 below.

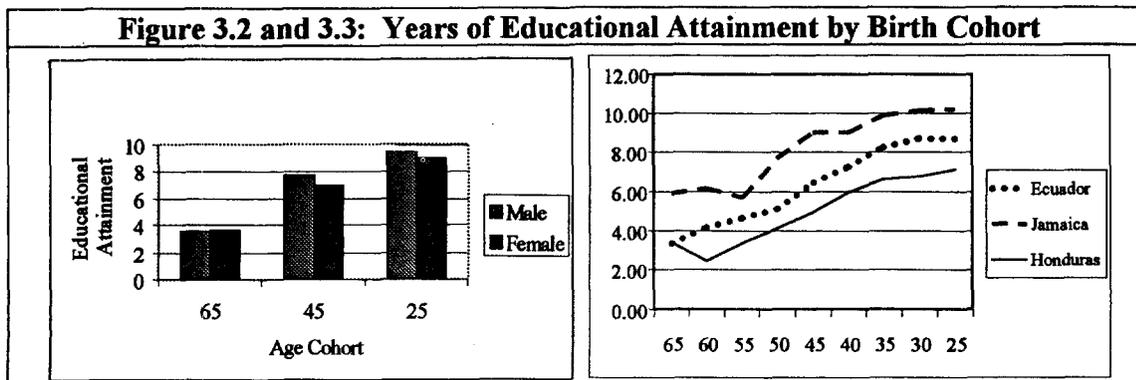


The picture is similar for other nutrition and health indicators. Annex 5 (Table 1) shows that infant mortality in 1998 was 39.4 per one thousand births in Ecuador, higher than that of Colombia (24) and Venezuela (22) but lower than Bolivia (59) and Peru (43).<sup>1</sup> The mortality rate of children under 5 years old is 48.3 per thousand, larger than that observed in Colombia (30) and Venezuela (25) but again lower than Bolivia (81) and Peru (68). The maternal mortality rate in Ecuador is also high (159 per 100,000) compared to Colombia (87) and Venezuela (56) and low compared to Bolivia (390) and Peru (265).

**Education.** Education indicators repeat the story found in nutrition and health. Ecuador has shown considerable progress in raising the educational attainment of its population, as have other countries in the Latin America and Caribbean Region. Figure 3.2 uses data in the 1998 LSMS to show the average educational attainment of the population by age cohort. While those aged 65 (born in 1933) are on average

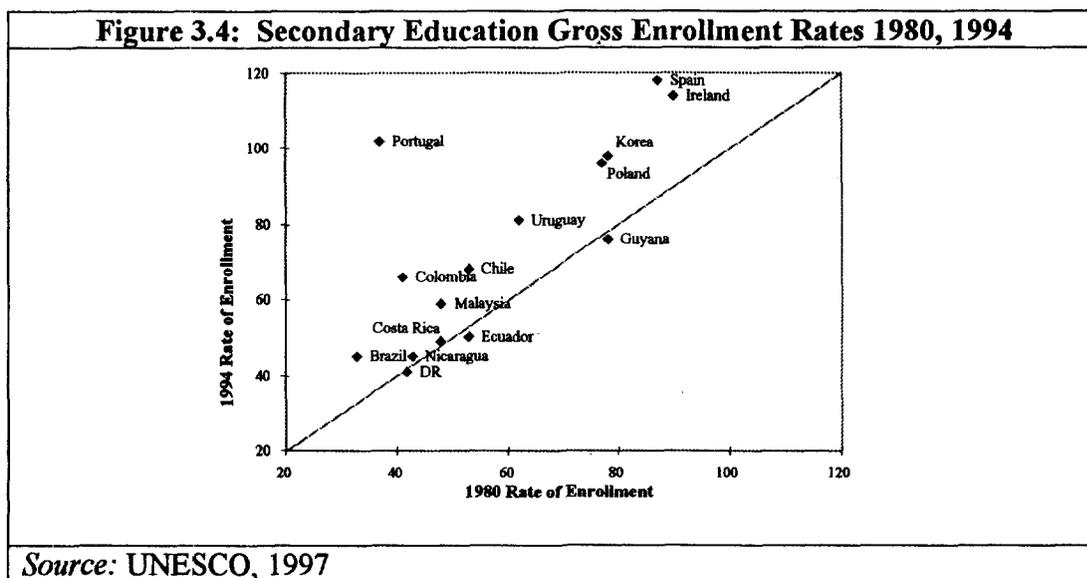
<sup>1</sup> Health in the Americas (1998).

functionally illiterate (less than four years of schooling), those aged 45 (born in 1953) have more than seven years of schooling, and those aged 25 (born in 1973) have nine years of schooling on average. As shown in Figure 3.3, the growth of educational attainment over time closely tracks Jamaica and Honduras.



Source: ECV, 1998

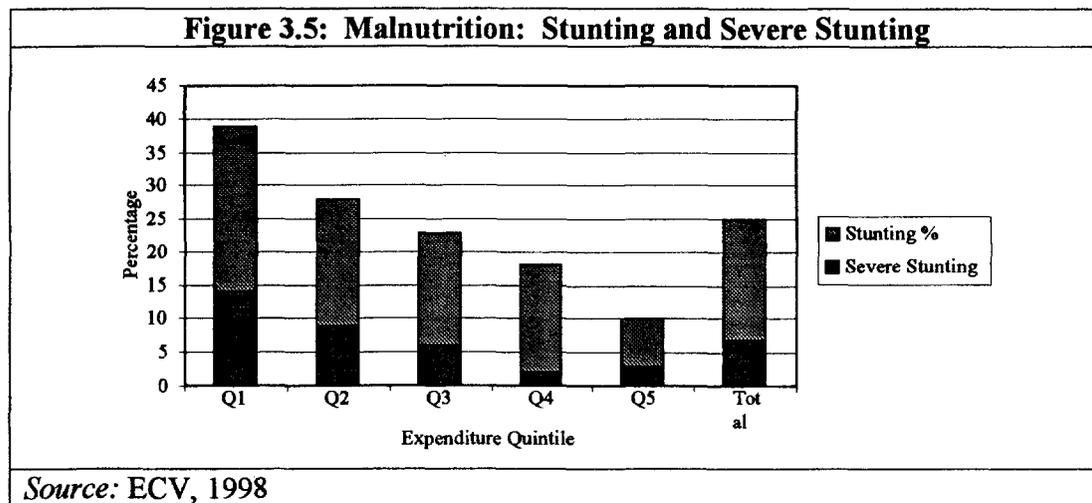
Ecuador appears to be doing less well than its Latin American neighbors on one key indicator, secondary school enrollments. As shown in Figure 3.4 below, Ecuador and Guyana were the only two countries in the region to show lower secondary school enrollment rates in 1994 than in 1980, according to official UNESCO statistics. Furthermore, it lags far behind the lower income OECD countries, like Portugal, which had a lower enrollment rate than Ecuador in 1980 and a rate double that of Ecuador by 1994.



Source: UNESCO, 1997

## B. Access and Equity.

**Health and Nutrition.** Despite Ecuador's progress in reducing rates of malnutrition, infant mortality and maternal mortality, there still remain glaring differences in these rates across household expenditure quintiles, as shown in Figure 3.5. In 1998, 39 percent of children in the bottom quintile had stunted growth, and 14 percent had severely stunted growth. Geographically, the highest incidence of stunting is in the rural Sierra with 42.1 percent and the lowest in the urban Coast with 17.4 percent.



Contributing to malnutrition is the very low coverage of programs that provide nutritional supplements to children under age two in poor families. The precise coverage is not known, but the single largest program (PACMI) targeted on these children covers only 15 thousand children, while the number of children (a substantial portion of whom are at risk of malnutrition) under age two in the first quintile is 209 thousand. As discussed in Chapter IV, the Government is now expanding the provision of mineral and vitamin supplements through MOH health clinics.

Access to health care is limited for many Ecuadorians. The Ministry of Health (MOH) covers about 45 percent of the population, and other public and charitable organizations provide care to another 5 percent. In addition, about 8 percent of the population is covered by Social Security Insurance (IESS) and 10 percent by Campesino Health Insurance. Almost 80 percent of the population have no health insurance coverage whatsoever, and about one-third of the population are neither covered by MOH facilities nor by health insurance.

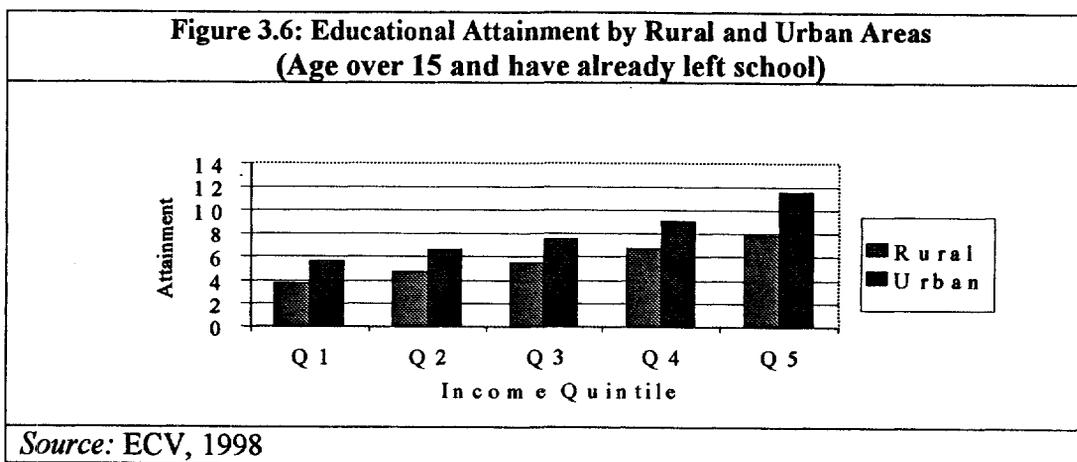
When ill, the poor are less likely than the non-poor to seek professional care (32 percent are self-medicated), face longer travel and waiting times to receive medical attention, and are less likely to be covered by Social Security Insurance. However, they are more likely to be covered by the Campesino Health Insurance; which covers 16

percent of individuals in the lowest expenditure quintile and 21 percent of the rural population.

Large differences are observed in reproductive health practices and family planning information across socioeconomic levels. In the poorest population quintile, only one out of five women in reproductive age have ever had a Pap smear, while half of those in the richest two population quintiles have been given the test. The responses to the question, "have you ever received family planning information?" indicate that only one-half of the poorest females have such information. Among women aged 15-20, only one-third have any information on family planning. These differences partially reflect the reproductive health care practices in rural areas, and the different access to information as a function of socioeconomic status.

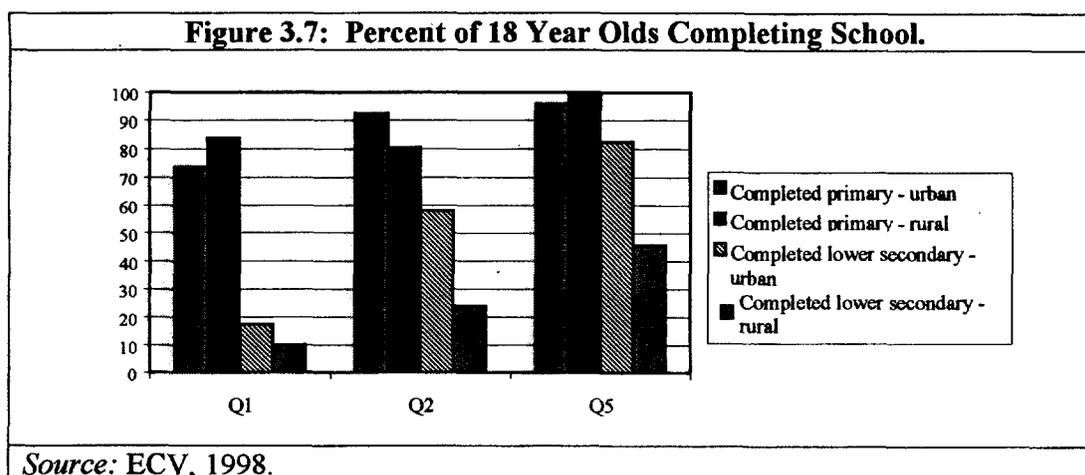
**Education.** Educational inequities begin at birth. The single most important determinants of a child's education prospects (as well as nutritional and health status) is the educational level of the mother. As shown in Chapter I, mothers of young children in the first consumption quintile are functionally illiterate, while mothers in the highest quintile are, on average, secondary school graduates. Unfortunately, disparities in access to preschool further increase, rather than decrease, the educational risks facing poor children. Children in the first quintile have one-third the preschool enrollment rate of children in the fifth quintile.

As shown in Figure 3.6, there is considerable disparity in educational attainment across socioeconomic groups and between rural and urban populations. For example, the extreme poor (consumption quintile 1) in rural areas have less than 4 years of education whereas the rich (quintile 5) in urban areas have attained on average almost 12 years of education.



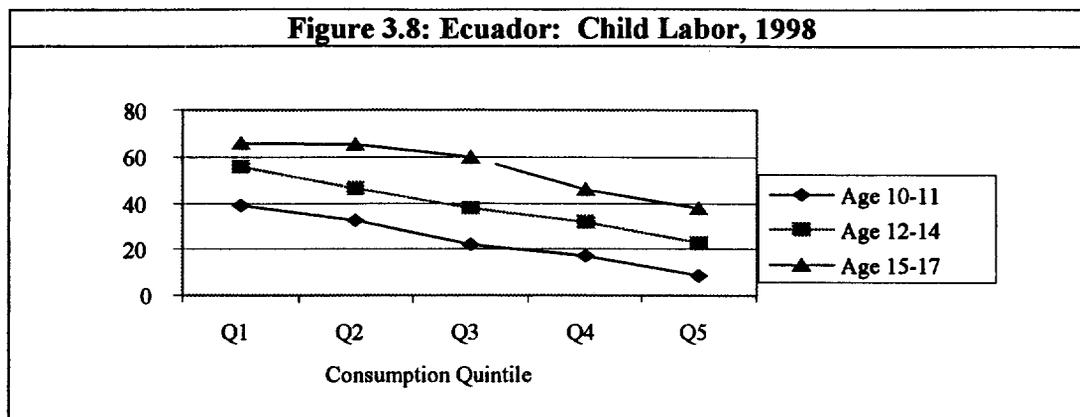
Some of the reasons for differing educational attainment by quintile is shown in Figure 3.7 below. Most children complete primary school, but educational attainment beyond the primary level is highly unequal. Only 12 percent of children in the bottom quintile complete lower secondary school, compared to 78 percent of children in the top

quintile. In addition, there are striking differences between children in rural areas, where 29 percent complete lower secondary, and urban areas where the figure is 62 percent. As shown in Annex 8, the indigenous population also has lower educational attainment than the non-indigenous population.



There are several reasons for low enrollment rates at the lower secondary level. Figure 7 (see Annex 4) shows that the single most important explanation (35%) reported by respondents to the 1998 household survey is cost. The average monthly expenditures per child in lower secondary school for households in the bottom quintile is US\$5.32, or about 3 percent of total household income (see Table 5.6). Other explanations include lack of interest (19%), work (16%), and lack of access (10%). While not asked in the survey, the quality of schooling and the expected income gains from attending school, also, affect school attendance decisions.

Child labor adversely affects the education of the poor, and the percent of children participating in the labor force is very high in Ecuador (see Figure 3.8). Most children in Ecuador are working and going to the school, and the large number of hours they work must adversely affect learning. Children aged 12-14 in the bottom quintile who work and attend school report working 26 hours per week; children aged 15-17 who work and attend school report working 36 hours per week (Annex 1, Table A20). Of all children aged 12-14 in the bottom quintile, 30 percent work and attend school, and another 24 percent only work, resulting in an overall labor force participation rate of 54 percent (Annex 1, Table A17). Child labor undoubtedly contributes to the high rate of school absenteeism for children in the bottom quintile—even prior to the 1999 Crisis, children aged 12-14 reported missing classes more than half the time, and even children aged 6-11 reported missing classes about one-third of the time (Annex 1, Table A15). Very little learning can occur with such high absenteeism rates.

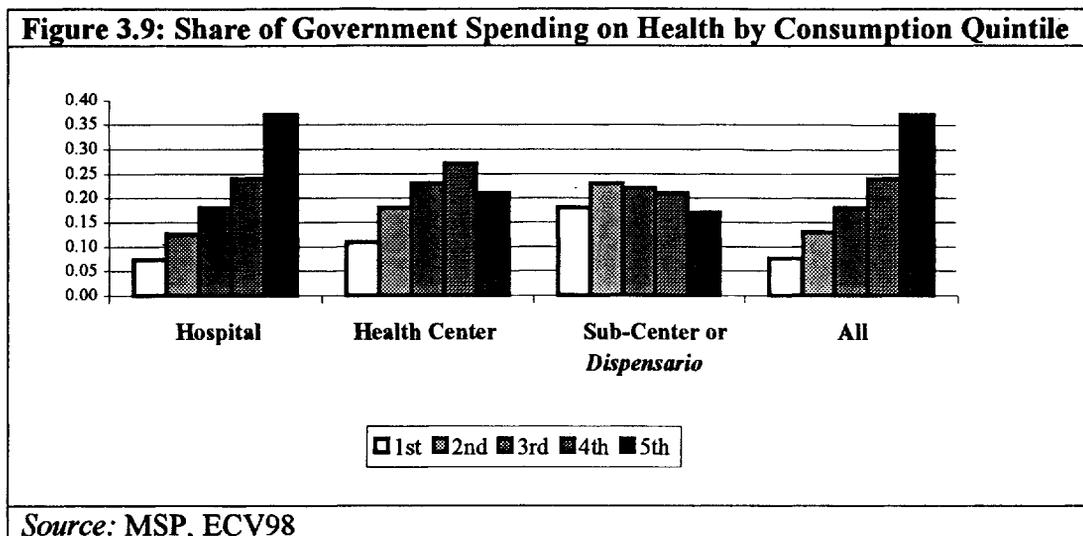


Contributing to the problem of low secondary school enrollments and, also, to income inequality are recent changes in the economic returns to educational investments by households. Since 1994, the wage premium associated with completing primary school (vs. not doing so) or completing secondary school (vs. completing primary school) have both decreased. Meanwhile, the premium associated with completing university education (vs. completing secondary education) has increased considerably, from 48 percent in 1994 to 73 percent in 1998 (see Annex 4).

