The Lucky Few Amidst Economic Decline

Distributional Change in Côte d'Ivoire As Seen Through Panel Data Sets, 1985-88

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Panel data sets show that a lucky few bucked the general trend of economic decline in Côte d'Ivoire — that among the poorest of the poor, some actually improved their standard of living, despite a great increase in the incidence of poverty.
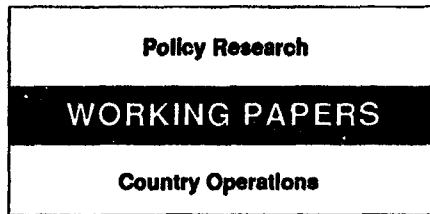
Côte d'Ivoire's economy declined drastically in the second half of the 1980s. The incidence of poverty climbed from 30 percent in 1985 to 35 percent in 1987, and jumped to 46 percent in 1988.

But how widespread was the collapse in living standards? Did a lucky few escape the decline?

Using panels of data from the Côte d'Ivoire Living Standards Survey (for 1985-86, 1986-87, and 1987-88) allowed Grootaert and Kanbur to track the level of living for the same households over successive years. These panels had not yet been used to examine the dynamics of poverty in the second half of the 1980s.

They find that "two-period" poverty was generally less than poverty measured from single-period snapshots. Surprisingly, a significant number of the poorest of the poor *improved* their status over the two years of the panel, even though there was a downturn in the average fortunes of the poor.

And Grootaert and Kanbur find that the "lucky few" are not so few. They were widespread regionally — though in some socioeconomic groupings, the poor had a greater chance to escape poverty amidst the general decline in living standards. Finer investigation of the characteristics of these groupings is hampered somewhat by the small sample sizes of the panels.

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THE LUCKY FEW AMIDST ECONOMIC DECLINE:
DISTRIBUTIONAL CHANGE IN CÔTE D'IVOIRE
AS SEEN THROUGH
PANEL DATA SETS, 1985-88

by

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1. Introduction

The second half of the 1980's was a period of drastic economic decline for Côte d'Ivoire, a decline which continues to this day. Per capita GDP fell by 28% between 1985 and 1990. It would be surprising indeed if this decline had not manifested itself in a significant deterioration in individual living standards. Using the Côte d'Ivoire Living Standards Survey (CILSS), Grootaert (1992) shows that the incidence of poverty increased from 30% in 1985 to 35% in 1987. This trend of rising poverty accelerated dramatically in 1988, when the incidence of poverty increased to 46%. In fact, Grootaert shows that the income distribution in 1988 is uniformly worse, in the sense of first order stochastic dominance, than in 1937. This means that poverty would be higher in 1988 than in 1987 for any poverty measure satisfying reasonable conditions (Ravallion, 1992).

The economic decline in Côte d'Ivoire, and its consequences for poverty are not to be doubted. But how widespread was the collapse in living standards? Did a lucky few escape the decline? And what were the characteristics of those who did? In order to answer these questions we need information on the level of living of the same individuals over at least two periods of time. The CILSS allows us to construct three such panels, for 1985-86, 1986-87 and 1987-88. For about 700 households in each case, we can track consumption over the two year period. Each of the three panels consists of a different set of households, so we do not, unfortunately, have information on the same households over four years. Nevertheless, the panel data sets for Côte d'Ivoire are an extremely rare occurrence in Africa, and in developing countries more generally. The 1985-86 panel has been used by Alessie et al. (1992) and by Deaton ( ) to explore labor market behavior and savings, but the full set of three panels have not yet been used to examine poverty dynamics in the second half of the 1980's.

The plan of this paper is as follows. Section 2 presents our method for constructing the three panels from the CILSS. Section 3 discusses construction of the welfare measure and poverty, and tracks poverty in Côte d'Ivoire over the three panels. It is found that the broad trends discussed in Grootaert (1992) for annual data from 1985 to 1988 are confirmed. However, section 4 investigates the lucky few who :mproved their circumstances amid the general decline. Actually we find that the lucky "few" were not so few! And, surprisingly, a significant number of the poorest of the poor improved their status over the two years of the panel, even though there was a dramatic downturn in fortunes on average. Section 5 concludes the paper.

