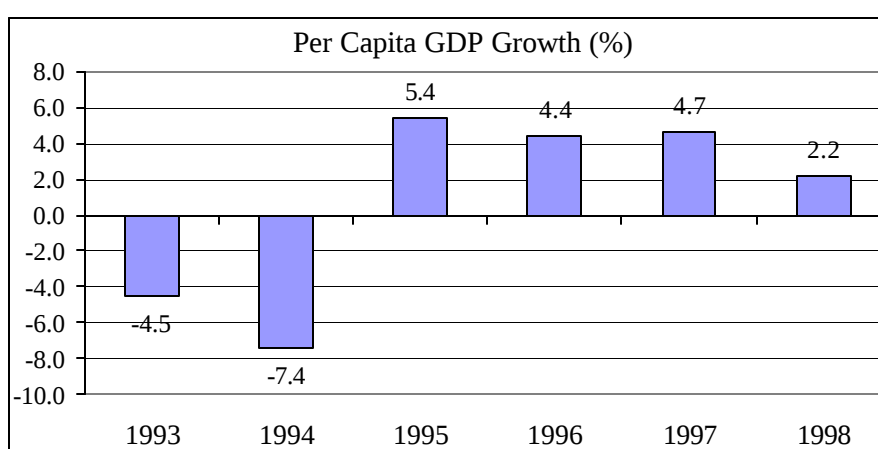


Counterfactual Simulations for Suriname based on Datt-Ravallion Type Decompositions

1. Simulations on the Recent Evolution of Poverty

Given the absence of updated household surveys, the first exercise to be performed is to simulate the evolution of poverty after the 1993 survey (!). The exercise assumes that the per capita GDP growth observed (figure 4) affected all segments of Paramaribo on a homogeneous way. In other words, in the absence of information, we assume that in this period inequality was unchanged. The poverty outcomes of this counterfactual exercise is shown further below



Source: Planning Office of Suriname.

COUNTER-FACTUAL EXERCISE ON THE TEMPORAL EVOLUTION OF POVERTY - EXPENDITURES BASED - 2000

Poverty Index Poverty Line (Multiples)	P0 1 (%)	P1 1 (%)	P2 1 (%)	GPD GROWTH FACTOR
1993	59.2	25.8	14.7	0.91
1994	63.9	28.7	16.6	0.83
1995	59.5	26.5	15.2	0.89
1996	58.2	24.9	14.1	0.93
1997	54.8	23.3	13.1	0.98
1998	53.3	22.6	12.6	1.00
1999	53.3	22.6	12.6	1.00

Source: GPHS2000

The proportion of poor would have reach a peak after the 1993-94 recession of 63.9%, falling gradually to 53.3% in 1998 with the per capita GDP growth.

2. Growth, Inequality Preserving Simulations and International Comparisons

A second type of counterfactual simulation of poverty performed is similar to the one described in the previous subsection. The present question is: what would be the extend of poverty in Suriname if income distribution was preserved and per capita GDP were set at other countries values?

We answer this question using an alternative per capita GDP adjusted indicators reported in World bank (1998) and UNDP (1998), respectively.

COUNTER-FACTUAL COMPARISSON OF POVERTY ACROSS COUNTRIES AND REGIONS - EXPENDITURES BASED BALANCED GROWTH SCENARIO - 2000

Poverty Index Poverty Line (Multiples)	P0 1 (%)	P1 1 (%)	P2 1 (%)	PER CAPITA GPD -PPP ADJUSTED FACTOR
WORLD	42.6	16.0	8.5	1.26
SURINAME	53.3	22.6	12.6	1.00
JAMAICA	75.5	37.3	23.0	0.66
LATIN AMERICA	42.6	16.1	8.6	1.26
HONDURAS	86.0	49.8	33.3	0.47
HAITI	96.9	68.4	52.2	0.27
LESS DEVELOPED COUNTRIES	98.0	75.2	60.4	0.21
COUNTRIES IN DEVELOPEMENT	77.7	38.7	24.0	0.63
BRAZIL	41.8	15.6	8.3	1.28

Source: GPHS2000

If a balance growth process led Surinamese per capita GDP to the level observed in the World, the proportion of poor would fall to 42.6% according to UNDP data. As we have seen this same number would correspond to less than half according to World Bank GDP estimates. This huge difference is explained by the Surinamese/World PPP adjusted GDP differential observed between the two institutions 131%(?) according to World bank (1998) and 26% according to UNDP (1996).