### C. Equity in Public and Private Expenditures.

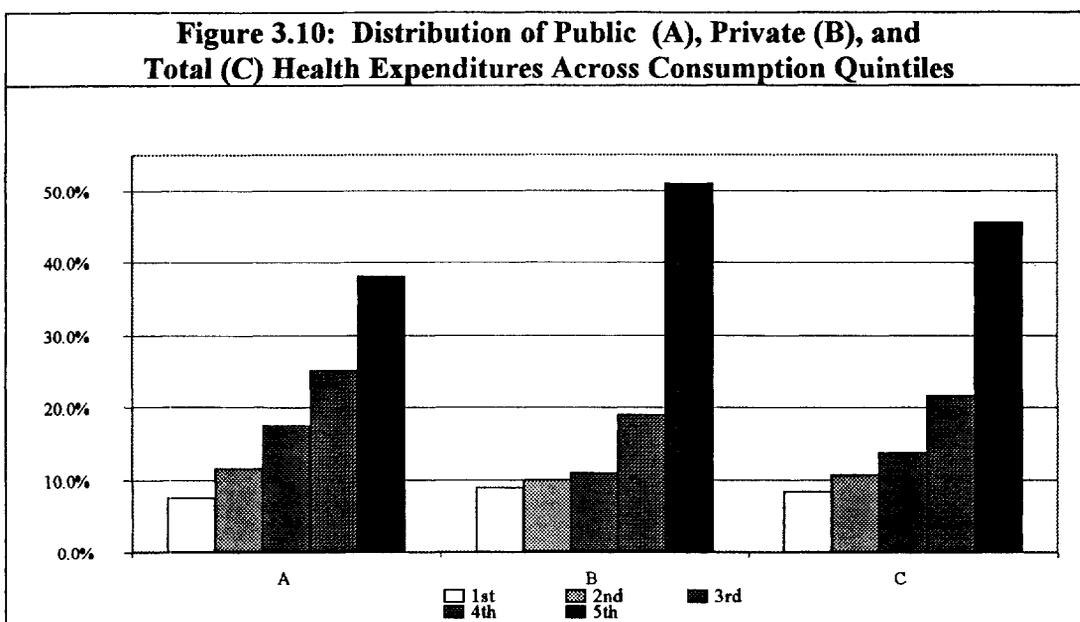
The preceding section discussed equity in terms of coverage and access to social services. Another dimension of equity is the distribution of public spending, since there may be inequalities in spending per beneficiary as well as inequalities in coverage and access. Yet another dimension of equity is the distribution of public plus private spending, as this provides a measure of the distribution of quality-adjusted services actually received. In this section, we review the evidence on equity in both public and total social sector spending. A more detailed analysis of equity in social services is found in Annex 6.

**Health.** Equity in health spending is a combination of two variables—(a) usage rates by socioeconomic group and (b) the type of facility used by those groups. Within public health care facilities, the higher consumption quintiles tend to use hospitals, while the poor are more likely to visit health clinics or centers. The resulting distribution of public expenditures is shown in Figure 3.9 below.

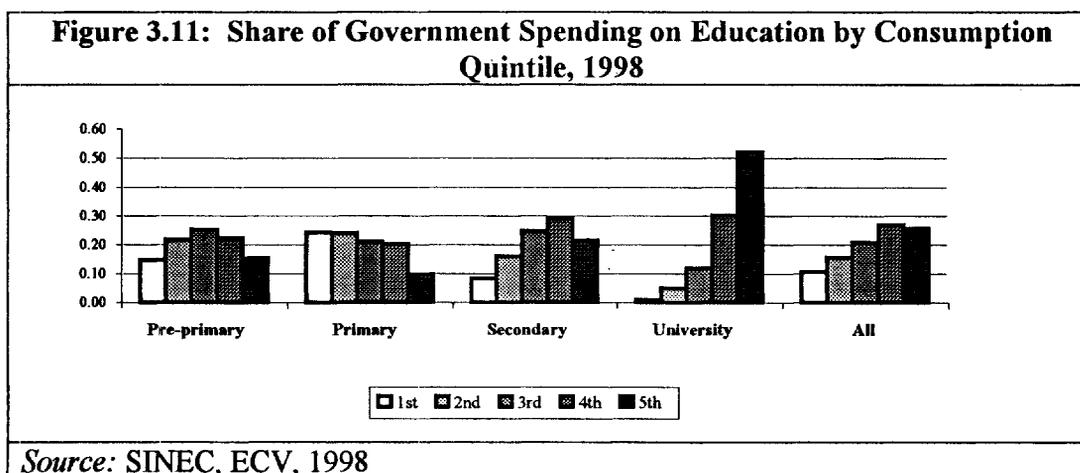


Since the unit cost of a visit to a public hospital is more than 20 times larger than that of a visit to a health center, the use of public hospital facilities across consumption quintiles has a large impact on the overall distribution of public spending across those quintiles. As shown in Figure 3.9, the lowest income quintile receives only 8 percent of total public health expenditures, while the highest quintile receives about 37 percent of the total.

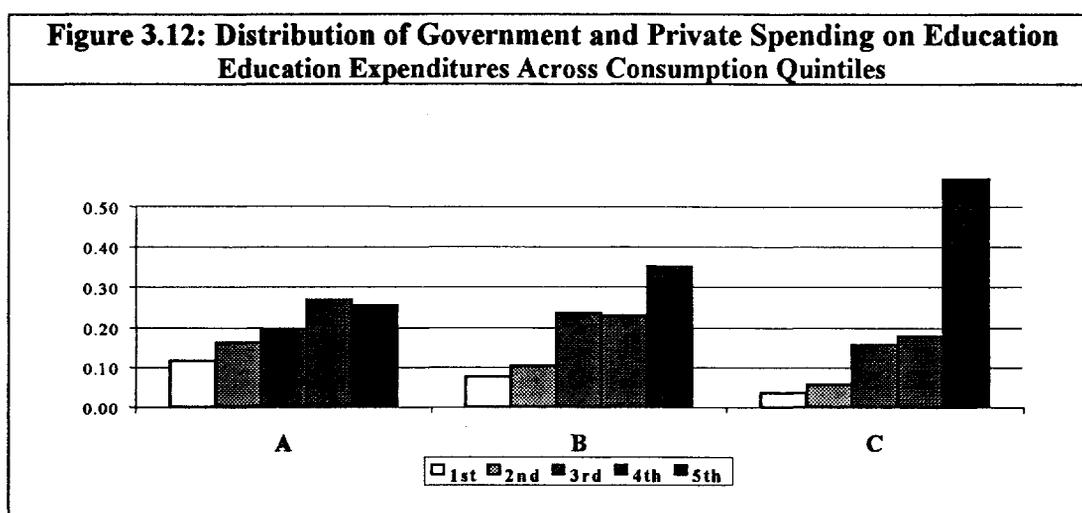
Since a high share of health spending is financed privately, it is important to also look at the distribution of private health spending in assessing equity in terms of services received by different socioeconomic levels. Figure 3.10 below shows (a) the distribution of total public spending on health across quintiles, (b) the distribution of private spending on health across quintiles, and (c) the distribution of total spending on health across quintiles. Surprisingly, the lowest consumption quintile accounts for a larger share of private spending on health than its share of public health expenditure. Overall, the first quintile receives 8.4 percent of total spending, compared to 45.6 percent for the highest quintile (see Annex 5 for details).



**Education.** As with health, equity in education is the product of coverage and the type of facility used by socioeconomic groups. In the case of education, coverage is measured by enrollment rates, and the type of facility refers to the level of educational institutions. In addition, equity is affected by variations in both public and private spending within levels of education. Figure 3.11 below summarizes the distribution of public education spending across income quintiles and levels of education. In aggregate, the lowest consumption expenditure quintile receives 11 percent and the highest consumption expenditure quintile receives 26 percent of all public education spending. The first quintile's share of total spending is significantly less than that found in Argentina (26 percent), the Dominican Republic (23 percent) and Peru (21 percent).

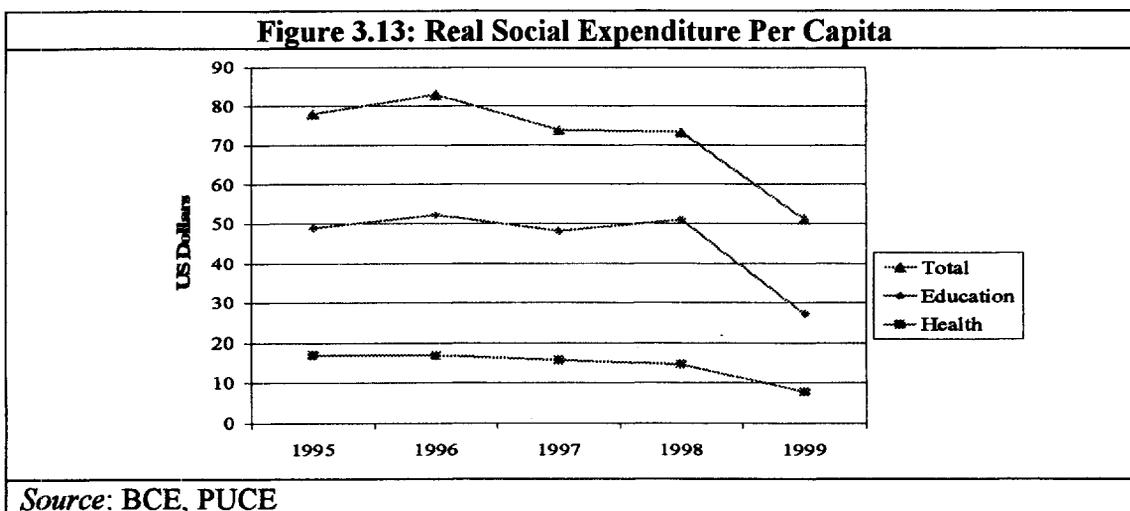


Private household finance of education takes two forms—purchase of complementary inputs for publicly provided schooling and payment of tuition for private educational institutions. Figure 3.12 below shows (a) government spending on public education, (b) government and private spending on public education, and (c) government and private spending on public and private education. In contrast to health, private expenditures are distributed much less equally across consumption quintiles than are public expenditures. Whereas the first quintile receives a larger share of public education spending (11 percent) than public health spending (8 percent), it receives a considerably smaller share of total, public plus private spending. The lowest quintile receives just 4 percent of total, public plus private education spending, while the highest quintile receives a 57 percent share.

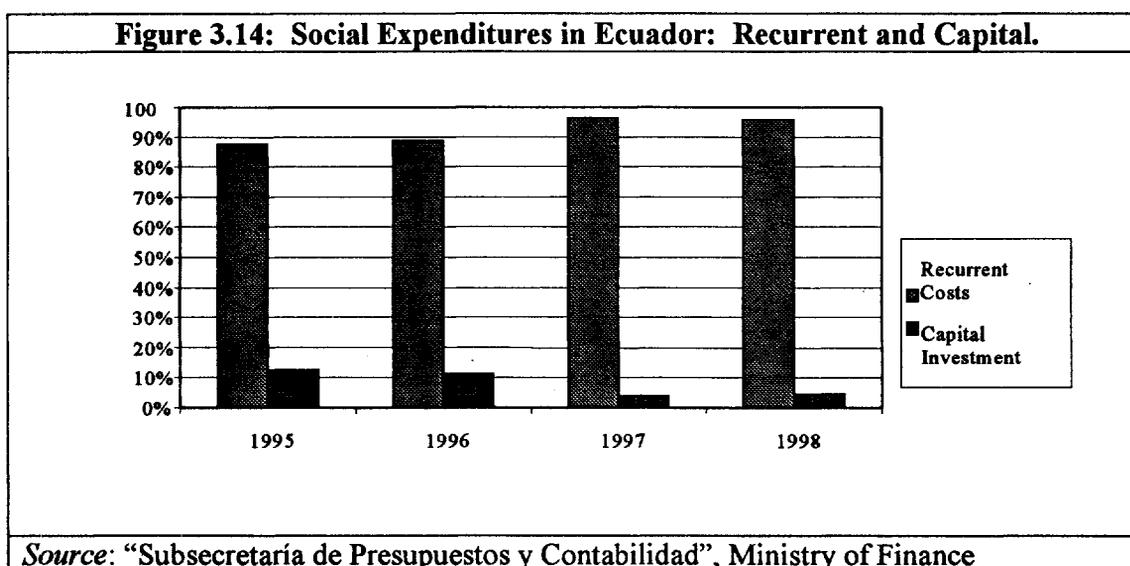


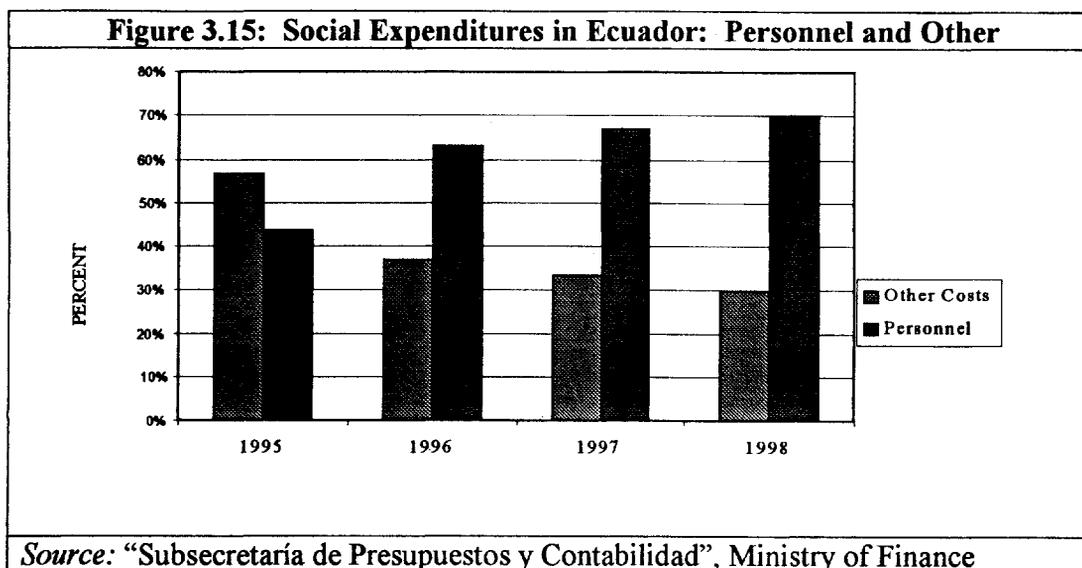
#### D. Social Protection Expenditures.

Using 1999 budget figures, the Government of Ecuador spends 7 percent of GDP on what can be broadly defined as social sector and social protection expenditures. Social sector spending in the four social sector ministries—Health, Education, Labor, and Social Welfare—is 4.9 percent of GDP, spending on Social Security is another 0.8 percent of GDP, and spending on the *Bono Solidario* is another 1.3 percent of GDP. In addition, the Government has subsidy expenditures (on cooking gas and electricity) of at least 1.5 percent of GDP and additional prices subsidies on gasoline. Excluding the *Bono Solidario*, education represents the largest share of the social budget (55%), with health (both social security and the health ministry) accounting for most of the rest.



In per capita terms, social expenditures in Ecuador declined between 1995 and 1998, with a further significant decline predicted for 1999 (see Figure 3.13). Education spending remained relatively constant over the time period, but decreased by 32 percent in 1999, while health spending has continuously decreased since 1995. These expenditure patterns reflect the revenue constraints and competing expenditure requirements, especially debt service, the Government faces. One public sector response to smaller budgets is to defer capital expenditures (Figure 3.14). Another response has been to reduce non-personnel spending (Figure 3.15). Thus, the crisis of 1999 occurred in the context of shrinking budgets, decreasing capital expenditures, and decreasing non-personnel outlays.





Despite constant or shrinking budgets, the public sector has increased output. Both school enrollments and hospital and clinic visits increased between 1995 and 1998. The result, of course, has been lower quality services and reduced real pay to the civil servants delivering the services.

**Public Financial Management.** Ecuador has an especially complicated system of budgeting and public financial management that results in an almost complete lack of accountability. School or hospital directors can't be held accountable, because they currently have very little decisionmaking power. Provincial directors of health and education can't be held responsible for basic services because the use of their budgets is largely outside their control. Ministries can't be held accountable because they are often uninformed observers of the execution of the budget.

Several measures have been adopted for reforming the Ecuadorian state as a whole, such as the 1992 Public Budget Law, the 1993 Modernization of the State Law, and the 1997 Decentralization Law, which enables the transfer of authority and resources to municipalities in relation to social sector management, particularly education services ownership, financing and delivery. The new Constitution of 1998 establishes general principles that can guide the process of implementing financial management and control mechanisms and in creating appropriate incentive structures for public agencies. However, these general principles must be implemented and translated into a specific national plan to develop a new legal framework, budget decentralization, transfer over 100 management functions to sub-national entities, and to involve local participation and representation in the design and implementation of the plan.

### **E. Improving Social Sector Performance.**

As the above review of social sector achievements and gaps demonstrates, Ecuador continues to face several challenges in the provision of basic social services: (a) ensure the poor, especially pregnant women and children under age two, have adequate nutrition; (b) improve access by the poor to regular, preventative health care and to expanded educational opportunities, especially at the lower secondary level; (c) raise the quality and equity of service delivery by, among other things, ensuring adequate non-personnel inputs such as drugs, medicines, textbooks, etc.; (d) improve equity in the distribution of public expenditures by taking advantage of citizens' higher ability to pay at higher income level; and (e) in a context of overall fiscal austerity, improve the efficiency of social service delivery to leverage the greatest output from existing resource levels. Annexes 4 and 5 review these issues in some detail, including Government initiatives, especially in the health sector, to increase access and service quality. In this section, we focus on the challenge of increasing efficiency in service delivery.