2. Constructing Panel Data Sets from the CILSS

The CILSS is a multi-purpose household survey conducted in four rounds, for 1985, 1986, 1987, and 1988. The usefulness of these data for analysis and policy design has been amply demonstrated by the studies that were carried out on the 1985 data (Deaton and Benjamin (1988); Glewwe (1987); Grootaert (1987); Kanbur (1990); van der Gaag and Vijverberg (1989); and many others). The full set of data from 1985-1988 are used by Grootaert (1992) to analyze the evolution of poverty in Côte d'Ivoire during the latter half of the adjustment decade.

The CILSS data a.e not without their problems. Two principal problems concern regional price variation and various sampling errors. In order to construct meaningful distributions of the standard of living we need to take into account regional price variations through a regional price index. While the CILSS provides us with expenditure data, its price data leave much to be desired. This problem is addressed by Grootaert and Kanbur (1992) where the rich price data from the International Comparisons Project for Côte d'Ivoire are blended with the CILSS expenditure data to derive a credible regional price index. Secondly, it turns out that the

behavior of household size in the raw data reveals a series of sampling errors. This requires correction and reweighting to make the national distributions representative. The procedure is developed and applied by Demery and Grootaert (1992). The data used in this paper have been corrected for these and other shortcomings, as described in Grootaert (1992).

Despite these problems, for which corrections have been developed, the CILSS is invaluable in answering the questions posed in this paper because it allows the construction of panels. Every year, around half the households were replaced and half the households were kept in the sample. Thus out of the 1600 households sampled in 1985, around 800 were replaced but 800 were surveyed again in 1986. The new households brought in during 1986 were surveyed again in 1987, and so on. Thus, in principle, we should have 3 panels of around 800 households each - for 1985-86, 1986-87 and 1987-88. In practice, the construction of the panels is not quite so straight-forward, and we ended up with around 700 households in each panel.

The main problem stems from the fact that not all households surveyed in the CILSS have a unique identification number. In particular, when at the occasion of the second survey, one year after the first, enumerators could not locate the same household in the same dwelling, they were instructed to interview the new household living in that dwelling and to keep the same identification number. This clearly less than ideal procedure has made it impossible to identify panel households simply by matching identification numbers across survey years. This would indeed lead to a large number of "type 2" errors, i.e. accepting in the panel households which in reality are not the same in the two years. Fortunately, as of 1986, the CILSS contained a supplementary section which, in the case of households originally designated to be re-surveyed, reprinted the original household roster and listed membership at the time of the re-survey. Household members present in both rosters were flagged. We retained households in the panel if

at least one household member was the same in both years. This "minimalist" requirement reflects a practical necessity -- a higher requirement would yield too low a number of panel households for useful analysis. However, this also reflects the reality in Côte d'Ivoire of very fluid household composition over time. In this fashion, we could construct three panels containing respectively 714, 693 and 701 households.

This procedure eliminates "type 2" error, but it still leaves open the possibility of "type 1" errors, i.e. the rejection from the panel of households which are the same in both years and thus true panel households. This error would occur if the supplementary section was not filled out for every panel household. The only way to be sure that this error does not occur is by directly checking names of household members across both years. Since the data at our disposal only contained actual names for 1987 and 1988, we could only do this for the third panel. It turned out that there were nine cases of "type 1" error, i.e. about 1%. We trust therefore that the reliance on the supplementary section to identify panel households does not introduce significant error[1].

Before turning to the empirical results, two implications of this procedure to construct panels need to be pointed out. First, the requirement that only one household member be the same across the two years means that meaningful statistics for the panels can only be computed at the household level. We have indeed panels of households but clearly not of individuals.

Second, the fact that the retained panels contained 10-15% fewer households than the originally intended 800 households raises the question whether this attrition biases the

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[1]   For a further discussion of technical and computational aspects of how the panels were constructed from the CILSS data, see Oh and Venkataraman (1992)

representativeness of the panels. The answer is unfortunately affirmative : our comparison of the "rejected" hous⁻holds versus those retained indicates that the former have systematically higher per capita expenditure levels. This means that panel results may not accurately represent country averages and, in terms of poverty analysis, panel results will overestimate somewhat the incidence of poverty. However, the extent of attrition is certainly not such that it invalidates the analysis of the panel data. In fact, in the African context, characterized by high mobility and difficult conditions of survey field work, retaining 85-90% of households for a panel survey can be considered quite a success. Moreover, since the bias is concentrated at the upper end of the distribution, it will probably affect little our analysis of the "lucky few" among the poor.

