Appendix B
Poverty and Inequality Data

Table B1 gives the poverty and inequality data used in the study. The data in general come from the work of Oscar Altimir at CEPAL who reconciled the calculations of poverty and inequality indicators from household surveys in 12 countries to allow for inter-temporal and cross country comparisons. His data have been published in ECLAC, *Social Panorama of Latin America*, 1994, 1995, and 1996. In some cases, other comparable data were used. The following gives detailed information on how the data set was constructed.

Poverty data: headcount ratio for the rural and urban sectors

When data are not from *Social Panorama of Latin America*, sources are as follows:

Argentina

Urban poverty: Data for the metropolitan area are available in *Social Panorama of Latin America* for the years 1980, 1986, 1990, 1992, and 1994. Data for the total urban area are only available for 1980, 1986, and 1994. Data for the total urban area in 1990 and 1992 were predicted on the basis of the metropolitan area data.

Chile

Data for rural and urban poverty in 1980 are taken from Altimir (1995). These same data have also been recently published in Altimir (1998).

Colombia

The data in *Social Panorama of Latin America* for urban poverty in 1994 are not comparable to the data for previous years (1970, 1980, 1986, 1990, and 1992) as the geographical coverage of the household survey used was extended to cover nearly the entire urban population, when the survey used until then only covered approximately half of the urban population. To scale the level of the 1994 figure to that of the previous data, we predicted 1994 using the consistent poverty figures for 1992 and 1994 in Lustig and Deutsch (1988).

Panama

The 1970 rural and urban poverty data are from Altimir (1995, 1998). These figures are consistent with the *Social Panorama of Latin America* data for subsequent years.

Peru

The 1991 and 1994 rural and urban poverty data are from GRADE (unpublished), using data from the Peruvian Living Standard Survey. Headcount ratios were calculated by GRADE to be consistent with the *Social Panorama of Latin America* data for earlier years.

Inequality data: Gini coefficient

Data are consistently for household income per capita. For some countries, the Gini coefficient is national while for others it is urban. We first report on the sources of the data and then test for potential bias originating in combining national and urban inequality measures in regression analysis. The 1970 data, whenever used, are from Altimir (1995), using the same definition as for subsequent years.

Argentina: urban

Data are for the Greater Buenos Aires. For 1994, where data for both the Greater Buenos Aires and urban areas are reported, the Gini coefficients are equal. We consequently use the Greater Buenos Aires data as proxies for urban area data.

Brazil: national

The 1979, 1987, and 1990 data are from Barros et al. (1993), cited in Morley (1995).

The 1993 figure is from Lustig and Deutsch (1988) who report the same Gini value for 1990 as Barros et al. (1993).

Chile: national

The 1987, 1990, and 1992 data are from CEPAL (1993).

The 1994 figure is from CEPAL (1995). These two data sources are consistent.

Colombia: urban

The data are for eight major cities. The data in *Social Panorama of Latin America* for inequality in 1994 are not comparable to the data for previous years (1970, 1980, 1987, 1990, and 1992) as the geographical coverage of the household survey used was extended to nearly the entire urban population, when the survey used until then only covered approximately half of the urban population. To scale the level of the 1994 data, we predicted 1994 using the consistent inequality figures for 1992 and 1994 in Lustig and Deutsch (1988).

Costa Rica: urban

Data are from *Social Panorama.*

Guatemala: national

The 1981 and 1986 data are from World Bank (1991), cited in Morley (1995). The Gini for 1981 was used for 1980.

The 1989 Gini is from Psacharopoulos et al. (1993), cited in Morley (1995). The Gini for 1989 was made consistent with data for previous years by using the 1986 overlap between the two sources to scale the 1989 figure. The 1989 Gini was used for 1990.

Honduras: urban

The 1990, 1992, and 1994 data are from *Social Panorama.*

The 1986 Gini was extrapolated backward from 1990 using 1986 and 1989 data from Psacharopoulos et al. (1993), cited in Morley (1995). The Psacharopoulos 1989 Gini was taken to apply to 1990.

Mexico: national

The 1984, 1989, 1992, and 1994 data are from INEGI (1993, 1994).

Panama: urban

The 1979, 1986, 1989, 1991, and 1994 data are from *Social Panorama*.

Peru: urban

The data are for Lima. All figures are consistently calculated by GRADE. The 1981 and 1986 data are from GRADE (1992), cited in Morley (1995). The 1981 Gini was used for 1979. The data for 1991 and 1994 are also from GRADE (unpublished).

Uruguay: urban

The 1981, 1986, 1990, 1992, and 1994 data are from *Social Panorama*.

Venezuela: national

The 1981, 1987, 1990 data are from Marquez (1992), cited in Morley (1995). The 1987 Gini was used for 1986.

The 1992 and 1994 Gini are from Londoño and Székely (1997), cited in Lustig and Deutsch (1988). The 1990 overlap between the two series was used to scale the 1992 and 1994 Gini.

To test whether there is a systematic bias in combining Gini measurements at the national and urban levels in regression analysis, all poverty regressions were run with a multiplicative national dummy variable D_n (taking the value of one when the Gini is measured at the national level), and all inequality

regressions were run with both level and multiplicative national dummies in the inequality equations as follows:

Poverty equations: $\dot{P} = \beta' X + (\gamma_0 + \gamma_1 D_n) G_0$

Inequality equations: $\dot{G} = (\alpha_0 + \alpha_1 D_n) + \beta' X + (\gamma_0 + \gamma_1 D_n) G_0$,

where X is the set of other regressors in each equation.

In all regressions, the coefficient of the D_n variable was not significant. Similar interactive and level dummies were introduced in all regressions with interactive terms between inequality and GDPpc growth, inequality and GDPpc growth per period, and inequality and sectoral growth, with no significant effects. We thus conclude that there is no significant bias in combining the national and urban Gini in analyzing (1) the role of the initial level of inequality (G_0) on the growth of poverty and inequality, and (2) the determinants of growth in inequality ($\dot{G}$).

Other data

Data on all other variables used in the analysis come from the World Bank, *World Tables*.

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Table B2. Calculation of Gini coefficients for 1970 by country

Country	Coverage	Period	% change over period	Base year used to predit 1970	Source as cited in Altimir (1995)
Argentina	Urban (Greater Bs Aires)	1974-80	10	1980	Altimir (1986)
Brazil	National	1970-80	-2	1979	Hoffman (1992)
Chile	National	1968-83	23	1987	CEPAL (1979)
Colombia	Urban (8 major cities)	1971-78	-16	1980	Urrutia (1985)
Costa Rica	Urban	1971-77	7	1981	Trejos (1983)
Guatemala	Missing information				
Honduras	Missing information				
Mexico	National	1968-77	-12		Altimir (1982)
		1977-84	-9	1984	CEPAL (1988b)
Panama	Missing information				
Peru	Urban (Lima)	1969-81	9	1981	CEPAL (1989)
Uruguay	Urban	1968-73	0		Melgar (1981)
		1973-79	32		Melgar (1981)
		1979-81	-2	1981	Melgar (1981)

Source: Altimir, Osacr. 1995. "Changes in Inequality and Poverty in Latin America". Santiago, Chile: CEPAL.