Raising efficiency requires creating the institutional framework that provides strong performance incentives. Basic elements in such a framework include: (a) establishing clear goals and objectives at every level of service delivery and especially at the level of the public ministry; (b) giving managers of health and educational facilities the discretionary authority to allocate resources, including selecting and reassigning personnel; (c) ensuring transparency and predictability in financial resources and continuity in sectoral policies; and (d) providing the performance information and the governance structure to ensure accountability. The 1998 Constitution and other legislation provides the legal basis for this framework, and there are signs of progress. The Education Ministry has implemented a national achievement test, the Health Ministry has created demonstration models of hospital autonomy, and there are examples of institutional innovations (see the descriptions of *Tena's Junta de Salud* and the *Sistema Comunitario de Salud Integral in Colinas del Norte* in Box 3.1), but progress in implementing a new institutional framework has been slow.

### **Box 3.1 A Public HMO: The Community System for Integral Health in Colinas del Norte**

The Community System for Integral Health (*Sistema Comunitario de Salud Integral, SICSI*) in *Colinas del Norte* builds off of the Municipal Health Council model and seeks to improve the incentive environment wherein health workers and service recipients interact. It targets one neighborhood with about 2000 families north of Quito. The SICSI operates like a small public health maintenance organization (HMO) in which families pay small monthly fees to become members of a clinic. Physicians are paid their usual monthly base salary plus bonuses for a) each new member family and b) each individual attended and service rendered.

A physician in a project clinic continues to receive her basic monthly salary independent of her productivity. For each new paying affiliated member family, she receives a monthly bonus of 0.1%. This encourages the physicians to help sell the program in the communities they serve, and quite likely, to treat members better than non-members. In addition, physicians are paid for each service rendered, within certain limits. They receive s/1,250 per consultation up to a limit of s/500,000 (or 400 consultations) per month. Finally, no more than 40% of the additional pay for consultations may relate to morbidity, leaving 60% for "public health" consultations.

Affiliated families pay about US\$2.50 per month, for which they receive a comprehensive array of health services including preventive care, pediatric care, and pre- and peri- natal care. The local clinic is the main point of contact but has referral rights to the local hospital. By contrast, non-affiliated families continue to be served in the traditional manner; that is, a system with co-payments for most services. In the first four months of the project, 700 families have affiliated with the clinic, and about 400 of these families pay the monthly fee regularly. Families eligible for the *Bono* can affiliate without paying the fee (in the same manner that if they are not affiliated they do not have to make most co-payments).

In addition to the encouragement of HMO-style efficiency incentives, another promising development is the cooperation on related service provision (such as pre- and peri-natal care) that the project has helped forge between the local clinics in the Area de Salud and the hospital geographically located within it.

The appropriate institutional framework for Ecuador must reflect its own unique history and culture, but the general path for constructing that framework seem clear. First and foremost, local managers should be given increased responsibility and increased decisionmaking authority and then be held accountable for results. The fact that hospitals and secondary schools are already separate budget units in the national budget gives the potential for making them separate management units as well. Second, governance mechanisms (e.g., hospital boards or school councils) should be created to ensure community voice in decisionmaking and to hold hospital and school managers accountable. Third, public financing to decentralized units should be based on transparent and predictable criteria (e.g., the number and type of students and/or patients)

instead of the historical inertia used at present. Fourth, directors of hospitals and schools, or managers of groups of health and education facilities, (and their governing boards) should be given greater managerial discretion in allocating resources and selecting hospital and school personnel. Finally, the national ministries should be strengthened in their norm setting, monitoring, evaluation, and technical assistance functions, while their day to day responsibilities for managing health and education facilities are moved to the provincial level or lower.

In navigating this path towards institutional reforms, Ecuador can learn from the experience of neighboring Latin American countries as well as from the NGO experience in Ecuador itself. Colombia's *Escuela Nueva* program, described in Box 3.1, has now been adopted and adapted by countries on every continent as a means of improving the quality of schooling in multigrade, rural schools. El Salvador's EDUCO program, described in Box 3.2, quickly expanded educational coverage in rural areas of that country and demonstrates the capacity of local communities to play an important role in directly managing school finances. Both *Escuela Nueva* and EDUCO have elements that Ecuador might adapt to improve indigenous education in remote, rural areas.

### **Box 3.2: Colombia's Escuela Nueva—A Strategy for Reaching the Rural Poor.**

Based on its 1978 study detailing major weaknesses in the provision of rural basic education, the Government of Colombia gave top priority to rural education and produced a ten-year rural education program which built heavily on the *Escuela Nueva* program. *Escuela Nueva* was created in 1976 after a decade of experimentation and was supported at various times by UNICEF, USAID, IDB and the World Bank. By 1978 more than 500 schools were involved and this gradually expanded under World Bank financing to 17, 948 schools by 1989, serving 800,000 students. Major characteristics of *Escuela Nueva* include: One or two teachers offering all five years of primary education in one or two multi-grade classrooms; flexible promotion, special instructional materials for individual and group work and teachers' guides, curriculum relevant to rural community, school government to ensure participation of students, parents, and community; study corners and class libraries; self-monitoring mechanisms for students. Rojas and Castillo (1988), Psacharopoulos, Rojas, and Velez (1992), and McEwan (1995) have found that *Escuela Nueva* schools had significantly improved student outcomes, reduced dropout rates among the rural poor, as well as student and community.

**Box 3.3: El Salvador's EDUCO Model of Community Participation.**

A new vision of shared responsibility for meeting educational needs has had a profound impact on education in El Salvador in the 1990s, resulting in significantly expanded coverage at the preschool and basic levels. Facing the daunting task of educational sector reform, the Salvadoran Ministry of Education sought an innovative and effective approach to expanding coverage in rural and marginalized areas. EDUCO ("Education with the Participation of the Community") provided a model for that approach, creating a framework and processes for responsibility to be shared among government authorities, community NGOs, and parent associations. Originally initiated in 1991, EDUCO works to provide preschool and basic education to rural and needy communities through a decentralized system of service provision, encouraging community participation in the educational process. Program activities include teacher training, organization of parents and teachers into community education associations (responsible for the management of educational resources at the local level), and development of didactic materials for parents and teacher guides. The program's administrative component has focused on design and actualization of legal and financial mechanisms that enable educational sector decentralization.

The outcomes of EDUCO programs demonstrate both quantitative advances in coverage and qualitative improvements compared with traditional education. Since 1992, EDUCO has provided basic education for 168,672 children, employed 3,871 teachers, and formed 1,700 community associations. The education provided in EDUCO communities is characterized by lower rates of teacher absenteeism, increased amount of instructional time, a higher average mathematics achievement test scores in first and second grades, and greater parent involvement in the education of their children than in the traditional school system. Coordination of efforts at national, regional, and local levels through EDUCO programs has significantly improved the education system in El Salvador, and today EDUCO continues to expand, spreading the benefits of community involvement in the education to children who might never have had educational opportunity through the traditional system.

*Sources:* Guido Bejar (1997) and Meza (1997).

#### IV. TARGETED PROGRAMS AND THE POOR.

Ecuador's collection of targeted programs is managed by several different governmental organizations and lacks coordination and integration into a unified system. As a result, it is almost impossible to assess the actual level of protection each group of beneficiaries receives from the various programs. In addition, there is an almost complete lack of evaluation as to the impacts of targeted programs, although the Government's creation of the Social Indicators Program (SIISE) and its continuing support of the Ecuador Household Survey (ECV) are important first steps in developing the capacity for monitoring and evaluation.

Although not designed as such, the *Bono Solidario* has become the backbone of the Government's social protection program. Covering 1.3 million Ecuadorian households, this is the only program that is available to some poor groups, e.g., the elderly, and it is a critical source of financial support to the extreme poor who receive it. However, the low level of benefits combined with a need to improve targeting constrains its impact on overall poverty measures. Large numbers of individuals who are eligible for the *Bono* fail to receive it, and many individuals receiving the *Bono* are in fact not eligible. While better than the targeting of similar programs in some other countries, there is clearly room for improvement. A new targeting mechanism is in the process of being applied.

There exists a wide variety of other programs targeted on the poor and, especially, poor children. Excepting the school snack, none of these programs provides anything approximating adequate coverage. For example, PACMI, a program to provide health and nutritional benefits to poor, pregnant women covers only 5 percent of the target population. While targeting could be improved in most programs, lack of coverage is the major problem. The single largest gap in coverage is with children under age two, who also happen to face the largest risk of irreversible harm resulting from malnutrition and inadequate health care.

The previous chapter discussed the broad-based nutrition, health, and education programs of special importance to the poor. In this chapter, we review those public sector programs specifically targeted on the poor. This review begins with the *Bono Solidario*, the backbone of the Government's program of social protection and then reviews programs that benefit each of the especially vulnerable groups among the poor: pregnant women and children under age two, children under age six, school-age children, and the elderly. The chapter ends with an assessment of social infrastructure programs which have the potential to generate employment.

### A. Ecuador's Social Protection Program.

The principal objectives of social protection programs are: (a) to provide a temporary safety net for the transient poor (new poor) to prevent them from depreciating their physical and human capital investment (with implications both for future productivity growth and the probability that the transient poverty might become permanent); and (b) to provide a safety net for the chronically poor, whose living conditions have further deteriorated as a result of the economic and other shocks, to maintain them above a critical subsistence level of income and to provide conditions conducive to poverty reduction.

It is difficult to characterize the collection of existing social programs in Ecuador as a "system of social protection". In particular, existing programs are not designed to respond to the social consequences of crisis and income insecurity. Although each program may fulfill its role of providing social services and other benefits to vulnerable groups, there is no coordination and integration of these programs into a unified system, and as a result, it is almost impossible to assess the actual level of protection each group of beneficiaries receives from various programs. Under the tightening fiscal constraints, it is imperative that the Government evaluates the social programs implemented by various ministries and agencies, with the objective of rationalizing them and developing a coherent social protection system. In this paper, we review the coverage, targeting, and cost of only the key programs, which, taken together, account for over 90 percent of total social protection spending.

**Table 4.1: Vulnerable Groups Among the Poor and Ecuador's Social Protection Program**

Group	Area				
	Nutrition	Health	Education	Cash Transfers	Social Infrastructure
Pregnant Women and Mothers	X	X		X	
The Very Young (0-2)	X	X		X	
Preschoolers (3-5)	X	X	X	X	
School Age Children (6-15)	X		X	X	X
The Elderly				X	
Indigenous Poor				X	X
The New Poor					

The scope of Ecuador's social protection programs—those programs specifically targeted on vulnerable groups—is summarized in Table 4.1. In addition to these programs, there are civil works, including Ecuador's Social Investment Fund, FISE, targeted on geographic areas with high concentrations of the poor to build schools, construct rural roads, improve water, sanitation, irrigation, and health clinics. These infrastructure programs provide benefits to the poor and frequently employ local unskilled labor.

The quality of a social protection system is proven in times of crisis, with the test being whether social programs can be quickly expanded (in benefits or coverage) or redirected to alleviate the social costs of the crisis. Some social programs have automatic triggering mechanisms, such as unemployment insurance or public employment programs that automatically increase with rising unemployment. Another automatic adjustment is the increase in the number of households eligible for social benefits as a result of loss of employment and family income.

### **B. Cash Transfers: The *Bono Solidario*.**

Our assessment of Ecuador's targeted social programs begins with the core of the Government's social safety net, cash transfers to the poor, in the form of the *Bono de Solidaridad* (or *Bono Solidario*, in brief). As the first important action under its social agenda in September 1998, the Government eliminated the indiscriminantly targeted cooking-gas subsidy, targeted the electricity subsidy to poorer consumers (instituting a cross-subsidization structure under which wealthier consumers helped pay for the subsidy), and instituted a cash-transfer program for poor families and elderly people, known as the *Bono Solidario*. (Presidential Decree, September 14, 1998) The *Bono Solidario* was not originally intended as a safety net for the structurally and chronically poor but, rather, as a mechanism to compensate them for the reductions in the subsidies. With the rapid deterioration of the economy since September 1998, however, the *Bono* has become the backbone of the Government's safety net strategy. The program provides an approximate amount of US\$15 per month to mothers from poor families and about US\$7.50 per month to poor old-aged people<sup>1</sup>. The amount provided to individual households is small – at the time of the inception of the program, it cost about double this amount just to meet the minimum caloric needs of one person for a month. Notwithstanding the small unit benefit amount, the *Bono Solidario* program is the flagship program in Ecuador for Social Protection. With approximately 1.3 million beneficiaries and a projected annual expenditure of about US\$190 million, the program represents nearly 8% of Central Government non-debt spending and about 1.3% of Ecuador's GDP.

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<sup>1</sup> The program also supports handicapped individuals, but the main focus is on poor mothers and the elderly. With the dollarization, at an exchange rate of 25,000 sucres to the U.S. Dollar, the *Bono* provided roughly \$6 per month for mothers, and \$3.00 per month for the aged. With dollarization and inflation, the real value of the *Bono* decreased significantly in the first six months of 2000, \$6.00 and \$3.00 monthly respectively.

**Coverage and Targeting.** The eligibility criteria for the *Bono* are fairly straightforward. The program is meant to be targeted to the poor, and amongst the poor, it seeks to reach the most disadvantaged – women without a steady income who need to take care of young children, as well as old aged persons who have no access to any income source. Executive Decree Number 129 of the Government of Ecuador established the following eligibility criteria for receiving the *Bono*.

#### Criteria for Beneficiary Selection under the *Bono Solidario*

##### *Mothers*

- Need to have at least one child 18 years of age or younger
- Family income of not more than 1 million sucres (originally about \$180)
- Neither mother nor spouse has fixed salary income.

##### *Elderly*

- Older than 65 years.
- Family income does not exceed 1 million sucres.
- No fixed salary income.

##### *Disabled*

- Persons between 18 and 65 years of age
- Disability of at least 70 %

Potential recipients were self-selected into the program based on the approval of their application form (see Annex 2). At the inception of the program, there was no use of any external validation of data on the application form, other than the fact that the local church handled applications. However, given evidence of widespread leakage to non-eligible persons, the government experimented with various instruments for validation. These instruments include criteria such as a high amount of electrical energy consumed, ownership of a car, or possession of a bank account as evidence to disqualify recipients. It is important to note that the income eligibility is based on self-reported income, and that eligibility does not have a reference to the family size or the number of children of the mother. In other words, a beneficiary with 7 children below the age threshold would receive the same amount as a mother with only one child.

An analysis of the coverage of the *Bono* using the Fourth Round of the Household Survey reveals that of the total population of 3.6 million mothers and elderly persons in Ecuador, approximately 1.45 million mothers and elderly persons were eligible to receive the *Bono*, with about 1.28 million actually receiving it (Table 4.2). Just on the basis of these two numbers, one could derive a coverage rate of 88%. However, a more detailed analysis suggests that many who receive the *Bono* would not meet the eligibility criteria laid down by the Government, and that many eligible individuals do not receive the *Bono*.

**Table 4.2: Targeting and Coverage of the *Bono*: Absolute Numbers**

	<b>Eligible Population</b>	<b>Non-Eligible Population</b>	<b>TOTAL</b>
<b>Bono Recipients</b>	590,955	692,985	1,283,940
<b>Bono Non-Recipients</b>	856,442	1,417,795	2,274,237
<b>TOTAL</b>	1,447,397	2,110,780	3,558,177

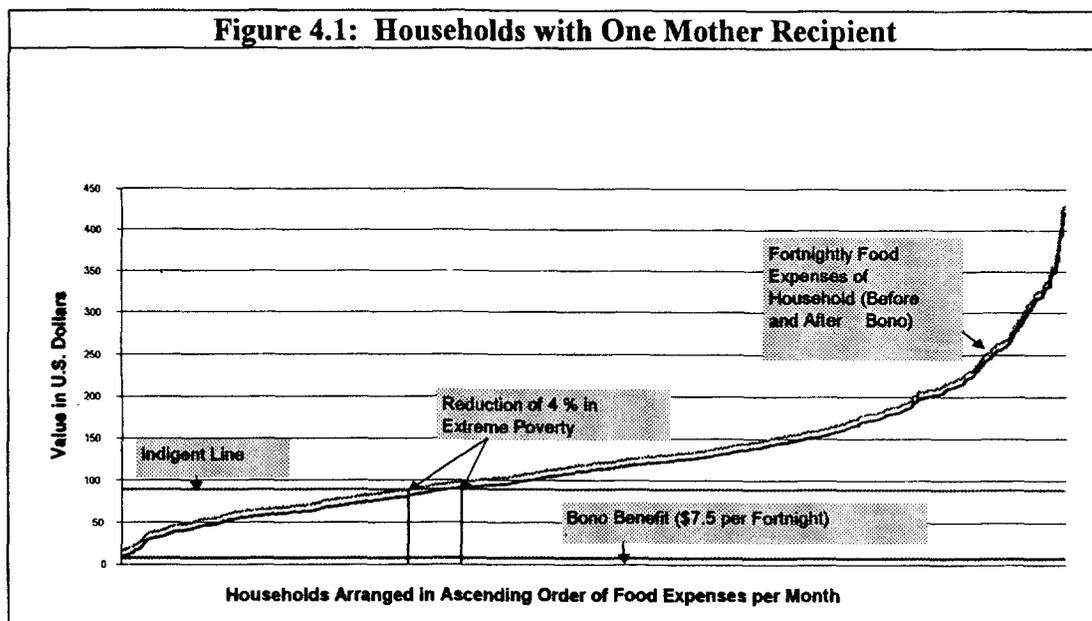
The absolute numbers can be best understood in terms of the percentage of error due to undercoverage (i.e., how many of the eligible population is not covered,) and the error of leakage (i.e., how many of the *Bono* recipients are in fact ineligible). In the case of the *Bono*, analysis of household survey data suggest that the undercoverage is 59%, and the leakage is 54%. While these figures compare favorably with similar programs in many countries, there is clearly much room for improvements. The task of improving both targeting and coverage would be extremely difficult, especially as individuals who have been receiving the *Bono* for over a year and a half would probably like to hold on to their eligibility, and amplifying coverage has its own attendant problems of increasing the fiscal burden and introducing new leakages

**Impact on Poverty.** For the extreme poor, receiving the *Bono* makes a difference. As shown in Chapter I, the per capita expenditures required to purchase a food basket of 2,300 kilocalories per adult per day were about US\$24 per month in 1998, which, given average family size, translates into US\$178 per month. On average, extremely poor families spend US\$126 per month on food, leaving a gap of US\$52. The *Bono* of US\$15 per household per month in mid-1999 covered 29 percent of the gap for the extreme poor and represented 8.4 percent of needed food expenditures. The gap is even larger in mid-2000, though data are not available to estimate it with confidence.