In this context, it also needs to be pointed out that the sample rotation in the CILSS which led to the existence of panels, i.e. the replacement each year of 50% of the households, was done by replacing all households in 50% of the survey clusters (as opposed to replacing 50% of households in all clusters). This was done because it was simpler to manage in the field, but the trade-off is that the precision of estimates from the panels is reduced. In combination with the attrition problem, this implies that, paradoxically, over-time analysis in the CILSS data is best done by comparing four years of cross-sectional results. The unique value of the panels lies not so much in providing correct averages of welfare and poverty variables but in revealing internal dynamics from one year to the next -- and it is this feature which we shall exploit in this paper.

3. Poverty in Côte d'Ivoire: 1985-86, 1986-87 and 1987-88

For the analysis of poverty, we have retained household expenditure per capita as the measure of welfare. This measure has both theoretical and practical advantages and most studies based on the 1985-86 CILSS data have used it (see earlier references) as well as the four-year cross-

sectional analyses by Grootaert (1992). The latter analysis has defined two poverty lines. The first line (128,600 CFAF/year) was selected to classify 30% of the population as poor in 1985. The second line (75,000 CFAF/year) identifies people in extreme poverty, as it cuts off the bottom 10% of the distribution in 1985. Both lines are held constant in real terms for over-time analysis. Tables 1 and 2 show the evolution of poverty and extreme poverty in Côte d'Ivoire between 1985 and 1988 using the P-Alpha class of poverty measures. The P-Alpha index is given by

$$P_\alpha = \frac{1}{n} \sum_{i=1}^{q} \left[\frac{z - y_i}{z} \right]^\alpha$$

where n = population size

q = number of poor people

z = poverty line

y_i = expenditure per capita of individual "i"

alpha = poverty aversion parameter

Table 1

Poverty in Côte d'Ivoire: Full Samples for 1985, 1986, 1987 and 1988

	P_0	P_1	P_2
1985	.300	.098	.045
1986	.299	.082	.032
1987	.348	.101	.043
1988	.459	.142	.063

Source: Grootaert (1992)

Table 2

Extreme Poverty in Côte d'Ivoire: Full Samples for 1985, 1986, 1987 and 1988

	P_0	P_1	P_2
1985	.100	.027	.011
1986	.064	.013	.004
1987	.091	.023	.008
1988	.141	.035	.013

Source: Grootaert (1992)

For alpha = 0, the index becomes simply the head count ratio (H = q/n). For alpha = 1, the index becomes HI, where I is the income (or expenditure) gap ratio

$$I = \frac{1}{q} \sum_{i=1}^{q} \left[\frac{z-y_i}{z} \right]$$

Thus, p_1 reflects both the incidence and depth of poverty. For higher values of alpha, the index becomes progressively more sensitive to the situation of the poorest (see Ravallion, 1992).

The cross-sectional analysis underlying tables 1 and 2 shows that between 1985 and 1986, the incidence of poverty in Côte d'Ivoire did not change, but the depth of poverty was reduced. Matters also improved for the very poor, where incidence as well as depth of poverty declined. The trend changed after 1986, and all measures of poverty started to increase. The biggest increase occurred in 1988, when the incidence of poverty went from 34.8% to 45.9% and that of extreme poverty from 9.1% to 14.1%.[2].

Tables 3 and 4 show the P-alpha index for poverty and extreme poverty, respectively, calculated from the panel data sets. The panel results confirm the pattern of poverty observed from the cross-sectional data. The first panel records the improvements in incidence and depth of poverty (with the curious exception of P_o for 1986 in table 3 -- probably an effect of sample attrition). The improvement is still reflected in the first year of the second panel, after which point the index figures all rise, with a notable acceleration in the 3rd panel.

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[2]   Grootaert (1992) attempts to relate this evolution to the macro-economic changes in Côte d'Ivoire over the same period.

Table 3: Poverty in Côte d'Ivoire by Panels for 1985-86, 1986-87, 1987-88

		P_0	P_1	P_2
1st Panel	1985	.288	.100	.048
	1986	.336	.091	.035
2nd Panel	1986	.261	.073	.028
	1987	.324	.085	.033
3rd Panel	1987	.363	.109	.048
	1988	.507	.164	.075

Table 4: Extreme Poverty in Côte d'Ivoire by Panels for 1985-86, 1986-87, 1987-88

		P_0	P_1	P_2
1st Panel	1985	.128	.036	.016
	1986	.070	.014	.005
2nd Panel	1986	.055	.012	.005
	1987	.075	.015	.005
3rd Panel	1987	.098	.028	.010
	1988	.208	.056	.021

When the same individual's standard of living changes over time, an argument can be made that it is a mistake to take each time period separately for poverty evaluation. The outcomes should be combined in some way to measure overall standard of living over the relevant period, and poverty should be assessed relative to this measure. A general argument in this direction, in the context of social welfare requirement, is provided by Atkinson and Bourguignon (1984). In our specific case, a convenient way to apply these ideas is to take a discounted sum of per capita expenditure and to compare this to a discounted sum of poverty lines in the two years of the panel (the discount rates for the two calculations being the same).