3. Income Versus Consumption Based Measures

This section discusses how the extension of poverty is affected by using income instead of consumption based measures. This comparison matters given the impossibility of having a continuous poverty monitoring system based on expenditure surveys. Other reason is that although expenditures based survey are superior on a methodological perspective, in Latin America and the Caribbean the vast majority of poverty diagnosis is income based. We will also perform an additional comparison of both procedures with subjective poverty

Income versus Expenditures Robustness Tests - 2000 Per Capita Household Income Based

Head of the Household	Poverty Index Poverty Line (Multiples)	P0 (%)	P1 (%)	P2 (%)	Contribution to Poverty		
					P0	P1	P2
Total		38.5	18.2	11.3	100.0	100.0	100.0
Gender	Male	36.5	18.2	11.6	45.6	48.2	49.2
	Female	40.3	18.1	11.1	54.4	51.8	50.8

Source: GPHS2000

Income versus Expenditures based - Ratio of Results(%) - 2000

Head of the Household	Poverty Index Poverty Line (Multiples)	P0 (%)	P1 (%)	P2 (%)	Contribution to Poverty		
					P0	P1	P2
Total		72.2%	80.2%	89.7%	100.0%	100.0%	100.0%
Gender	Male	68.7%	81.1%	93.0%	95.7%	101.6%	104.3%
	Female	75.3%	79.4%	86.6%	103.9%	98.6%	96.2%

Source: GPHS2000

estimates directly asked in the survey.

Our estimates reveals that poverty, measured by all three FGT measures, is higher when obtained from the distribution of per capita consumption than when obtained from the distribution of per capita income. The headcount for Paramaribo based on income data is 38.5% whereas the corresponding headcount based on consumption data is 63.21%. More generally, estimates based on consumption data across gender samples tend to be between 2% and 7% (?) higher than the corresponding estimates based on income, at least for the basic poverty lines used.

Counterfactual Simulations

The sensitivity of poverty to the use of income or consumption data is a result of the differences found in the mean and the dispersion these two concepts.

Average level of per capita consumption estimated is about 78% the value of the average per capita family income estimated from the same survey, indicating that savings and taxes accounts for about 22% of income. Per capita income inequality is also considerably greater than the inequality in per capita consumption. In particular, the difference is very large with the Theil coefficient being close to 0.07 lower in consumption than in income (0.607 and 0.535, respectively). This point is illustrated by the Lorenz curve below: per capita income distribution Lorenz dominates per capita expenditures distribution.

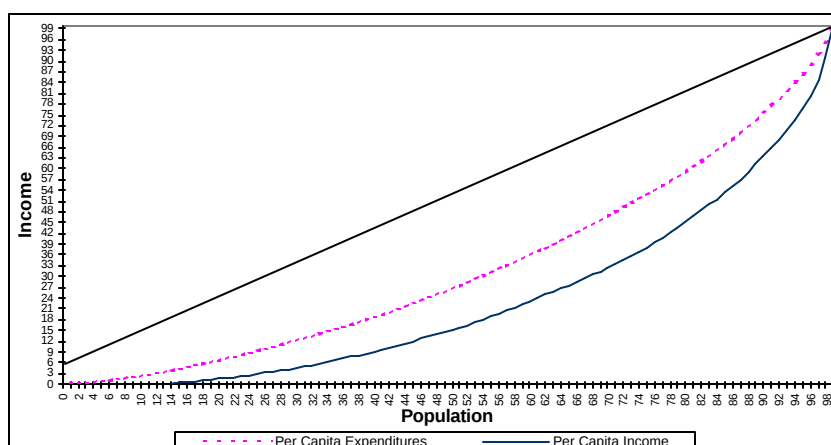
Inequality Measures - Per Capita Concepts - 2000

Population Concept - Income Concept	THEIL	GINI
All Population - Expenditures Per Capita	0.317	0.419
All Population - Earnings Per Capita	0.483	0.507
Active Age - Expenditures Per Capita	0.323	0.424
Active Age - Earnings Per Capita	0.397	0.440

Source: GPHS2000

Per Capita Income X Per Capita Expenditures - Suriname 2000

Universe: All Population



Source: GPHS2000

Per Capita Income Inequality and Expenditures Level Scenario - 2000

Head of the Household	Poverty Index Poverty Line (Multiples)	Per Capita Expenditures	P0 (%)	P1 (%)	P2 (%)	Contribution to Total Poverty		
						P0	P1	P2
Total		60,500.1	51.9	21.4	11.4	100.0	100.0	100.0
Gender	Male	60,987.5	51.7	21.4	11.4	48.0	48.1	48.3
	Female	60,048.7	52.0	21.3	11.3	52.0	51.9	51.7

Source: GPHS2000

Mean expenditure is higher than mean household income while the former concept inequality is also greater. As a consequence, when one imputes income level to consumption inequality, poverty reaches its maximum levels. The proportion of poor (P0) reaches 51.9% while P1 and P2 achieves 21.4% and 11.4%, respectively.