Figure 4.1 illustrates the size of the *Bono* relative to the actual food expenses of households with children. As shown, 35 percent of these households have expenditures less than those required to purchase the required food basket. For a small number (4 percent) of families, the *Bono* makes the difference between being able to purchase the required food basket or not, but the fact that over half of the eligible population fails to receive the *Bono*, combined with its relatively small value, limits its effects on poverty. As shown in Annex 6, the bottom income quintile receives only 28 percent of total *Bono* transfers, and the bottom two quintiles receive 56 percent of total *Bono* transfers.

### C. Programs Targeted on Pregnant Women and Children Under Age Two.

The Solidarity Health Service program (*Atención Solidaria en Salud*) is offered to those holding a *Bono Solidario*, described before, and includes maternal and infant health care. Without this program, a poor woman may have had free services but still was charged for medicines and other costs. In a similar fashion, the recently established Free Maternity program (*Maternidad Gratuita*) by law provides universal coverage for pregnant women using Ministry of Health (MOH) facilities (although the MOH has proposed modifying the law to allow the program to be targeted on only the poor.) This program covers prenatal care, non-standard birth procedures, treatments due to sexually transmitted diseases (STD) or family violence, and cancer-detection tests. This program was only initiated in 1999, with funding from the Solidarity Fund, and it still requires operational procedures that are clearly understood by providers (hospitals or health centers).



*Sample Size: 641*

In addition to these programs, three others provide important benefits to the poor. The MOH's National Micro-nutrient program (*Programa Nacional de Micronutrientes*) aims to reduce anemia by providing iron and vitamin A supplements for children under age five, pregnant women, and breast-feeding mothers. Special attention is given to teenage pregnant women, because of their high incidence of iron deficiency. This program only reaches those children and/or pregnant women that actually visit MOH centers. A MOH-private industry partnership supported under the Basic Health Project (FASBASE) also addresses anemia by fortifying wheat flour with iron, folic acid, and vitamin B.

A second program is Maternal-Infant Nutrition (PACMI), described in Table 4.3 below. The objective of this program is to satisfy the caloric requirements of the poor by providing a monthly food ration to families with a low-weight pregnant woman or malnourished children. Despite establishing a reasonable targeting procedure, weaknesses in transportation and logistics have resulted in increased stocks of food staples that have to be delivered through other institutions (such as INNFA). Benefits reach those who actually visit a Health Center in the country.

A third program is the immunization program which aims to provide universal immunization coverage of pregnant women and children under twelve years old. This program has been in effect for 33 years and was recently expanded to include immunizations such as Hepatitis B, rubella, and parotiditis. This program has recently been expanded with financing through FASBASE.

These programs can be improved in terms of targeting (especially *Maternidad Gratuita*), but the largest constraint on the effectiveness of health care delivery to the poor is low coverage (e.g., PACMI covers only 5 percent of the need) and inadequate funding. Programs that exist in principle—such as Health Solidarity—are not yet implemented due to inadequate funding. Indeed, as was shown earlier, the poor claim that the quality of services provided to them, especially the provision of medicines, has deteriorated during the crisis. Lack of access to health care centers, especially common in rural areas, and the lack of technical health personnel further constrain effectiveness.

**Coverage and Targeting.** The Micronutrient Program is directed to the population that is serviced by the MOH, so it covers a large target population (about 500,000 individuals), but it fails to reach the 40 percent of the poor, who report they do not use public health facilities. When this program began to receive funding via the FASBASE project, targeting criteria were added based on morbidity, mortality, and poverty rates using canton-level information. On the other hand, the Maternal-Infant program is directed to the population with nutritional deficiencies, reducing the target population (to 300,000 individuals) but having very modest results in coverage (about 5%, or 15,000 individuals). Targeting is geographic, with criteria being the incidence of poverty and availability of transportation. As shown in Table 4.4, this program is well-targeted, providing 73% of all benefits to the bottom two quintiles and 61% of benefits to the bottom quintile alone.

#### **D. Programs Targeted on Children under Age Six.**

Ecuador targets nutritional supplements and a variety of other early childhood development (ECD) services to children under age six. In addition, several public health programs—immunizations, malaria control, and tuberculosis treatment—benefit this age group, although only the immunization program is particularly targeted on young children.

Table 4.3: Programs for Children under Six

Program	Agency	Target Group	Services
Child Development Program (PDI)	INNFA	Children 6 months to six years whose parents work outside the home.	Daycare, nutrition, healthcare, parental education.
Child Rescue Operation (ORI)	Ministry of Social Welfare	Children under six in poverty and at risk.	Daycare, nutrition health care, parental education.
Alternative Preschool (PRONEPE)	Ministry of Education	Children 4-6 without success to formal preschool.	Daycare, child and Family education.
Maternal Infant Program (PACMI)	Ministry of Health	Malnourished pregnant women, infants and children (300,000)	Nutrition supplements equal to 22 % of family daily requirements.
Immunizations	Ministry of Health	Children 1-12; pregnant women.	Immunization for measles, polio, tetanus, etc.

In addition to nutrition, these early childhood development services include daycare, preschool education, parental childcare training, and health services. These services are typically delivered in combination (e.g., nutrition supplements with parental childcare education) and are provided by several agencies (the Ministry of Health, the Ministry of Social Welfare, and the National Institute of the Child (INNFA), in addition to municipalities, NGOs, and the private sector). The largest programs are described in Table 4.3. The multiplicity of agencies providing overlapping services combined with the relatively small scale of the programs translates into excessive administrative costs, poor planning, and weak management controls. Unit costs of the two largest programs are high, yet the centers themselves are underfunded and often depend in part on community financing. No evaluations exist to compare the impacts of the various programs

A new program, *Nuestros Niños*, financed by the Inter-American Development Bank, offers the potential to both quickly increase ECD coverage and to improve coordination and management. Rather than directly provide services, *Nuestros Niños* provides financing on a competitive basis to fund proposed improvements and expansions from all providers—governments, NGOs, and private. The cost-effectiveness and targeting selection criteria used to evaluate proposals, combined with improved monitoring of those programs financed through this mechanism, provide strong incentives for increased efficiency and better coordination of the sector.

**Coverage and Targeting.** According to agency reports, the four largest programs benefit more than 120,000 children in the under six age group, with 106,000 enrolled in daycare or preschool programs, while the 1998 household survey reports 164,000 children aged 0-5 enrolled in public and another 102,000 enrolled in private institutions, with an overall coverage rate of 16% and a coverage rate for the first quintile

of 10%. INNFA's Child Development Program provides 65% of benefits to the bottom two quintiles, but only 22% accrue to the lowest quintile. The Ministry of Social Welfare's Child Rescue Operation (ORI) is not well targeted, however. According to the 1998 household survey, the bottom quintile, which has a high percentage of children under age six, represents only 16 percent of total enrollments in childcare and preschool programs.

**Table 4.4: Coverage and Targeting: Program for Children under Six**

Program	Coverage	Targeting Mechanism	Targeting	Unit Cost
Child Development Program (PDI)	38,002	Geographic – high incidence of poverty and children under six.	65% of beneficiaries in 1 <sup>st</sup> and 2 <sup>nd</sup> quintiles.	US\$211 per year
Child Rescue Operation (ORI)	50,296	Proportional by province; poverty map by cantons.	41% of beneficiaries is 1 <sup>st</sup> and 2 <sup>nd</sup> quintiles.	US\$140 per year
Alternative Preschool (PRONEPE)	18,027	None	NA	US\$39 per year
Maternal-Infant Program (PACMI)	14,930 (5% of target group)	Family Poverty index (SISVAN) and self selection. (Those who use Public Health Centers).	73% beneficiaries in 1 <sup>st</sup> and 2 <sup>nd</sup> quintiles.	US\$25 per year
Immunizations	NA	None-universal.	78-100% of universe depending on province.	US\$2.30 per beneficiary

*Source:* World Bank and Government (SIISE) estimates.

While the evidence shows that targeting of government-financed nutrition and early childhood development programs can be improved, a more important concern is coverage. With statistics showing that 39 percent of children in the bottom consumption quintile are malnourished, this group has considerably greater need for programs that meet their basic developmental needs than do children in the top quintile, yet their coverage rate is only one third that of the top quintile. There is an urgent need to raise their coverage, and that will require additional public sector spending. Improved efficiency from the consolidation of publicly funded programs and improved targeting will not provide all the needed resources.

### E. Programs for School-Age Children.

Ecuador provides nutritional supplements, educational improvements, scholarships to reduce child labor, and health services targeted on the school-age population. Since the school is the most effective locus to reach school-age children, at least for those of primary school age, the Ministry of Education is the most important provider. The main programs benefiting poor school-age children are listed in Table 4.5.

**Table 4.5: Programs for School Age Children**

Program	Agency	Target Group	Services
School Snack	Ministry of Education	Public school children in poverty (900,000)	School snack of 272 K/Calories/day
Rural Education (Redes Amigas)	Ministry of Education	Public school children in rural areas.	Teacher training, textbook, create school networks (CEMs), Redes Amigas strengthens school level autonomy and management.
Urban Education (EB/PRODEC)	Ministry of Education	Public school children in urban marginal areas.	Teacher training, textbooks, create school networks (CEMs).
Child Labor (Niños trabajadores)	INNFA	Children 7-15 who work & do not attend school.	Scholarship, tutoring, family education.
Iodine	Ministry of Health	Children 6-12 in public schools of the Sierra	Control salt quality; monitor iodine consumption.

*Source:* World Bank estimates.

**Coverage and Targeting.** The coverage and targeting of these programs is reported in Table 4.6. As can be seen, the only program to have high coverage and good targeting is the school snack program; the Government has proposed increasing this program from a snack of 272 calories per day to a lunch with double that nutritional value, but this initiative has not yet been financed. Both the large education quality improvement projects—PROMECEB in rural areas and EB/PRODEC in urban areas—have also been well targeted, but their coverage has been limited and their benefits are chiefly in the improvement of infrastructure and quality of education, rather than nutrition. Finally, the child labor program run by INNFA appears to be well-targeted and relatively inexpensive, but there is no evaluation of its impact.

**Table 4.6: Coverage and Targeting: Programs for School-Age Children**

Program	Coverage	Targeting Mechanism	Targeting	Unit cost
School Meals	648,600 (71% of target group)	School map and poverty map (SISVAN) to identify parroquias with high malnutrition.	76% of beneficiaries in 1 <sup>st</sup> and 2 <sup>nd</sup> quintile.	US\$0.13 per snack/day. US\$0.25 per lunch/day.
Rural Education PROMECEB/Redes Amiga)	128,469 (16% of rural students)	School map. (PROMECEB); self selection (Redes Amigas).	58% of beneficiaries in poorest cantons.	US\$145/student per year.
Urban Education (EB/PRODEC)	198,065 (17% of urban marginal students)	School map.	Low inclusion error.	US\$108/student per year.
Child Labor (Niños Trabajadores)	12,335 (40% of target group)	Geographic—largest urban centers; census of working children.	NA	US\$45/child/year; US\$200/child/year for children in dangerous occupations.

Source: World Bank and Government (SIISE) estimates.

#### F. The Elderly.

The only social protection program directly targeted on the elderly is the *Bono Solidario*, which provides a benefit of approximately US\$3.00 per household per month to recipients. Due to the low income of most elderly, 68 percent of all elderly are eligible to receive the *Bono*. Nevertheless, as shown in Table 4.7, only 28 percent actually receive it. Those eligible who are not covered is very high—71 percent—far exceeding the 25 percent elderly *Bono* beneficiaries who are not eligible (i.e., leakage).

**Table 4.7: Targeting and Coverage of the Elderly: Absolute Numbers**

	Eligible	Not Eligible	Total
<b>Bono Recipients</b>	150,968	61,562	212,530
<b>Bono Non-Recipients</b>	364,985	182,012	546,997
<b>Total</b>	515,953	243,574	759,527

### G. Social Infrastructure.

The Government has several programs that simultaneously generate temporary employment and provide social benefits to the poor. The Emergency Social Investment Fund (*Fondo de Inversion Social Emergente*, FISE) finances community social infrastructure projects. Special entities, COPEFEN and CORPECUADOR, have been created for the reconstruction and rehabilitation of infrastructure affected by El Niño. There are also infrastructure components within the work of the Ministries of Education, Health, and Social Welfare, which could contribute to employment generation. Another obvious source of public infrastructure investment is the Ministry of Public Works, though their work tends to be large scale and more physical rather than human capital-intensive. The Ministry of Urban Development and Housing also invests a substantial amount in public housing construction. Finally, municipal governments carry out infrastructure projects that improve water, sanitation, local roads, and other facilities that may benefit (but are rarely targeted to) the poor.

While these programs have potential for employment generation for the poor, the Government has not yet developed a well-defined strategy to organize these programs under the explicit objective of public employment generation. If the institutional infrastructure of the existing programs were to be used for expanding public employment in the short-run, a helpful next step may be to identify a designated super-entity within the Government which has the mandate and authority to coordinate these various ministries and other autonomous public entities, and to develop a coherent scheme for generating temporary employment for the poor. In doing so, design features and institutional capacity of each program need to be carefully assessed to determine necessary modifications.

For each of these programs, Table 4.8 summarizes employment generation, targeting mechanisms, and the estimated unit cost of employment created (i.e., total program costs divided by days of employment generated). Each program is reviewed in greater detail in an accompanying annex to this paper. Here, we point to some issues of targeting, coverage, and implementation that constrain the effectiveness of these programs in employment generation for the poor.

**Lack of Clear Targeting.** Some programs, notably FISE, and the infrastructure components of the projects financed by international lending institutions in the education and health sectors, have explicit selection/targeting criteria based on poverty indices. Most of the other existing infrastructure programs do not have a well-established, poverty-based targeting mechanism. During 1999, much of the infrastructure investment was focused on reconstruction and rehabilitation of buildings, roads, and bridges damaged by El Niño. The extent of damage, rather than any poverty indicator, have dictated the selection of projects. If these programs were to be used as instruments for income support for the poor as part of the social safety net, it would be necessary to develop a suitable mechanism of project selection and beneficiary targeting.

Table 4.8: Social Infrastructure Programs

Program/ Agency	Employment Generated	Targeting Mechanism	Unit Cost of One Worker Day*
Social Investment Fund (FISE)	400,000 w/w (work/weeks)	Funds preallocated on basis of canton poverty index; priority given to parroquias with index of unsatisfied basic needs.	US\$20
COPEFEN	226,000 w/w	Municipalities affected by El Niño.	US\$18
CORPECUA DOR	NA	Coastal area affected by El Niño.	NA
PRONADER/ MSW	227,000 w/w	Geographic areas with concentration of small farmers and high poverty.	US\$9
Ministry of Health	92,000 w/w	Health infrastructure in 300 poorest parroquias in coastal area damaged by El Niño.	US\$20
Ministry of Education	227,000 w/w per year	Schools in coastal area damaged by El Niño	US\$10
Ministry of Urban Development and Planning	NA	None.	US\$25
Municipal Governments	90,000 w/w	None.	US\$18

*Note:* w/w refers to work weeks; the unit cost of one worker day is total project costs divided by employment days created.

**Budgetary Constraints Leading to Limited Coverage.** Delays in availability of funds have negatively affected program implementation, particularly for the reconstruction and rehabilitation of infrastructure damaged by El Niño. There has been criticism for its slow progress, although part of the explanation may be the initial planning work required. The same budgetary constraints limit the scope of employment generation in the short-run.

**Legal Impediments for Efficient Program Implementation.** Since the Public Sector Contracting Law (*Ley de Contratación Pública*) applies to contracting of services in these infrastructure projects, administrative inefficiencies resulting from compliance with the law tends to cause significant delay in contract processing. For these infrastructure projects to serve as effective public employment generation tools, a more flexible and streamlined contracting process is needed. This may include raising the threshold costs of contracts to allow direct contracting or direct invitation; waiving ex-ante approval of the National Comptrollers Office for smaller contracts; or the decentralization of ex-ante approval authority to local governments. Certainly, the need for speed of implementation has to be balanced with the need to ensure transparent, fair execution of the program. However, the current situation, where the entire process of hiring workers for a small social infrastructure project takes 6 months on average, needs to be improved to allow faster responses.

For those projects funded by multilateral financing agencies, the law allows that the terms agreed with the lending agencies supercede those in the national law. This should help contracting of workers in emergency public employment projects funded by external financing.

This paper has argued that there is much that Ecuador's authorities can do to offset the effects of the crisis on the living standards of the poor and on human-capital formation. Ultimately, however, the most effective thing the authorities can do is to foster conditions for an early resumption of economic growth. To ensure that poverty declines steadily over the longer term, the most important thing the authorities can do is to complete the structural-reform process, to set the bases for sustainable growth and to reduce the economy's vulnerability to future economic shocks. The means by which the authorities can promote economic reactivation and the content of the remaining structural reform program are beyond the scope of the present work, but are treated in other Bank ESW.

## V. POLICY OPTIONS IN TIMES OF CRISIS.

A government strategy to offset the effects of crisis would typically have three basic components—protection of basic and targeted public services, income or consumption support for vulnerable groups, and new or expanded programs to prevent the crisis from doing permanent and irreparable harm to the poor. Important elements of a social protection strategy already exist in Ecuador. However, Ecuador's record to date on expenditure protection is mixed, with some targeted programs having been protected, while basic health and education services have not been protected.