This type of calculation of a two-period poverty index from panel data raises two new considerations, relative to the cross-sectional calculations. First, the size of each panel household may change from one year to the next. Since poverty is calculated over individuals, there is a choice to be made as to which household size to use for deriving the distribution of expenditure per ca·;ita over individuals underlying the poverty index. We selected the initial year. (Note that the welfare measure, i.e. expenditure per capita, was of course calculated in each year with the corresponding household size in that year). Second, the sampling weights to be applied to the CILSS data also change from year to year. Since only one set of weights can be applied for the calculation of within-panel poverty, the same choice of year needs to be made. Again, we selected the initial year.

Table 5 shows results for two-period poverty with a discount rate of 10%. As can be seen, the broad conclusions about trends continue to hold. More interesting, however, is the conclusion that "two-period" poverty is in general less than the larger of the two snapshot poverty figures for each panel. In fact, in some cases two-period poverty is less than both of the two snapshot figures. And it is certainly less than the full sample snapshots given in Table 1 and Table 2. What this suggests is that there is considerable ·.nobility in the panels, particularly across poverty classes. From the point of view of welfare, this raises the question that conventional measures of poverty, as presented in Kanbur (1990), Grootaert (1992) and other places may be overestimates. From the point of view of positive analysis, the results lead us on to investigate in greater detail the extent and nature of this mobility.

Table 5: Two-period Poverty and Extreme Poverty in the Three Panels

	P_0	P_1	P_2
(A) Poverty			
1st Panel	.281	.077	.030
2nd Panel	.267	.060	.021
3rd Panel	.401	.118	.051
(B) Extreme Poverty			
1st Panel	.100	.020	.005
2nd Panel	.038	.007	.002
3rd Panel	.146	.034	.012

4. The Lucky "Few".

Sections 2 and 3 demonstrated that by and large poverty in Côte d'Ivoire increased during the second half of the 1980s. This result holds true for the four annual surveys and for the three panels. This does not mean, of course, that all households lost out. Table 6 presents information on households that improved their standard of living and those that did not. (In this section we have chosen the household as the basic unit of analysis since the panels are household panels, and we do not here have to convert to individual data in order to calculate poverty indices).

For Côte d'Ivoire as a whole, it is seen that a minimum of 30% of households improved their standard of living, even during the precipitous decline at the end of the period under consideration. And this is the sort of figure we see throughout the regions and throughout the period. The regional pattern varies, of course, and is influenced by which pair of years we take. Thus in 1985-86, only 13.2% of Abidjan households experienced an increase, but in 1986-87 as

many as 43.3% of West Forest households improved their standard of living. However, the

general message should be loud and clear - the lucky "few" were not so few!

Table 6: Frequencies (%) of Changes in Per Capita Expenditure

	1985-86	1986-87	1987-88
Côte d'Ivoire			
Increase	39.2	44.6	30.2
Decrease	60.8	55.4	69.8
Abidjan			
Increase	13.2	54.7	38.7
Decrease	86.8	45.3	61.3
Other Cities			
Increase	40.8	42.4	31.4
Decrease	59.2	57.6	68.6
East Forest			
Increase	51.9	38.8	33.9
Decrease	48.1	61.2	66.1
West Forest			
Increase	33.0	43.3	22.1
Decrease	67.0	56.7	77.9
Savannah			
Increase	56.5	44.5	25.0
Decrease	43.5	55.5	75.0

Of course, the improvements may have been very small - so small as to be accountable by

measurement error. Tables 7A, 7B and 7C give figures for movement of households across

poverty classes - very poor (those below the extreme poverty line), mid-poor (those between the

poverty line and the extreme poverty line) and non-poor (those above the poverty line). Each

Table presents raw frequencies (the fractional households are because of weighting procedures) and percentages.

Let us start with Table 7C, which reports results on the third panel, for changes between 1987 and 1988. It is seen that 69.1% of households remained in their class and 30.9% changed classes. More importantly, 6.3% of households improved their class, moving from very poor to mid-poor or non-poor, and from mid-poor to non-poor. In all, 26.7% of households who started off as very poor improved their class, as did 19.3% of households who started off as mid-poor. Thus even in the midst of general decline, there was a significant probability that a poor household could become non-poor. These results are confirmed by the 1986-87 and 1985-86 panels. In 1986-87, 8.5% of households improved their poverty class, and the probability that a very poor household would improve its poverty class was a staggering 64.8%. In fact, the probability that a very poor household would jump two classes and become non-poor was 23.2%. These figures may be thought to be implausibly high, but they are also found in the 1985-86 panel, and they are at the very least an indication of considerable mobility counter to the general trend of immiserization.

This mobility has at least two implications for the analysis of poverty. First, it leads us to ask questions about who these lucky "few" are. Second, it alerts us to the possibility that poverty measures based on snapshots may be inappropriate and that "two-period" poverty measures may be better. The second question was taken up in the previous section. In the rest of this section we take up the first question.

Table 7: Changes in Poverty Status

(A) First Panel

		1985			
1986	Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
	Very Poor	17.6 (2.4) 52.6 29.7	11.0 (1.5) 32.9 9.9	4.8 (0.7) 14.4 0.9	33.5 (4.6)
	Mid-Poor	25.7 (3.5) 16.9 43.3	50.4 (7.0) 33.1 45.3	75.9 (10.5) 49.9 13.7	152.0 (21.0)
	Non-Poor	16.0 (2.2) 3.0 27.0	49.7 (6.9) 9.2 44.7	472.2 (65.3) 87.8 85.4	537.9 (74.4)
	ALL	59.4 (8.2)	111.1 (15.4)	552.9 (76.4)	723.4 (100.0)

(B) Second Panel

		1986			
	Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
1987	Very Poor	7.6 (1.2) 18.4 35.1	18.3 (2.8) 44.4 16.6	15.4 (2.3) 37.2 2.9	41.3 (6.3)
	Mid-Poor	9.0 (1.4) 6.1 41.6	50.5 (7.7) 34.2 45.8	88.1 (13.4) 59.7 16.8	147.6 (22.5)
	Non-Poor	5.0 (0.8) 1.1 23.2	41.4 (6.3) 8.9 37.6	419.8 (64.1) 90.0 80.2	466.2 (71.2)
	ALL	21.7 (3.3)	110.2 (16.8)	523.3 (79.9)	655.2 (100.0)

(C) Third Panel

Frequency (%) Row Percent Column Percent	1987 Very Poor	1987 Mid-Poor	1987 Non-Poor	ALL
Very Poor	41.7 (5.8) 38.7 73.2	51.6 (7.2) 47.9 33.3	14.4 (2.0) 13.3 2.9	107.6 (15.0)
Mid-Poor	11.7 (1.6) 6.0 20.6	73.6 (10.3) 37.8 47.5	109.3 (15.3) 56.2 21.7	194.7 (27.2)
Non-Poor	3.5 (0.5) 0.8 6.1	29.9 (4.2) 7.2 19.3	379.2 (53.0) 91.9 75.4	412.6 (57.7)
ALL	56.9 (8.0)	155.1 (21.7)	502.9 (70.3)	714.9 (100.0)

1988

As a first cut at who the lucky few are, consider Table 8. It shows that of all households who improved their poverty status, the majority were to be found consistently in Savannah or East Forest. The contrast between Abidjan, the richest region, and Savannah, the poorest, is striking. In each panel, the number of households in the Savannah who improved their poverty status is several times the corresponding number for Abidjan even though the total number of households in the panels from the two regions is about the same. From the detailed analysis of mobility for the Savannah for 1987-88 it can be shown that 7.2% of households improved their poverty class, compared to only 4.0% for Abidjan (see Appendix Tables). In the Savannah, for the same years, the probability of a very poor household escaping its class was 12.0% and the probability of a middle-poor household escaping poverty was 17.8%. In Other Cities these probabilities were 42.9% and 15.6%. The regional pattern is thus quite diverse.

Table 9 is analogous to Table 8, except that it is for socio-economic categories (the details of this are presented in Grootaert, 1992). The relevant statistic here is the relative probability of improving or worsening poverty status. In the third panel, it is seen that this is highest for private formal sector employees and lowest for food crop farmers. Export crop farmers have a better relative probability than food crop farmers in all of the three panels, while the self-employed and the public sector employees (with the exception of the latter in the first panel) are equally likely to improve or worsen their poverty status.