The *Bono* should be converted into an efficient income assistance program with higher benefit levels targeted on the very poor, with the potential for quickly increasing coverage in times of crisis. However, the large number of beneficiaries in the program, the depth and length of the crisis, and the high costs of raising benefit levels make it fiscally and politically difficult to make the required adjustments in the short-term. An alternative is to introduce tightly targeted programs that complement and build on the *Bono*. These programs would provide cash transfers tied to changes in household behaviors that would protect poor children. They could be implemented during the current crisis and downsized or eliminated afterwards, depending on evaluations of their effects on the welfare of the poor. One complement to the *Bono* would be to introduce an additional cash transfer conditional on routine health clinic visits to protect the health of the most vulnerable of the poor—pregnant and lactating women and children under two years of age. Another complement to the *Bono* would be to introduce a cash transfer tied to school attendance of the children of the beneficiaries. This program would also target one of the most vulnerable groups among the poor—school age children who are at risk of failing to attend or failing to enroll in school during the crisis.

Another option for providing income support would be to introduce a temporary public employment program. This would be difficult to quickly design and implement, especially given the fragile financial conditions of the municipal governments and NGOs which would be expected to provide counterpart financing. Looking towards the medium term, a temporary public employment program could be designed to be taken off the shelf in the event of a new crisis. In the short-term, a practical strategy for generating employment would be to work with the existing Social Investment Fund and with several existing social infrastructure projects to put priority on labor-intensive projects, increase the share of costs financed by the Central Government, and modify procurement and other regulations to facilitate implementation.

Ecuador's existing social protection program was reviewed and evaluated in the previous chapter. In this chapter, we examine policy options to provide income support, to prevent irreversible physical and mental losses, and to prevent losses in human capital. These policy options are guided by the priorities and framework set out in the Government's *Integrated Social Plan* and target the especially vulnerable groups

identified in Chapter 2. Short-term and medium-term strategies for improving social protection are proposed.

### A. Guiding Principles.

In developing a strategy to respond to crises, Governments have several options. One is simply to protect public spending on basic services and on services targeted to the poor, to ensure that the coverage and quality of these services does not deteriorate and thereby exacerbate the economic shocks already having adverse effects on the poor. Another is to provide a safety net for those most adversely affected by the crisis to ensure that their consumption does not fall below some minimum level. Safety nets should be easily and quickly implementable, provide benefits quickly, and be temporary and countercyclical in nature, phasing out as the crisis recedes. A temporary public employment program, like Argentina's *Trabajar*, is an example of a safety net program. A third option is to respond to the crisis by expanding existing programs or introducing new programs to prevent irreparable harm to the poor. These programs may also address the structural causes of poverty and thus be part of the government's longer-term overall poverty alleviation strategy as well. Increasing efforts at poverty alleviation also serves to ameliorate the effects of the crisis on the poor. An example of this third option might be to introduce a new or expanded school lunch program, which would not be expected to end with the crisis.

Few programs are pure safety net or pure poverty alleviation in practice. Temporary employment programs may include training to improve the employability of unskilled laborers. Poverty alleviation efforts, such as a new nutrition program, also provide crisis relief in the form of increased consumption. In recent years, new hybrid programs that combine crisis relief and poverty alleviation have arisen, including Mexico's *Progresa*, Honduras PRAF, and Brazil's *Bolsa Escola* (see Table 5.1). These programs provide cash transfers or vouchers conditional on families enrolling children in school or routinely taking children to health care clinics.

**Table 5.1: Characteristics of Cash Transfer/Food Stamp Programs in Brazil, Honduras, and Mexico**

	<b>BOLSA-ESCOLA, Brazil</b>	<b>PRAF, Honduras</b>	<b>PROGRESA, Mexico</b>
<b>Objective</b>	Promote school attendance, thus reducing dropouts, failure rates, and child labor among children from poor families.	Alleviate impact of structural adjustment on the poor. (Two food stamp programs. One for poor school children, the other for children 0-5 and pregnant, nursing mothers)	Provide integrated cash, health and education assistance to families to reduce extreme poverty and malnutrition.
<b>Implemented</b>	<b>1995</b>	<b>1990</b>	<b>1997</b>
<b>Number of Beneficiaries % Population</b>	22,500 families and on behalf of approximately 43,000 students (1997)	-125,700 school children (1992). -56,200 children 0-5 years old, pregnant, nursing women (1992).	1.9 million families (end 1998).
<b>Target Area</b>	Brasilia	Both rural and urban	Mainly rural
<b>Target Group</b>	<ul style="list-style-type: none"> <li>Low-income households with 7 to 14 years old children</li> </ul>	<ul style="list-style-type: none"> <li>Poor primary school children in selected areas.</li> <li>All 0-5 age children and pregnant, nursing mothers in selected areas.</li> </ul>	Extremely poor families in mainly rural localities. All family members of chosen families are beneficiaries (children, parents).
<b>Targeting Mechanism</b>	<ul style="list-style-type: none"> <li>Participant registration</li> </ul>	<ul style="list-style-type: none"> <li>Schools are selected by Ministry of Education teachers choose children.</li> <li><u>Self-selection</u>. Mothers who attend health posts and centers with their children.</li> </ul>	Families are selected in a two stage process. First poor rural localities are selected on basis of housing and public services. Second, families are selected in those localities
<b>Income and/or Other Eligibility Criteria</b>	<ul style="list-style-type: none"> <li>Household per capita income of half a minimum wage</li> </ul>	<ul style="list-style-type: none"> <li>Eligible children determined by teacher assessment of family income, size and civil status of parents.</li> <li>Villages selected based on aggregate poverty index.</li> </ul>	Families are ranked according to poverty index combining a series of socioeconomic variables in a Logit function.
<b>Value of cash transfer, voucher, or food stamp</b>	<ul style="list-style-type: none"> <li>US\$140 per month for each family on average</li> </ul>	<ul style="list-style-type: none"> <li>- For school children: \$37 per year (distributed biannually). Limited to three children per family.</li> <li>- For 0-5 age children and mothers: \$44 each child and mother per year no limit (distributed monthly in health posts and centers). Data for 1992.</li> </ul>	Value varies with family size and age composition of children. Subsidy for average family per month was 235 Mexican pesos (about US\$26).
<b>Importance of transfer</b>	<ul style="list-style-type: none"> <li>Transfer corresponds to almost 40% of the resulting average family income,</li> </ul>	Stamp subsidies increased disposable income of bottom 30% by 26% in urban and 13%.	Subsidy amount is about 34% of money income obtained by families in extreme poverty.

Given the need for quick response in times of crisis, a good strategy for governments to follow would include the following elements (adapted from Hicks and Griffin, 1998):

- Identify programs that have high impact among the most vulnerable groups of the poor and that should be protected in a crisis;
- Give priority to programs that prevent irreversible losses in human development and human capital;
- Establish means of monitoring expenditures and budgets for essential programs;
- Expand successful programs with low coverage, and cut back poorly targeted programs;
- Improve targeting, including means testing for existing programs;
- Work with existing larger institutions to establish steps that would enable them to expand rapidly in a crisis; and
- Establish a method, using existing data systems, for monitoring the poor and unemployed in a crisis.

With these guidelines and criteria in hand, we propose the following options for Ecuador's crisis response strategy. The options include those that: (a) ensure that basic and targeted services continue to function; (b) improve income support for vulnerable groups; (c) prevent irreversible losses in physical and mental development; and (d) prevent irreversible losses in human capital.

#### **B. Protect Spending and Reduce Poorly Targeted Programs.**

Ensuring that basic and targeted services continue to function typically means protecting the pre-crisis levels of expenditures. For a country like Ecuador, which has a fiscal crisis, high debt service, and a low level of discretionary resources, it is difficult to protect all programs that benefit the poor. Top priority should be given to those programs which provide benefits targeted on the poor especially the most vulnerable groups; and those programs that provide important public goods to society at large (e.g., malaria control). Secondary priority should go to programs providing untargeted basic services and lowest priority to non-basic services that disproportionately benefit the non-poor. In the case of Ecuador, this translates into an argument for giving top priority to protecting expenditures on programs (ORI, INNFA, PRONEPE, *Nuestros Ninos*) targeted on pregnant mothers and young children and on families with poor school-aged children (*Bono Solidario*, school meals, child labor) and on programs with large externalities (immunizations, malaria control). To a large extent, Ecuador has done just that.

What Ecuador has not protected is programs providing basic, untargeted services, such as basic education and basic health. While the Government is no longer deferring the pay of civil servants, rising salary arrears in much of 1999 resulted in major disruptions in the delivery of basic services to the poor and non-poor alike. Furthermore, at the same time that the delivery of basic social services has been cut, untargeted

subsidies have increased significantly. The additional expenditures in untargeted subsidies, has again reached at least 1.5% of GDP, far exceeding the arrears in wages to civil servants. The subsidies to cooking gas and electricity have in this sense come at a very high human cost in terms of higher incidence of disease and infant mortality and higher school repetition and desertion rates.

**Recommendations.** Ecuador's experience has provided convincing evidence of the need to protect the salaries of civil servants providing basic social services. The Government needs to reduce, if not eliminate, the subsidies for cooking gas and electricity.

### C. Improve Income Support for Vulnerable Groups

**Cash Transfers.** While the *Bono Solidario* was not originally designed as an income maintenance program, the crisis has led beneficiaries to view it as such. The analysis of the previous chapter revealed several deficiencies in the *Bono* as an income maintenance program: (a) a high percentage of the eligible poor do not receive the *Bono*, especially the elderly and rural poor; (b) a somewhat smaller percentage of the non-eligible population do in fact receive it; and (c) the value of the *Bono* is small relative to the extreme poverty line and relative to the needs of the extreme poor. In Table 5.2, we estimate the costs of several options that would improve the targeting and impact of the *Bono*.

**Table 5.2: The Annual Cost of Alternative Coverage, Level, and Targeting Changes in the *Bono Solidario* (in US\$)**

Alternative	Description	Total
1	Maintain real value of Bono at April 1999 level.	\$212m
2	Extend coverage to all eligible poor.	\$333m
3	Target <i>Bono</i> only on the sub-indigent poor.*	\$212m
4	More than double benefit levels to eligible sub-indigent poor and retain existing benefit levels for the non-sub-indigent..	\$377m

\* Increase *Bono* level to mothers to \$36/month and to the elderly to \$18/month.

Source: World Bank Staff estimates.

Table 5.2 reports the costs of four alternatives. The first alternative does not alter the targeting or coverage of the existing *Bono* but does retain the real value of the *Bono* as of April 1999, when it was raised to US\$15 for mothers and US\$7.50 for the elderly. The total cost of the program (US\$212 million) is thus equal to that of April 1999 as well.<sup>1</sup>

<sup>1</sup> As of June 2000, these values were US\$6.00 for mothers and US\$3.00 for the elderly, with total program cost at US\$99 million. As noted in Chapter VI, it is difficult to accurately compare the purchasing power of the *Bono* over time given the sharp depreciation of the Ecuadorian currency.

**Increasing Coverage.** The second alternative would extend coverage to all the eligible poor without making any changes in targeting, resulting in an increase in program cost of US\$121 million, which is approximately equal to the current cost of providing *Bono* payments to recipients who are not eligible.<sup>2</sup> Improving targeting to reduce the percentage of benefits going to the non-eligible from the current 33 percent to 22 percent would yield \$40 million in savings and finance about one-third of the cost of extending coverage to all the eligible.<sup>3</sup>

**Increasing Benefit Levels.** Since the small benefit of the *Bono* limits its impact on poverty, the third alternative takes the April 1999 level of *Bono* expenditures and asks what benefit levels could be provided if coverage were restricted to the sub-indigent poor, defined here as those households with no more than half the current maximum eligible income level of US\$100. The answer is that all the sub-indigent poor mothers could receive US\$36 per month, and the elderly could receive US\$18 per month.<sup>4</sup> Alternative #4 would increase the amount of the *Bono* to these levels for all the sub-indigent and also retain all current beneficiaries of the *Bono* at the benefit levels of US\$15 and US\$7.50. The additional cost would be US\$165 million. Improvements in targeting could realistically reduce the additional cost by about one third.

**Summary and Recommendation.** The size of the *Bono Solidario* program in terms of number of beneficiaries means that any significant changes in coverage, targeting, or benefit levels yield large changes in the annual expenditure of the program. Improving targeting and dropping large numbers of non-eligible beneficiaries from the program in a time of economic crisis is politically difficult. On the other hand, simply increasing coverage and benefit levels is very costly.

Given the likely difficulties in time and in political capital to adjust the targeting of the *Bono*, the best short-term option may be to simply maintain the real value of the *Bono*, while designing the adjustment that should occur in the medium-term. While the preferred medium-term option depends on what other changes are made in government programs benefiting and protecting the poor, serious consideration should be given to restricting coverage to the sub-indigent poor, raising their benefit levels, and improving targeting to reduce the leakage of benefits to the non-eligible.

**Workfare.** An alternative to cash transfers is a public employment program that pays below market wages and targets through self-selection. One model of such a program is Argentina's Trabajar program, which was introduced in 1997 after the national rate of unemployment reached 17% and the unemployment rate of the bottom decile reached 40%, a situation not dissimilar from Ecuador. The Trabajar program invites local community groups (municipalities and/or NGOs) to submit project proposals, which are evaluated by the program in terms of their location (priority to poor geographic areas), the public benefits that result from the project, and the capacity of the

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<sup>2</sup> At June 2000 benefit levels, the increase in cost would be about US\$56 million.

<sup>3</sup> At June 2000 benefit levels, these savings could be US\$18 million

<sup>4</sup> At the \$99 million level of *Bono* program cost as of June 2000, the recalculated benefit level for the sub-indigent would be significantly lower.

sponsoring agency to implement the proposed project. Since workfare programs cost about \$4 to transfer \$1 to the poor through employment, the projects have to create assets with large public benefits to be economically feasible. The Central Government finances all labor costs, while sponsoring agencies finance all other project costs. In order to use self-targeting, the program set the wage rate at 2/3 of the average wage rate for the poorest decile in the Buenos Aires metropolitan region. The project was under implementation six months after the beginning of planning. Eighty percent of the participating workers in Trabajar came from the bottom quintile.

A possible workfare program for Ecuador might have a design similar to Trabajar, with the Central Government financing all labor costs, municipalities and NGOs financing non-labor costs, and targeting done via self-selection with a wage rate set at half the average wage rate (\$52 as of 1998) for the lowest quintile. Assuming the program would pay a wage of \$26 per month and would cover enough workers (62,000) to reduce the urban unemployment rate by two percent, the annual cost of the program would be approximately \$94 million, with \$18.7 million paid in salaries to workers.<sup>5</sup>

While the cost of workfare is an important deterrent to its adoption, two other factors may be even more important constraints to implementing workfare in Ecuador in the short-term. First, unlike Argentina, Ecuador has no prior experience with implementing a national program of this scope, which suggests that it would probably take longer than six months to begin implementation. Second, the large arrears in Central Government transfers to municipalities have left them with no capacity to finance non-labor costs. Therefore, in the short term at least, the Central Government would need to pay a very high percentage of total costs of the program. Third, aside from the large urban centers of Cuenca, Guayaquil, and Quito, municipal governments have limited experience in managing projects.

**Social Infrastructure.** A short-term option available to the Government to generate employment would be to provide financing and regulatory changes to permit more rapid execution of existing social infrastructure programs managed by the FISE, CORPECUADOR, and various ministries, as well as reducing arrears of transfers to the municipalities, which are required to spend a significant share (about one-third) of their revenues on investment. If implemented, these various programs could generate as much as 28,000 temporary new jobs annually. However, Ecuador's experience to date with the FISE indicates reaching this target might be difficult (Vos, et.al., 1999)

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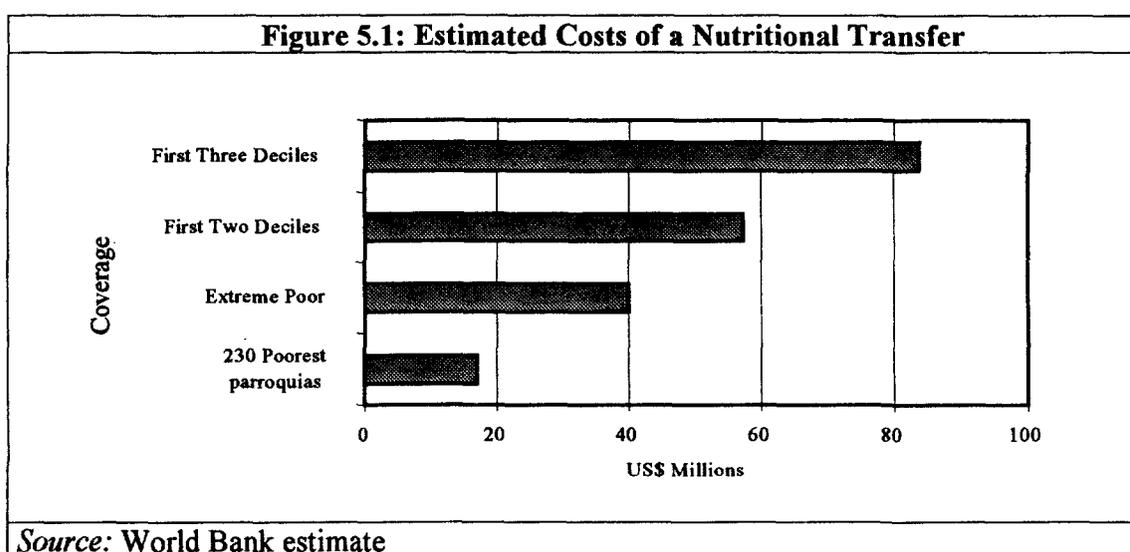
<sup>5</sup> At June 2000 wage rates, both benefit levels and program costs would be considerably lower.

### D. Preventing Irreversible Losses in Physical and Mental Development.

Temporary crises can lead to irreversible losses in human development. As shown in Chapter 2, poor households in Ecuador are adjusting to lower incomes by reducing food consumption and delaying medical attention, especially for women and children. The unusually high vulnerability of this group argues that they be given the very highest priority in any program of social protection.

As discussed in Chapter 4, Ecuador's current programs, mainly PACMI, to address the nutritional and health needs of poor pregnant women and mothers are woefully inadequate, addressing only about 5 percent of the malnourished target group and only 4 percent of women and mothers in the bottom quintile. While the guarantee of Free Maternity care may improve this situation for some, in and of itself it does not ensure the poor use public health care facilities, which are sometimes costly to access, nor does it provide additional income that could be used to purchase nutritional supplements.