One problem with tabulations of this type is that with only 700 households we can run into "small-cell" problems and some of the erratic variations in the tables can be attributed to this. Nevertheless, the results confirm specific patterns among the lucky few that are worth investigating further in the future.

Table 8: Regional Pattern of Poverty Changes (%)

	Abidjan	Other Cities	East Forest	West Forest	Savannah	Total
1st Panel						
Improved Poverty Status	2.0	13.6	44.9	10.7	28.7	100.0
Worsened Poverty Status	20.3	12.7	21.9	23.7	21.3	100.0
2nd Panel						
Improved Poverty Status	7.7	16.4	30.8	11.1	34.0	100.0
Worsened Poverty Status	4.7	13.9	36.3	8.3	36.8	100.0
3rd Panel						
Improved Poverty Status	11.8	15.8	20.4	20.2	31.8	100.0
Worsened Poverty Status	1.0	14.8	19.5	25.3	39.4	100.0

Table 9: Socio-Economic Pattern of Poverty Changes (%)

	Export Crop Farmers	Food Crop Farmers	Public Sector Employees	Private Formal Sector Employees	Informal Sector Employees	Self-Employed	Other	Total
1st Panel								
Improved Poverty Status	14.5	61.6	1.1	0.0	0.0	18.5	4.3	100.0
Worsened Poverty Status	11.0	50.3	3.6	9.2	2.9	14.2	8.8	100.0
2nd Panel								
Improved Poverty Status	21.7	46.6	1.4	5.2	3.8	16.9	4.4	100.0
Worsened Poverty Status	18.3	52.7	1.5	0.6	2.9	16.4	7.7	100.0
3rd Panel								
Improved Poverty Status	26.0	39.1	6.3	3.9	4.4	14.5	5.8	100.0
Worsened Poverty Status	17.9	56.9	6.7	0.9	1.5	12.8	3.3	100.0

5. Conclusion

This paper is an exploratory exercise in using panel data sets to investigate distributional change. Its particular, the concern is to confirm the existing evidence on declining living standards in Côte d'Ivoire during the second half of the 1980s. After constructing the panels from the CILSS, we show that these do indeed confirm earlier results, which relied on snapshots of the distribution of living standards during the years 1985-88. But the panels, uniquely, allow us to highlight and quantify mobility of the same households across poverty classes over time. We were alerted to the extent of this mobility by the finding that "two-period" poverty was generally less than poverty measured from single-period snapshots. There must, therefore have been a lucky few who bucked the trend and improved their standard of living amid general decline. Detailed investigations then revealed that the lucky few were fairly numerous, and the probability of escaping poverty was quite high even for the very poorest. We found that these lucky few were widespread regionally, although in some socio-economic groupings the poor had higher chances of escaping poverty amidst general decline in living standards. Finer investigation of these characteristics is hampered somewhat by the small sample sizes of the panels, but it is hoped that future work will reveal further patterns that will be useful for policy design.

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Annex 1: Changes in Poverty Status, by Region and Panel

Abidjan, 1985-86

		1985			
	Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
1986	Very Poor	- - - -	0.2 (0.2) 100.00 6.4	- - - -	0.2 (0.2)
	Mid-Poor	- - - -	1.9 (1.3) 9.5 47.4	18.4 (12.9) 90.5 13.3	20.3 (14.3)
	Non-Poor	- - - -	1,9 (1.3) 1.5 46.1	119.7 (84.2) 98.5 86.7	121.6 (85.5)
	ALL	- -	4.0 (2.8)	138.1 (97.1)	142.2 (100.0)

Other Cities, 1985-86

		1985		
Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
Very Poor	5.3 (4.5) 66.7 46.1	2.4 (2.0) 29.8 16.2	0.3 (0.3) 4.2 0.4	8.1 (6.8)
Mid-Poor	2.6 (2.2) 14.6 22.50	6.3 (5.3) 35.2 42.4	9.0 (7.5) 50.1 9.7	17.9 (15.0)
Non-Poor	3.6 (3.1) 3.9 31.4	6.2 (5.2) 6.6 41.4	83.2 (69.9) 89.4 89.9	93.0 (78.2)
ALL	11.6 (9.8)	14.9 (12.5)	92.5 (77.7)	119.0 (100.0)