**Nutritional Voucher.** One proposal to address this unmet critical need is to provide a financial incentive in the form of a nutritional voucher or cash transfer for pregnant women and women with children 0-24 months old to regularly visit public or private health care facilities. Patterned loosely after Honduras' PRAF program, the financial incentive would take the form of a cash transfer to eligible mothers who visit a public health post for regular checkups and well-baby care. Evidence from surveys of how mothers use the *Bono Solidario* suggests that a high percentage of the transfer would go to food.(CONAMU, 1999). Figure 5.1 summarizes the cost of providing a monthly transfer of US\$12 to each pregnant woman and mother with children 0-24 months old, under four different assumptions as to coverage and excluding leakage to non-eligible beneficiaries. These estimates do not include the costs associated with the increased provision of health care to transfer recipients. (See Annexes for a more complete analysis.)



## **E. Prevent Irreversible Losses in Human Capital.**

Temporary crises can result in permanent losses in productivity and employment income to the poor and constrain the future economic growth of the country. Families at all income levels respond to lower incomes by reducing their spending, including spending on education and health. The high levels of household spending on education and health, even at the two lowest household consumption quintiles, puts Ecuador at particular risk of having lower human capital in the future as a result of household decisions made in response to the current crisis. Since human capital is a key factor in future economic growth—and more so than ever in the 21<sup>st</sup> century—and since human capital is also a major determinant of poverty status, the Government must consider policy alternatives that would reduce or eliminate the risk of lower human capital.

Crises can lead to reduced school enrollments and reduced school attendance, which, combined with a lower quality of education, reduce the human capital of children, result in smaller earned income and an increased probability that children will themselves eventually be heads of households in poverty. To prevent this reduction in human capital and ensure future employment income, governments need to reduce the cost of schooling and maintain its quality. In what follows, we assess alternative policy options to do this, including providing financial incentives to families in the form of school scholarships, instituting incentives to teachers to reduce their absenteeism and to encourage student attendance, and reducing the private costs of schooling through the public provision of textbooks.

**1. Ensuring School Attendance and Enrollment.** Several countries, including Brazil, Honduras, and Mexico, have introduced financial incentives to poor families to keep their children enrolled in schools. While the precise mechanism varies, all these schemes provide cash to families that can provide evidence that their school-age children regularly attend class. In Table 5.3, we examine the costs of establishing a similar program in Ecuador, under three different program designs for the three bottom deciles of household consumption.

All alternatives specified in Table 5.3 presume a scholarship of \$5 per month per child enrolled in public or private school (Note that \$5/month would cover only about half the total estimated direct and opportunity cost of schooling to the family; see Vos et.al., 1999). Since most children aged 6-11 are already enrolled in school, providing a scholarship would generate at most an additional 60 thousand students enrolled. On the other hand, a scholarship program focused on children aged 12-15, where enrollment rates are lower, would generate at least 93 thousand additional students, not including an additional 50 thousand students who are ill, work full time, or have no access to school. In the third option, only children aged 6-15 enrolled in primary school would be eligible for a scholarship, and this would generate an estimated 107 thousand additional students. All of the options would increase actual attendance at school.

**Table 5.3: The Annual Cost of School Scholarships in Ecuador**

Alternative	Age Group	1 <sup>st</sup> Decile	2 <sup>nd</sup> Decile	3 <sup>rd</sup> Decile	Total Cost	Added Enrollment (°)
1	Children 6-11	\$9.3m	\$8.9m	\$8.2m	\$26.4m	60,257
2	Children 12-15 Adjusted	\$5.3m	\$5.3m	\$4.8m	\$15.4m	92,924
3	Children 6-15 in Primary School With Limits	\$12.3m	\$12.3m	\$11.4m	\$35.1m	107,339

\*Note: All three deciles.

Source: World Bank estimates.

Which of the options given is preferred depends on the specific goals of policymakers, and the likely impact and cost of the options, as summarized in Table 5.4 below:

**Table 5.4: Preferred Options for School Scholarships.**

Goal	Preferred Option
Ensure poor households can finance private costs of education.	Target households with children in primary school, where most poor children are already enrolled.
Increase the attendance of children already enrolled.	Target households with children in primary or secondary school where absenteeism is under the control of the household.
Increase the enrollment of poor children.	Target households where enrollment rates are low, in particular at the lower secondary level.

If the goal of the program is primarily to ensure the poor with school-aged children have the minimum income required to pay for the private costs of schooling, an option should be selected that covers most of the poor. Given that the net enrollment rate for the first quintile is 0.88 for primary school and only 0.11 for secondary school, the preferred option would be one that includes primary school children. If the goal of the program is to ensure and possibly raise school achievement and grade attainment by reducing high rates of student absenteeism, an option should be selected that reduces absenteeism per student the most. Finally, if the goal of the program is to increase the enrollment of poor children, an option should be selected that targets households with low probability of employment.

The social benefits of these options depends critically on the response by children and households to the financial incentive offered by a school scholarship. Variables that will influence the household decision to have students attend school include: (a) the private cost of public schooling, (b) the opportunity cost of schooling, measured by the difference in income between children who attend school and work and those who do not

attend school and work, and taking account of the value of nutrition and health services that may be offered by the school, and (c) the perceived economic gain to the child and family associated with additional schooling. A cost-benefit analysis of a US\$5/child per month scholarship for children aged 6-15 in primary school predicts a large net present value (see Annex 3), with much of the benefit attributable to parents first enrolling their children at the appropriate age. The same analysis shows that the transfer itself would have an important positive impact on poverty reduction. The per capita income gap of households below the 20<sup>th</sup> percentile was calculated as a percentage of the per capita income at the 20<sup>th</sup> percentile. This income gap measure, calculated before and after the income transfer of the *Beca Escolar*, would fall from 0.35 to 0.25 for rural areas.

**2. Assuring Quality of Instruction.** One hypothesis as to why parents fail to send their children to school is that they do not perceive that schooling has a high payoff. One contributing factor to this perception is the low quality of schooling itself. Teachers who have to travel to rural schools from urban areas are frequently absent on Mondays and Fridays. Teachers have few school materials with which to teach, and children often lack the basic required textbooks. In short, both the effective quantity of instructional time and the quality of that instructional time are often lacking, resulting in children not learning. A school scholarship program that assures children attend school will do them little service if issues of instructional time and the quality of instruction are not also addressed.

**Incentives for Teachers.** One of the largest benefits of a student scholarship is likely to be increased school attendance, presuming any design would require students to attend as well as to enroll in schools. According to the 1998 ECV, children aged 6-11 and 12-14 in the bottom two consumption quintiles fail to attend schools a total of 4.6 and 5.8 days, respectively, per month. However, only 1.3 and 1.6 days, respectively, are missed due to reasons under the control of the household, and the two most important reasons for non-attendance that lie outside the control of the household are weather and non-attendance by the teacher. While little can be done about the weather, reduced teacher absenteeism could significantly increase school attendance and, thus, learning by children.

Financial incentives to assure teacher attendance in difficult areas (either rural areas where commuting is difficult or urban marginal areas where teaching conditions are difficult) could reduce the number of school days missed by students and, as a result, raise learning and school productivity. Evidence from other countries (e.g., Mexico, El Salvador) shows that communities can effectively monitor teacher attendance, and teachers strongly respond to the financial incentive. The appropriate size of the incentive is something to be determined; here we assume a monthly benefit of US\$25, equivalent to about 8 percent of average teacher monthly salary. Also, we assume this incentive would be geographically targeted on the poorest cantons or parroquias. The estimated costs of a teacher incentive program are given in Table 5.5, which gives estimates for two coverage options for a program of teacher incentives. The costs range from \$3.0 million to provide incentives for teachers only in the very poorest (Priority I) cantons to \$13.1 million to provide incentives for teachers in all poor cantons (Priorities I and II).

**Table 5.5: The Annual Cost of School Quality Improvements**

Cantons	Cost of Teacher Incentives	Cost of Texts and Materials	Total Cost
<b>Primary Schools</b>			
Priority I	US\$3.0m	US\$4.8m	US\$7.8m
Priority I & II	US\$13.4m	US\$22.2m	US\$35.6m
<b>Secondary Schools</b>			
Priority I	US\$3.3m	US\$2.7m	US\$6.0m
Priority I & II	US\$14.3m	US\$11.9m	US\$26.2m

Note: (a)US\$10/pupil; (b) US\$15/pupil

**Textbooks.** As shown below in Table 5.6, the costs to households of public education are high. The average household in the bottom consumption quintile spends \$2.40 per month on school-related expenses for each primary school child and \$5.31 per month for each lower secondary school child. In a time of crisis, when incomes decline, poor households reduce their spending on school-related expenses, either by sending children to school less frequently (to save on transportation expenses), or sending them to school without textbooks and basic school supplies. While an attendance-based school scholarship can be expected to provide adequate incentives for most parents to send their primary school age children to school on a regular basis, it does not ensure that students will have the necessary inputs for effective learning. In short, school scholarships can improve attendance, but they cannot ensure the quality of schooling.

**Table 5.6: Monthly Household Expenditures per Student on Public Education for the Lowest Consumption Quintile**

Category	Level		
	Primary	Lower Secondary	Upper Secondary
Transport	937	3,510	5,373
Texts & Materials	5,011	10,818	23,376
Other	3,171	14,656	27,858
<b>TOTAL</b>	<b>13,120</b>	<b>28,983</b>	<b>56,608</b>
Monthly in US\$	\$2.41	\$5.32	\$10.39
Annual in US\$	\$21.69	\$47.88	\$93.51
As Percent of Total Household Consumption	1.6%	2.9%	5.4%

Source: ECV, 1998.

A government program to distribute free textbooks to schools enrolling high proportions of poor students is one way to reduce the price of schooling to poor families and to simultaneously provide some minimum floor to the quality of schooling. Drawing on the World Bank and the Inter-American Development Bank experience in procuring

textbooks in Ecuador, Table 5.5 gives annual cost estimates for providing textbooks and teaching materials to four alternative target groups.

#### F. Strategic Options.

Like many countries, Ecuador faces an uncertain future. Crises of different origins—external economic shocks, natural disasters, man-made policy mistakes—are likely to occur. The expectation of continued crisis requires that Government have a coherent strategy to protect the most vulnerable groups in society and to prevent permanent harm to the groups most affected by the crisis. This strategy should establish clear priorities for expenditure protection as well as include programs that could be quickly introduced or expanded. Important elements of that strategy already exist in Ecuador. Table 5.7 below summarizes: (a) the elements of the Government's current strategy; (b) changes that might be introduced in the short-term to improve protection, and (c) changes that might be introduced in the medium-term to improve protection for future crises and to sustain current efforts.

Short-term improvements to social protection include introducing a geographically targeted *Bono Materno-Infantil*, introducing a *Beca Escolar* and a minimum package of school supplies, and providing financing to implement existing civil works programs. In the medium term, coverage of the BMI would be increased using proxy means tests for targeting, the *Beca Escolar* program would be expanded to include lower-secondary students, and the coverage of the elderly by the *Bono Solidario* would be significantly improved. In addition, the *Bono* itself would be adjusted to allow higher benefit levels to be paid to a smaller number of beneficiaries, at no net increase in total spending, and a temporary public employment program would be designed for rapid implementation, should it be needed in a future crisis.

Improvements in social protection programs, several of which may have external financing, will not be sustained in the medium to long term in the absence of reforms in the organization, financing, and delivery of social services. In general, this entails changing the way public expenditures are managed, delegating decision-making and granting more managerial discretion over personnel and budgets at the point of service delivery, developing alternative service delivery arrangements, such as contracting with NGOs and the private sector, and developing the capacity to monitor and evaluate programs and policies.

Table 5.7: Strategies for Social Protection

Target Group	Current Strategy as Implemented	Short-Term Additions to the Current Strategy	Medium-Term Improvements
<b>Pregnant women, mothers, children &lt; 2</b>	Basic package of health services including key public health interventions (immunizations, micronutrients) and basic clinical services in poorest parroquias.	Improve access to and quality of health of basic clinical services in poorest parroquias; introduce <i>Bono Materno-Infantil</i> (BMI), targeted on poorest parroquias.	Improve public health organization and financing to sustain improved services to poor; increase coverage of BMI using proxy means test
<b>Children 3-5</b>	Increase coverage of ECD programs.; basic package of health services.	Increase rate of growth of coverage of ECD; improve access to basic clinical health services.	Ensure ECD coverage reaches rural poor.
<b>School Age Children</b>	Maintain very small child labor scholarship program and high coverage of school meals; implement quality improvements in primary schools in poor areas.	Introduce <i>Beca Escolar</i> (BE) program at primary level, school materials to primary schools in Priority 1 cantons.	Expand BE to secondary level, provide school materials to primary and secondary schools in Priority 1 & 2 cantons; improve education organization and financing to broaden and sustain quality improvements.
<b>Elderly</b>	Maintain eligibility for <i>Bono</i> .	Increase real value of <i>Bono</i> to elderly.	Reduce targeting errors of <i>Bono</i> to elderly.
<b>New Poor</b>	None.	Create public employment by implementing existing civil works programs.	Create <i>Trabajar</i> -type program to be quickly implemented.
<b>All Poor</b>	<i>Bono Solidario</i> .	Maintain real value of the <i>Bono</i> .	Retarget <i>Bono</i> using proxy means test; reduce coverage and increase benefit level.
<b>Expenditure Protection for Broad Based Social Services.</b>	None; permit serious erosion in service quality.	Ensure timely pay of essential civil servants and ensure minimum level of non-teacher inputs.	Protect key non-personnel expenditures.

## VI. FINANCING IMPROVEMENTS IN SOCIAL SERVICES.

Given the depth of the economic crisis and the deterioration of social services of the past few years, there is an urgent need to strengthen social protection and raise the coverage and quality of basic education and health. Additional resources will be required to implement both the short- and medium-term strategies, but the fiscal environment for obtaining these additional resources is unusually difficult.

Social sector expenditure declined sharply in dollar terms in 1999 in comparison with 1995-1998, and the combination of increased interest payments and decreased revenues has led to a significant reduction in year 2000 spending levels. With the crisis, the Government's resource envelope for the social services has shrunk, and, even with the increase in the Value Added Tax (VAT) rate from 10 to 12 percent beginning in 2000, is unlikely to reach real 1995 levels in the next three years. Thus, the social sector resource envelope is shrinking at precisely the time when social protection programs most need to be improved and strengthened.

The required financing for improved social protection must be put in perspective. At the same time that traditional social sector spending on health and education has been declining, a large, new cash transfer program (*the Bono Solidario*) was introduced in late 1998, and costly price subsidies for cooking gas and electricity were allowed to reemerge in 1999. In addition, Ecuador has maintained relatively low tax rates and, until recently, has failed to implement public sector management reforms that could yield significant efficiency gains. In short, finding the financing for improved social protection has as much to do with political will and commitment to poverty alleviation as it does with the macroeconomic situation.

The previous chapter set out a strategy for improving social protection in a time of crisis. In this chapter we estimate the cost of implementing that strategy, and assess the possibilities of financing the strategy within the Government's expected social sector resource envelope. Finally, we discuss policy options that might permit increased social sector spending. It is clear that the Government faces very tight tradeoffs as it seeks, simultaneously, to manage its excessive public-debt stock and provide adequate levels of social-sector support.

### A. The Cost of Improving Social Services.

In 1999, total Central Government social sector and social protection spending, including the *Bono Solidario*, was about seven percent of GDP. Of this amount, 3.1 percent of GDP was in targeted programs, including 1.3 percent of GDP in cash transfers (the *Bono Solidario*). Total expenditure on targeted programs was US\$260 million, or \$21 per capita.

Short-term and medium-term improvements in social protection and social services were defined in Table 5.7. Short-term improvements to social protection include introducing a geographically targeted *Bono Materno-Infantil* and a *Beca Escolar* to complement the *Bono Solidario*, in addition to ensuring a minimum package of school and medical supplies, and providing financing to implement existing civil works programs. In the medium term, coverage of the BMI would be increased, the *Beca Escolar* program would be expanded, and the coverage of the elderly by the *Bono Solidario* would be significantly improved. Another option for the medium term is to create a new temporary public employment program to be implemented only in times of high unemployment.

The estimated cost of improving social services is given in Table 6.1. The additional cost (above the current strategy) of short-term improvements is US\$4 per capita, or an increase of 0.3 percent of 1999 GDP. The additional cost (above the current strategy) of medium-term improvements is US\$10 per capita, or an increase of 0.9 percent of GDP. And the additional cost of implementing a public employment program in the medium-term would be US\$6 per capita, or 0.5 percent of GDP above the cost of medium-term improvements. The possibilities of financing any of these improvements depends, of course, on the resource envelope available for social spending, including the size of the Solidarity Fund (See Appendix 7).

**Table 6.1: Estimated Cost of Improving Social Services (in US\$)**

	<b>Current Strategy as Implemented</b>	<b>Short-Term Improvements</b>	<b>Medium-Term Improvements (MTI)</b>	<b>MTI+ Public Employment Program</b>
Total Expenditures (millions)	\$260m	\$310m	\$388m	\$457m
Expenditures Per Capita	\$21	\$25	\$31	\$37
Expenditures as Percent of 1999 GDP	1.8%	2.1%	2.7%	3.2%

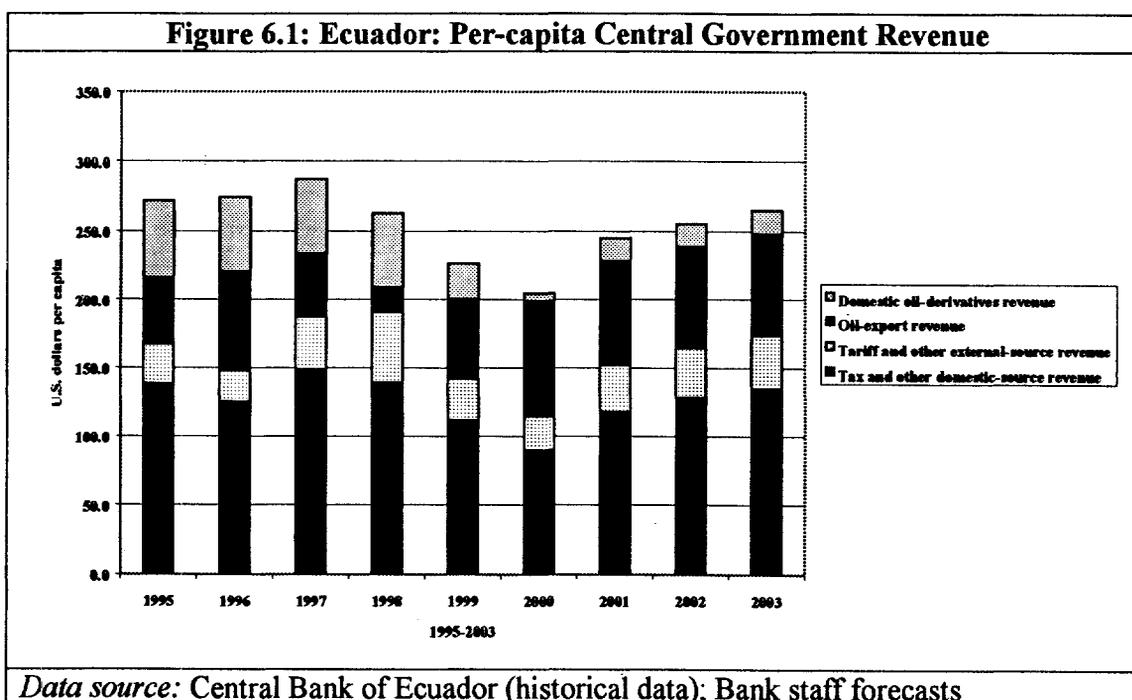
Source: World Bank Staff estimates.

## **B. The Resource Envelope.**

Ecuador now faces a particularly tight fiscal constraint. This has raised inevitable questions about the Government's capacity to maintain an adequate flow of social sector expenditures, defined here as the sum of expenditure in education, health, social welfare (including the *Bono Solidario*), and several smaller government programs. Taken together, the reduction in domestic revenue resulting from the decline in real GDP, the increase in interest due resulting from the need to finance commercial-bank recapitalization as well as the Central Government's deficit, and the loss of access to external and domestic financing sources have constrained the "resource envelope"

available to the Central Government for non-interest expenditure generally and social-sector expenditure in particular.

Figures 6.1 and 6.2 show the recent evolution of the Central Government's finances from a perspective that characterizes the nature of the problem. Figure 6.1 shows the Central Government's revenue flows, comprising petroleum revenue, and non-petroleum revenue, in per-capita U.S.-dollar terms, for the years 1995-1999 and for a forecast period going out to 2003. In the four years 1995-1998, the Central Government had revenue resources averaging US\$275 per capita. With the crisis, this declined to about US\$225 in 1999, and is forecast to decline still further in 2000.<sup>1</sup>



At the same time, per-capita Central Government expenditure, which averaged just under US\$325 in 1995-1998, fell to US\$280 in 1999. Figure 6.2 shows the Central Government's overall expenditure, and how it is allocated into social expenditure, other non-interest expenditure, and interest due. (By definition, total expenditure also measures the total resource envelope available to the Central Government from revenue *and* from net external and domestic borrowing.) Overall expenditure is forecast to fall below US\$230 in 2000, then recover in subsequent years. Non-interest expenditure,

<sup>1</sup> In this, as in subsequent aspects of this analysis, it is important to remember that in 1999 the exchange rate depreciated unusually sharply in real-effective terms, and the real-effective exchange-level over 2000 will continue to be sharply depreciated. One consequence, however, is that dollar magnitudes during 2000 have a higher purchasing power than in other years. To this extent, reductions in dollar amounts correspond to somewhat smaller reductions in purchasing power. As Ecuador's domestic price level rises, the real-effective exchange rate can be expected to appreciate to Ecuador's longer-term average level, and movements in dollar magnitudes will come then to correspond more closely with changes in purchasing power.

however, which averaged just under US\$250 per capita during 1995-1998, declined to US\$165 in 1999 and is forecast to decline below US\$140 in 2000, and then recover only to the range of US\$180-US\$225 in the forecast years thereafter. Per-capita social expenditure declined from around US\$75 in 1995-1998 to about US\$50 in 1999. It is forecast to fall even lower in 2000, then recover to about US\$70 in the subsequent forecast years.

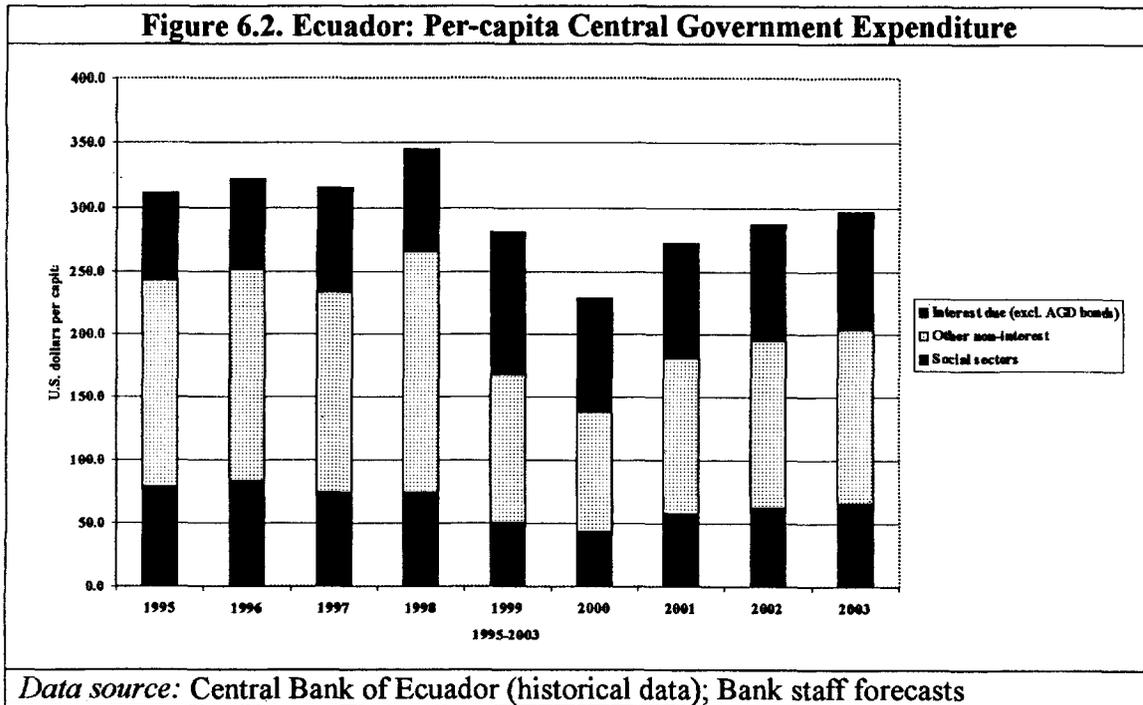
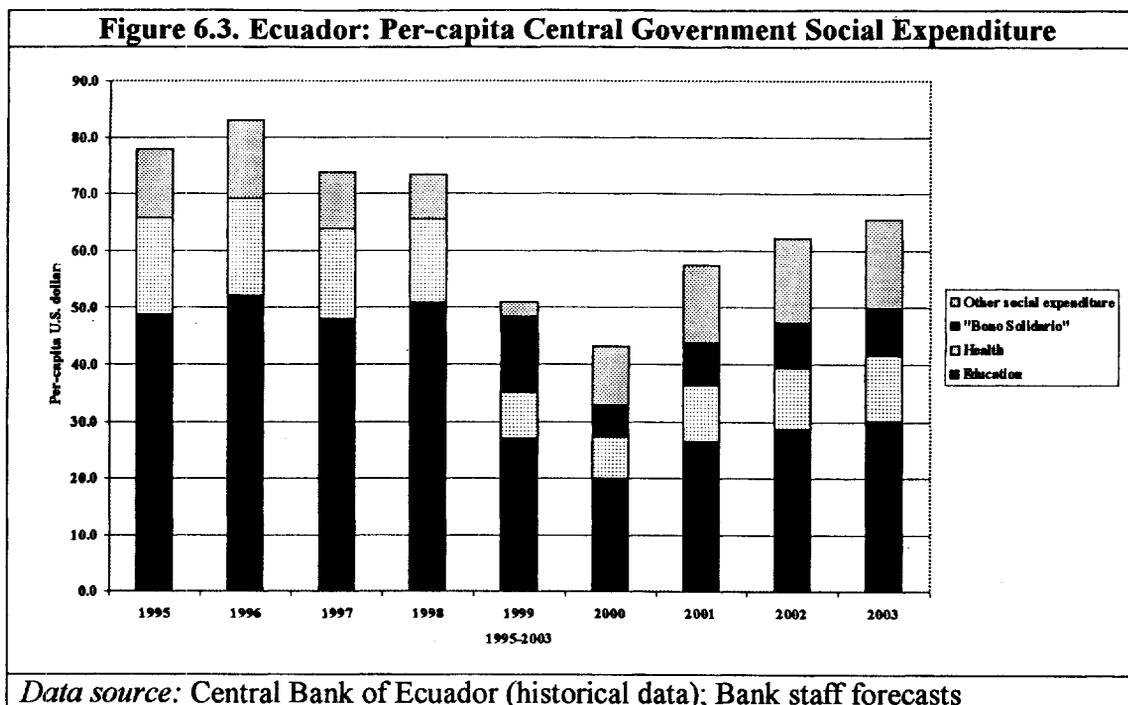


Figure 6.3 gives more details on the performance and forecast of per-capita social expenditure. The collapse in per-capita social expenditure in 1999 in U.S. dollar terms is evident: the sum of expenditure on education, health, and the newly introduced *Bono Solidario* were, together, less in U.S.-dollar terms than education expenditure alone in 1998. These flows are forecast to dip sharply in 2000, but then to rise after 2000.



The forecasting exercise is constructed from a relatively large number of assumptions. The most important are (i) real GDP growth of 0 percent in 2000 (following a decline of 7.3 percent in 1999), then growth rates rising gradually to 3.5 percent over the period 2001-2003; (ii) maintenance of the relatively high oil-export price through 2000, followed by a ten-percent decline in 2002 but then maintenance in real terms thereafter; (iii) some recovery in imports from the 50-percent drop in 1999, and hence some recovery in tariff revenues, over the period; (iv) an increase in the overall domestic tax yield, as a consequence of tax increases approved toward the end of 1999 (including the increase in the value-added tax rate from 10 to 12 percent); (v) social sector expenditure increases at a rate equal to the combined growth rates of population and the domestic price level; (vi) net external borrowing according to the IMF program; average interest rates of (vii) 7.8 percent on public external debt (based on historical experience and forecast tendencies in world interest rates) and (viii) 5.5 percent on domestic debt; (ix) bond issues by the Treasury to help recapitalize or pay deposit insurance for commercial banks, amounting to US\$300m in 2000 (with interest capitalized) but nothing more thereafter; (x) no extraordinary valuation changes in debt-stock values – that is, the public debt stocks increase or decrease only through disbursement and repayment. Net borrowing in domestic markets is calculated in each year to the exact amount necessary to complete the financing of the Central Government.

The forecast years in Figures 6.1, 6.2 and 6.3 show the evolution of the Central Government's revenue, resource-envelope, and expenditure flows under these assumptions. In addition, Table 6.2 below shows the recent and forecast evolution of the Central Government's accounts in terms of percent of GDP, along with its overall external and domestic indebtedness, under the assumptions indicated. In this scenario, the Central Government's overall deficit would decline from its high 1999 level of

4.2 percent of GDP to about 2.3 percent by 2003. The Central Government's overall debt stock would rise to 156 percent of GDP by the end of 2001 before declining to 107 percent by the end of 2003. (A substantial proportion of the movement in these figures mentioned results from the high volatility of the real-effective exchange rate and the price level.) Because of the high interest bill, however, the Central Government would have to run a very high, if gradually declining, primary surplus.

The persisting high debt-GDP ratio in this forecast, together with the high required primary surplus, raise obvious doubts that Ecuador's Central Government can simultaneously maintain adequate social-sectors expenditure and manage the Central Government's debt stock appropriately. The high required primary surplus, in particular, indicates that the Central Government would be absorbing a large share of resources from the economy without turning it back in domestic expenditure. This in itself can be expected to act as a brake on real growth (which, it is important to remember, the exercise takes as exogenous). In addition, it is a source of concern on political grounds, in that it assumes that Ecuador would continue to maintain tax payments that go in large measure for debt service rather than for services that serve the economy's longer-term developmental interests and objectives.

Ecuador's policy makers are, of course, well aware that they must set policy within a very narrow constraint. This is one of the reasons why they have sought a reduction in their external indebtedness. If the foregoing exercise is carried out in all ways the same except for a 30-percent reduction in the external debt stock outstanding at the end of 2000, the interest bill would be reduced accordingly and the overall deficit would be about 0.6 percentage points of GDP lower on average over the forecast period. This would reduce the Central Government's outstanding debt-GDP ratio to 90 by 2003, still a high ratio, but lower than the 107 percent resulting from the base scenario.

In coming years, because its fiscal constraint is so tight and because the Central Government will be called upon simultaneously to address the social crisis, the banking crisis, and the need to limit the public debt, the Central Government will have to plan its resource flow and its expenditure allocations carefully so as to balance among its objectives. This will constitute a continuing challenge to policy makers.

Table 6.2. Ecuador: Summary Central-Government Accounts

	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Central Government balance</b> (excl. interest on Treasury bonds issued for the AGD)	-1.6	-2.6	-1.4	-4.8	-4.2	-2.1	-2.0	-2.3	-2.3
<b>Primary (non-interest) surplus:</b>	1.8	1.4	3.3	-0.1	5.0	7.4	5.2	4.4	4.1
<b>Interest due:</b>	3.4	4.0	4.7	4.7	9.1	9.5	7.2	6.7	6.5
<b>Total revenue:</b>	17.4	16.9	17.4	16.2	19.2	22.5	20.3	19.6	19.3
<b>Oil revenue:</b>	6.7	7.7	6.1	4.5	7.1	9.8	7.7	6.9	6.7
Crude-oil exports	3.1	4.4	2.8	1.1	4.9	9.3	6.3	5.7	5.5
Domestic sales of oil derivatives	3.6	3.3	3.2	3.3	2.2	0.6	1.4	1.2	1.2
<b>Non-oil revenue:</b>	10.7	9.1	11.3	11.8	12.0	12.6	12.6	12.6	12.6
Tax and other domestic-source revenue	8.9	7.7	9.0	8.6	9.5	9.9	9.9	9.9	9.9
Tariff and other external-source revenue	1.8	1.4	2.3	3.1	2.5	2.8	2.8	2.8	2.8
<b>Total expenditure:</b>	19.0	19.5	18.8	21.1	23.3	24.5	22.3	21.9	21.6
<b>Interest due:</b>	3.4	4.0	4.7	4.7	9.1	9.5	7.2	6.7	6.5
External interest	2.8	3.2	3.5	3.6	5.8	6.3	4.7	4.3	4.1
Domestic interest (excluding AGD bonds)	0.6	0.9	1.2	1.2	3.3	3.2	2.5	2.4	2.4
<b>Non-interest expenditure:</b>	15.5	15.5	14.0	16.3	14.2	15.1	15.2	15.2	15.2
Social-sectors expenditure:	5.0	5.1	4.5	4.5	4.3	4.7	4.8	4.8	4.8
Other non-interest expenditure:	10.5	10.4	9.6	11.8	9.9	10.4	10.4	10.4	10.4
<b>Financing:</b>	1.6	2.6	1.4	4.8	4.2	2.1	2.0	2.3	2.3
Net external borrowing	-1.1	-0.3	-2.7	0.1	0.5	0.1	0.5	0.9	1.2
Net domestic borrowing:	2.7	3.0	4.1	4.7	3.7	3.6	2.9	2.7	2.3
<b>Net debt outstanding (year-end):</b>		65.9	62.6	75.9	116.3	155.8	119.0	111.3	107.2
External debt		47.1	46.5	46.7	63.2	80.5	60.3	55.4	52.9
Domestic contractual debt:		18.8	16.2	29.2	53.1	75.3	58.7	55.8	54.3

Base data source: Central Bank, Ministry of Finance and Public Credit of Ecuador

### C. Financing Social Service Improvements.

While these forecasting results are subject to numerous assumptions, the exercise described above clearly offers little cause for optimism that resources will be available to improve basic education and health services significantly, much less raise the level of social protection. While short-term improvements in social protection might be funded from additional external sources, sustaining and extending these improvements in the medium-term presents stark budget tradeoffs. As shown earlier, short-term improvements in social protection would require an increase in spending equal to 0.3 percent of GDP, while medium-term improvements would require an increase of 0.9 percent of GDP, and medium-term improvements combined with a public employment program would cost an additional 1.4 percent of GDP, compared to the existing spending level of 1.8 percent of GDP.

#### *Medium-term policy options*

The Government's basic options for financing additional social expenditure include (i) raising government revenues by reducing price subsidies, (ii) reducing non-interest expenditure apart from social-sectors expenditure and improving public-sector expenditure management, (iii) increasing taxes, and (iv) seeking a reduction in the external-debt burden.

*Reducing or eliminating subsidies.* Box 6.1 summarizes the recent history of Ecuador's use of subsidies for electricity, cooking gas, and domestic motor fuels. Successive Governments have grappled with this politically sensitive issue. In September 1998, a month after taking office, the Mahuad Government announced a fundamental reform, including restriction of the electricity subsidy to poorer consumers and elimination of the cooking gas subsidy. In the months following the September 1998 reform, however, increases in oil-derivatives and electricity prices lagged behind the price level, exchange rate, and opportunity price of exports, reestablishing the subsidies at high levels. In May 2000 the Government increased motor-fuel prices by 60-80 percent and increased the prices of industrial oil derivatives by as much as 300 percent. It also raised public-sector wages, however, and decided not to increase the politically sensitive price of cooking gas, so the probable consequences for the public finances were at most just slightly positive.