(row label **1986** spans the left side of the table)

East Forest, 1985-86

	1985			
Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
Very Poor	7.3 (4.1) 47.4 27.4	5.0 (2.8) 32.3 9.8	3.1 (1.7) 20.3 3.0	15.4 (8.6)
Mid-Poor	11.5 (6.4) 24.2 43.2	23.8 (13.3) 50.4 47.1	12.0 (6.7) 25.4 ∴1.7	47.3 (26.4)
Non-Poor	7.8 (4.3) 6.7 29.4	21.8 (12.1) 18.6 43.0	87.3 (48.6) 74.7 85.2	116.8 (65.1)
ALL	26.5 (14.8)	50.6 (28.2)	102.4 (57.0)	179.5 (100.0)

Row labels Very Poor, Mid-Poor, Non-Poor, ALL are under the "1986" heading.

West Forest, 1985-86

		1985			
	Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
1986	Very Poor	- - - -	0.6 (0.4) 100.0 4.8	- - - -	0.6 (0.4)
	Mid-Poor	0.3 (0.2) 1.2 34.4	2.4 (1.5) 10.0 20.0	21.2 (13.7) 88.8 14.9	23.9 (15.4)
	Non-Poor	0.6 (0.3) 0.4 65.6	9.0 (5.8) 6.9 75.2	121.0 (78.1) 92.7 85.1	130.6 (84.2)
	ALL	0.8 (0.5)	11.9 (7.7)	142.3 (91.7)	155.1 (100.0)

Savannah, 1985-86

Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
		1985		
Very Poor	5.0 (3.9) 54.2 24.4	2.8 (2.2) 30.8 9.5	1.4 (1.1) 15.0 1.8	9.2 (7.2)
Mid-Poor	11.3 (8.9) 26.6 55.7	15.9 (12.5) 37.3 53.7	15.4 (12.1) 36.1 19.8	42.7 (33.4)
Non-Poor	4.0 (3.2) 5.3 19.8	10.9 (8.5) 14.4 36.8	60.9 (47.7) 80.3 78.4	75.8 (59.4)
ALL	20.4 (15.9)	29.6 (23.2)	77.7 (60.8)	127.7 (100.0)

(1986 is the row grouping label)

Abidjan, 1986-87

Frequency (%) Row Percent Column Percent	1986			
	Very Poor	Mid-Poor	Non-Poor	ALL
Very Poor	1.6 (1.2) 49.9 66.9	- - - -	1.6 (1.2) 50.1 1.3	3.2 (2.4)
Mid-Poor	- - - -	2.9 (2.2) 41.2 45.2	4.1 (3.2) 58.8 3.4	7.0 (5.4)
Non-Poor	0.8 (8.6) 0.6 33.0	3.5 (2.7) 2.9 54.8	115.8 (88.9) 96.4 95.3	120.1 (92.2)
ALL	2.4 (1.8)	6.4 (4.9)	121.5 (93.3)	130.2 (100.0)

The left side of the table is labeled **1987**.

Other Cities, 1986-87

	1986			
Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
Very Poor	- - - -	2.2 (1.6) 100.0 13.8	- - - -	2.2 (1.6)
Mid-Poor	1.0 (0.7) 4.3 50.0	6.4 (4.7) 28.9 40.6	14.8 (10.9) 66.8 12.6	22.1 (16.35)
Non-Poor	1.0 (0.7) 0.9 50.0	7.2 (5.3) 6.5 45.6	102.9 (76.0) 92.7 87.4	111.0 (82.0)
ALL	1.9 (1.4)	15.7 (11.6)	117.7 (87.0)	135.3 (100.0)

1987

East Forest, 1986-87

		1986			
	Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
1987	Very Poor	3.4 (2.1) 22.0 40.3	9.0 (5.6) 57.8 24.2	3.2 (1.9) 20.1 2.7	15.6 (9.7)
	Mid-Poor	4.3 (2.7) 8.2 50.5	16.4 (10.1) 31.1 43.8	32.0 (19.8) 60.7 27.7	52.7 (32.6)
	Non-Poor	0.8 (0.5) 0.8 9.2	12.0 (7.4) 12.8 32.0	80.4 (49.8) 86.3 69.6	93.2 (57.7)
	ALL	8.6 (5.3)	37.4 (23.1)	115.6 (71.5)	161.5 (100.0)