#### **Box 6.1: Ecuador's subsidization of energy consumption.**

Ecuador has a long history of untargeted subsidization of energy consumption. In September 1998, after a little more than a month in office, the Mahuad Government took the courageous step of ending the cooking-gas and targeting the differentiated residential electricity subsidy to relatively poorer people. The authorities indicated that they would adjust the price of gasoline and other petroleum derivatives through formulas that would keep them in line with production costs.

Ecuador's electricity subsidy had been provided as discounts in the unit household consumption charge, with higher percentage discounts applying to households with lower monthly usage. The cooking-gas subsidy was provided by setting the price of canisters at roughly one fifth the combined production and distribution cost. At the time of the reform these subsidies were estimated to be flowing at annual rates of 1.2 and 0.7 percent of GDP respectively. The public power-generation company (then INECEL) and the public petroleum-derivatives distribution company (*PetroComercial*), effectively absorbed the subsidies in the form of diminished profitability.

In September 1998 the authorities changed the residential electricity subsidy, replacing it with a system under which households consuming less than 150 kwh per month received a subsidy financed by having households consuming more than 150 kwh per month pay a surcharge over the base rate. This cross subsidy was calculated in such a way as to be self-financing. They also raised the prices of cooking gas and diesel fuel to cover the cost of production and distribution. The September 1998 policy change greatly reduced the size of these subsidies; from an annual US\$401 million to an estimated US\$34 million, or, 0.15 percent of GDP.

Since then, however, largely because the exchange rate has depreciated sharply, world hydrocarbons prices have surged, and the prices of electricity, cooking gas and oil derivatives have generally lagged, the subsidies have reemerged. In July 1999, to resolve a strike called by taxi drivers and supported by peasant and other labor groups, the authorities promised to freeze these prices for one year. The resulting overall subsidy since then has deepened steadily, and became far larger than it has ever been before. In June 2000 the authorities sharply increased the motor-fuel prices and electricity rates. They did not, however, raise the price of cooking gas. The cooking-gas subsidy and other derivatives subsidies have reemerged because their prices lagged while the relevant costs have surged on account of exchange-rate depreciation and rising international oil prices. For the cooking-gas subsidy alone, with an exchange rate of one dollar per fifteen-kg. cylinder, the subsidy would run at 2-3 percent of GDP (using the weighted "blend" of domestic and imported gas costs).

It is essential on many grounds that the Government not return to the kind of untargeted subsidization that results from price repression. Nevertheless, it is also clear

that the overall effect on the public finances of reducing price subsidies is inevitably limited. There are several reasons. One is that, for obvious political reasons, when the Government increases derivatives prices it must politically simultaneously raise public-sector wages to compensate, at least partially. The increased revenue would therefore be at least partially offset by increased payroll expenditure. A second reason is that, under the present rules, the Government will receive only a limited share of the increased revenue, since oil revenue is shared among various public-sector entities. At present, on this subject, the best the Government could do would be to return to the policy in effect from 1994-1996 of adjusting the prices in question on a monthly basis to prevent indiscriminate subsidization from reemerging.

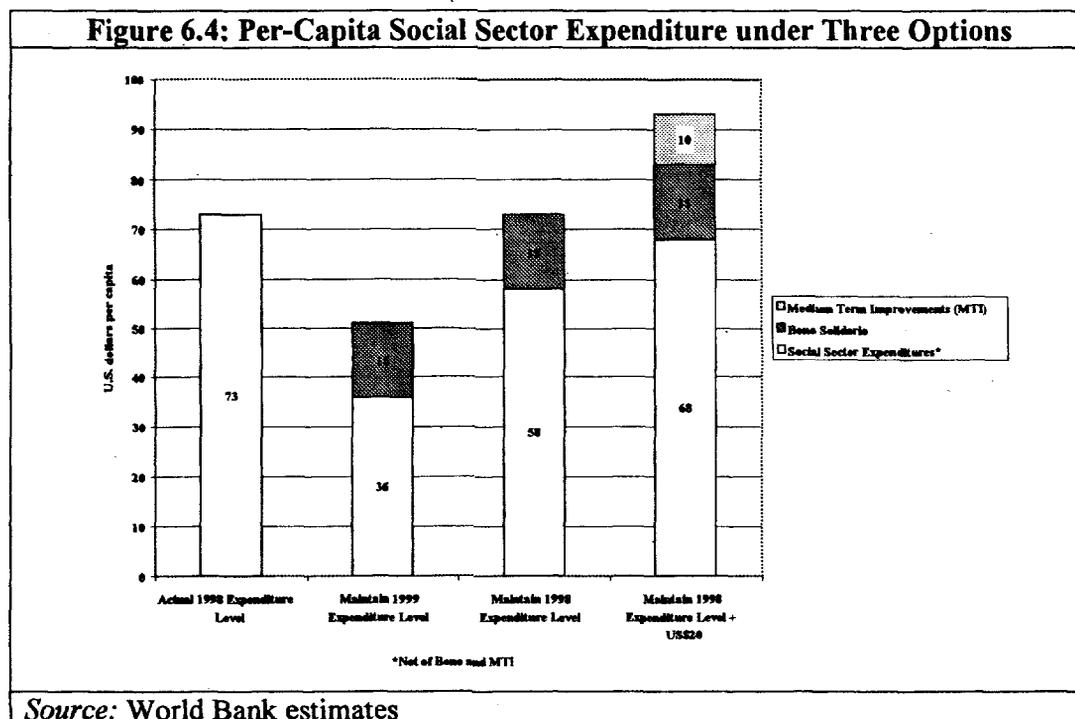
*Reducing public-sector expenditure in areas other than the social sectors; improving public expenditure management.* Ecuador's Government has some scope to reduce public-sector expenditure in areas other than interest payments and the social sectors, and to the extent in can do so it can open wider scope to increase social expenditure. It is a limited scope, however, since it includes a relatively large flow of payroll expenditure (including police and defense) as well as other expenditure programs difficult to cut. In addition, the Government has made significant efforts to introduce structural reforms in public expenditure management in recent years, but much remains to be done. It approved the 1992 Public Budgets Law, the 1994 General Financial Institutions Law, and various other measures to tighten control of public expenditure and enhance its efficiency. However, the border war with Peru, an extended drought, El Niño, political crises, and, more recently, the banking crisis have interrupted structural-reform progress. In recent months, the Noboa Government has submitted legislation to the Congress that, if approved, would have the effect of strengthening expenditure management significantly.

*Increasing tax revenues.* Given the volatility of non-financial public-sector oil revenue (which reached 8.2 percent of GDP in 1996, then fell to 4.6 percent of GDP in 1998 before rising again to a forecast 9-10 percent of GDP in 2000), Ecuador clearly needs to increase tax revenue. Partly because it came to rely so heavily on oil revenue in the past, Ecuador has one of the lowest tax-revenue flows as a percentage of GDP in Latin America. Overall non-financial public-sector tax revenue (including social security) is only about 13-14 percent of GDP (compared with 24.8 percent for Brazil, 19.3 percent for Colombia, 17.5 percent for Bolivia, and 13.3 percent for Peru. Ecuador's single most important tax source is the value added tax (VAT), but its 12-percent rate (it was raised from 10 percent in January 2000) is one of the lowest among Latin America's larger economies. Neighboring countries have considerably higher rates, including Colombia at 16 percent, Bolivia at 15 percent, and Peru at 18 percent. One obvious, but politically difficult, way to raise revenues for development expenditure over the medium term is to raise VAT rates.

If Ecuador could raise its VAT rate by an additional three percentage points beginning in 2001, it would raise additional revenue amounting to well over 1 percentage point of GDP per year, about equal to the amount required to finance medium-term improvements in social protection.

*Debt-service reduction* Ecuador has one of Latin America's heaviest debt and debt-service burdens. Since 1995 it has been accumulating partial arrears to Paris Club creditors, and since August 1999 has been accumulating arrears on all payments due external bondholders. If it could secure a reduction in the outstanding stock of debt, it could reduce its debt service due, and apply the difference to social-sector expenditure. Unlike the other options mentioned here, to accomplish a debt-stock reduction, Ecuador would have to reach agreement with external creditors, including the bondholders who hold nearly one half of the public external debt.

**Sensitivity Analysis.** Figure 6.4 summarizes the actual level of social sector spending through 1999 and three alternative levels of social-sector spending for the year 2000 and beyond. In 1999, actual social-sector spending was US\$51 per capita, including spending on the *Bono Solidario*, which was fully implemented beginning in 1999. The three alternative levels portrayed in Figure 6.4 are: (a) maintain social-sector spending (SSE) constant at its 1999 level, that is, US\$51 inclusive of the *Bono* or US\$36 net of the *Bono*; (b) maintain total SSE, inclusive of the *Bono*, at their 1998 level, which implies spending net of the *Bono* of US\$58; and (c) maintain social sector expenditures at their 1998 level plus US\$20 per capita additional, to finance the *Bono* (US\$15), Medium Term Improvements (MTI) in social protection (US\$10), and other social sector spending (US\$68).<sup>2</sup> All three alternatives presume reduced spending on broad-based programs in health and education, partly reflecting the large reduction in the real wages and salaries of social service workers during the crisis.



<sup>2</sup> In 1999, per capita expenditures on the Bono were about US\$15, or US\$12 per month per beneficiary. Protecting the monthly beneficiary amount at US\$15 would require increasing the annual per capita expenditures to US\$19.

Table 6.3 presents the result of an exercise to predict the consequences of these three spending levels for the Central Government's overall deficit, primary surplus, and total debt stock, under three alternative financing scenarios: (a) the base scenario, described in Table 6.2; (b) the base scenario plus an additional three percentage-point increase in the VAT; and (c) the higher VAT scenario plus a reduction in the outstanding Central Government external-debt stock of 30 percent. The expected pattern emerges. The average fiscal deficit over 2000-2003 and 2003 total debt stock decrease with additional revenues and increase with additional expenditures, while the opposite is true of the primary surplus. More importantly, however, both the primary surplus and the debt stock turn out high irrespective of the scenario considered. There is a clear tradeoff between the imperatives of assuring fiscal sustainability and the coverage and quality of social services in the medium term. Ecuador will have little choice but to maintain deficits no higher than 2-2.5 percent of GDP under dollarization.

**Table 6.3 Ecuador: Sensitivity Analysis for Social-Expenditure Programs**

Percent of GDP, for the Central Government	2000-2003 Average:		Year 2003:
	Deficit	Primary Surplus	Total Debt Stock
<b>Base scenario</b>			
2000 social programs at 1999 per-capita U.S.-dollar value	2.2	5.3	107.2
2000 social programs at 1998 per-capita U.S.-dollar value	3.1	4.4	110.5
2000 social programs at 1998 per-capita U.S.-dollar value plus US\$20	5.8	1.9	119.7
<b>Higher VAT scenario, with VAT rate at 15 rather than 12 percent</b>			
2000 social programs at 1999 per-capita U.S.-dollar value	1.1	6.2	103.7
2000 social programs at 1998 per-capita U.S.-dollar value	2.1	5.3	106.9
2000 social programs at 1998 per-capita U.S.-dollar value plus US\$20	4.8	2.9	116.2
<b>Higher VAT scenario, but with reduction of the Central Government external-debt stock</b>			
2000 social programs at 1999 per-capita U.S.-dollar value	0.5	6.2	86.3
2000 social programs at 1998 per-capita U.S.-dollar value	1.5	5.3	89.6
2000 social programs at 1998 per-capita U.S.-dollar value plus US\$20	4.2	2.9	98.9

Source: World Bank estimates

Table 6.3 provides yet another indication of the tightness of the constraint within which Ecuador's Government must program its social expenditure. Even with 2000 social programs set at the 1999 per-capita dollar value, in any of the resource scenarios the total Central Government debt stocks at the end of 2003 would still be very high. With interest rates averaging 6-8 percent on this debt, the resulting interest bill (equal, by definition, to the sum of the primary surplus and the overall deficit), will remain inordinately large under any of the scenarios discussed. In all of these scenarios, the primary surplus remains high, which – as discussed above – would act as a brake on real growth and could lead to eventual political problems.

#### **D. Choices and Tradeoffs.**

The Government faces hard choices and tradeoffs. Poverty and inequality are increasing. In the short term, the poor and vulnerable groups require improved protection from declining incomes. In the medium term, both social protection and basic social services need strengthening. If inequality and poverty are to decline in the future, the poor will require significantly improved access to basic health and education services of higher quality. Education, in particular, can play a critical role in raising the future earnings of poor children and, thus, helping them to escape poverty. But the extremely low access by the poor to education beyond the primary level now constrains education as a vehicle for social mobility. Increasing that access, along with improvements in quality, will require additional public spending that may simply not prove feasible if Ecuador is to secure fiscal stability.

The tradeoffs facing the government are politically difficult. Low tax rates and price subsidies are politically popular and benefit large numbers of people, even if the subsidies are regressive in nature. Targeted social expenditures by definition benefit a relatively small percentage of the population, while financing them affects a large percentage of the population. Reducing non-social-sector, non-interest expenditures in order to increase social spending would entail reductions in military and other spending. As shown above, increasing social sector spending also poses tradeoffs in terms of the size of the Central Government's primary surplus and debt stock.

The consequences of not making the difficult choices are equally stark—continued high and possibly increasing poverty and inequality, inadequate human capital to confront an economic future that gives increasing importance to highly skilled labor, and a continued weak capacity to respond to future crises. The Mahuad Government entered office with a pledge to reduce poverty, and the present Government has indicated that it intends to maintain this promise. To make good on this pledge, it now needs to follow up with a strong commitment to improving social protection in both the short and medium terms and to making the politically difficult decisions required to find the resources to implement that commitment.

## References

- Agenda Social Ecuador Siglo XXI, Gobierno Constitucional 1998-2003
- Centro de Planificación y Estudios Sociales –CEPLAES. 1999. *Estudio Cualitativo del Impacto Social de la Crisis en Comunidades y Barrios del Ecuador*. Quito, Ecuador
- CEPAL (1998) *Cuentas Nacionales de Gastos en Salud. Ecuador – 1995. Informe Final*. CEPAL-INEC-GESE-PATCO. June, Quito.
- Correia, Maria C. 1999. *Ecuador Gender Review*, LCC4C Country Management Unit Gender Group, Poverty Reduction and Economic Management Unit. Latin America and the Caribbean Region. The World Bank. November. Washington, DC.
- Gragnotati, M. (1999) *Incidence Analysis of Social Expenditures and Public Subsidies in Ecuador*. Background paper for the Ecuador Social Expenditure Review. August.
- INEC (1995) Encuesta de Manufactura y Minería 1995.
- Iturralde, Roberto y Elkin Castaño (1999) 'Desarrollo de un Índice de Bienestar para la Focalización del Bono Solidario', CONAMM, Quito, Ecuador (borrador).
- Lucio, R. and E. Laprilla (1999) *Costos y Eficiencia de los Servicios de Salud en el Ecuador a 1999*. Estudio preparado para el Banco Interamericano de Reconstrucción y Fomento. Quito, July, 1999.
- Lasprilla, E. et al. (1997) *Gasto y Financiamiento del Sector Salud – Ecuador 1996*. Organización Panamericana de la Salud. Salud Pública: reflexiones y experiencias No. 4. Quito, Ecuador, October.
- Larrea, Carlos, et. al. (1996) *La Geografía de la Pobreza en el Ecuador*, Quito: Secretaría Técnica del Frente Social.
- León, M. and R. Vos (1999) *La Pobreza Urbana en el Ecuador, 1988-98*. Mitos y Realidades, Estudios e Informes del SIISE No. 2. Quito, Ecuador, Sistema Integrado de Indicadores Sociales del Ecuador, Frente Social, 2000, en prensa.
- Lasprilla, E. et al. (1998) *Equity in Health in LAC. Country Studies: Ecuador*. November. Unprocessed mimeo.
- Maceira, D. (1996) *Fragmentación e Incentivos en los Sistema de Atención de la Salud en America Latina y el Caribe*. Banco Interamericano de Desarrollo. Oficina del Economista Jefe. December.

- Mahuad Witt, Jamil (1998-2003) *Agenda para el Desarrollo Ecuador Siglo XXI*
- Marquez, P. F. Sacoto and M. Molares-Halberg (1999) *Organizational Innovations: The Lipchin of Health Sector Reform in Ecuador*. Washington, D.C.
- MSP (1999) *Ministerio de Salud Pública. Reglamento al DE 502. Anexo 1. Tarifario Referencial. Anexo 2. Criterios para Categorización Socio-Económica.*
- Musgrove, P. (1987) "The Economic Crisis and its Impact on Health and Health Care in Latin America and the Caribbean" in *International Journal of Health Services*, vol 17, pp.411-41.
- Organización Panamericana de la Salud (1999) *Ecuador. Perfil del Sistema de Servicios de Salud. Programa de Organización y Gestión de Sistemas y Servicios de Salud.*
- The World Bank. 1999. "ECUADOR: Consultations with the Poor." Prepared for the GLOBAL SYNTHESIS WORKSHOP, September 22-23. Poverty Group, PREM. Washington, DC.
- SIISE (1997) *Pobreza y Capital Humano en el Ecuador*, Secretaría Técnica del Frente Social
- SIISE (1999) *Sistema Integrado de Indicadores Sociales del Ecuador, Base de Datos en CD-Rom*, Quito: Secretaría de Estado de Desarrollo Social.
- Vos, Rob (1999) *Balance of Payments Liberalization, Employment and distribution in Ecuador, 1988-98*, Institute of Social Studies, The Hague (mimeo).
- Vos, Rob, Margarita Velasco y Edgar de Labastida (1998) *Éfectos Económicos y Sociales del Fenómeno de El Niño en Ecuador, 1997-8'*, Paper presented at LACEA Annual Conference, Buenos Aires (October).
- Vos, R, M. Leon, J. Ponce, et.al. (2000) *Ecuador: Crisis y Protección Social*, Estudios e informes del SIISE No. 1. Quito, Ecuador, Sistema Integrado de Indicadores Sociales del Ecuador, Frente Social, en prensa.
- World Bank. (1996) *Ecuador Poverty Report*. Washington, D.C.: World Bank.