West Forest, 1986-87

Frequency (%) Row Percent Column Percent	1986 Very Poor	Mid-Poor	Non-Poor	ALL
Very Poor	1.0 (1.4) 32.8 46.0	1.1 (1.5) 34.8 8.8	1.0 (1.4) 32.4 1.7	3.1 (4.2)
Mid-Poor	1.2 (1.6) 7.7 54.0	6.1 (8.3) 39.8 50.4	8.1 (11.0) 52.5 13.6	15.4 (20.9)
Non-Poor	- - - -	5.0 (6.7) 8.9 40.7	50.3 (68.2) 91.0 84.7	55.3 (74.9)
ALL	2.2 (3.0)	12.1 (16.5)	59.4 (80.5)	73.8 (100.0)

(1987 labels rows)

Savannah, 1986-87

	1986			
Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
Very Poor	1.6 (1.0) 9.1 23.8	6.0 (3.9) 35.0 15.7	9.6 (6.2) 55.8 8.8	17.3 (11.2)
Mid-Poor	2.6 (1.6) 5.1 38.5	18.7 (12.1) 37.1 48.5	29.1 (18.9) 57.8 26.7	50.4 (32.7)
Non-Poor	2.5 (1.6) 2.9 37.7	13.8 (8.9) 15.9 35.8	70.4 (45.6) 81.2 64.5	86.7 (56.2)
ALL	6.6 (4.3)	38.5 (25.0)	109.2 (70.7)	154.3 (100.0)

(Left column label: 1987)

Abidjan, 1987-88

		1987			
Frequency (%) Row Percent Column Percent		Very Poor	Mid-Poor	Non-Poor	ALL
1988	Very poor	- - - -	- - - -	- - - -	- - - -
	Mid-Poor	- - - -	4.4 (3.3) 71.4 50.0	1.8 (1.3) 28.6 1.4	6.2 (4.7)
	Non-Poor	0.9 (0.7) 0.7 100.0	4.4 (3.3) 3.5 50.0	121.4 (91.3) 95.8 98.6	126.7 (95.3)
	ALL	0.9 (0.7)	8.9 (6.7)	123.2 (92.7)	133.0 (100.0)

Other Cities, 1987-88

		1987			
	Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
1988	Very Poor	5.2 (3.8) 53.3 57.1	1.9 (1.4) 20.0 9.4	2.6 (1.9) 26.7 2.4	9.7 (7.1)
	Mid-Poor	3.9 (2.9) 9.5 42.9	15.6 (11.4) 38.1 75.0	21.4 (15.7) 52.4 20.1	40.9 (30.0)
	Non-Poor	- - - -	3.2 (2.4) 3.8 15.6	82.4 (60.5) 96.2 77.4	85.6 (62.9)
	ALL	9.1 (6.7)	20.8 (15.2)	106.4 (78.1)	136.2 (100.0)

East Forest, 1987-88

Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
		1987		
Very Poor	2.6 (1.8) 14.3 50.0	11.8 (8.0) 64.3 32.1	3.9 (2.7) 21.4 3.7	18.4 (12.5)
Mid-Poor	2.6 (1.8) 6.7 50.0	18.4 (12.5) 46.7 50.0	18.4 (12.5) 46.7 17.5	39.5 (26.8)
Non-Poor	- - - -	6.6 (4.5) 7.4 17.9	83.0 (56.2) 92.6 78.7	89.6 (60.7)
ALL	5.3 (3.6)	36.9 (25.0)	105.4 (71.4)	147.5 (100.0)

(1988 is the row grouping label for Very Poor, Mid-Poor, Non-Poor)

West Forest, 1987-88

		1987			
	Frequency (%) Row Percent Column Percent	Very Poor	Mid-Poor	Non-Poor	ALL
1988	Very Poor	5.2 (5.2) 33.3 57.1	10.4 (10.4) 66.7 34.8	- - - -	15.6 (15.6)
	Mid-Poor	2.6 (2.6) 5.1 28.6	14.3 (14.3) 28.2 47.8	33.8 (33.8) 66.7 55.3	50.7 (50.6)
	Non-Poor	1.3 (1.3) 3.8 14.3	5.2 (5.2) 15.4 17.4	27.3 (27.3) 80.8 44.7	33.8 (33.8)
	ALL	9.1 (9.1)	29.9 (29.9)	61.2 (61.0)	100.2 (100.0)

Savannah, 1987-88

Frequency (%) Row Percent Column Percent	1987			
	Very Poor	Mid-Poor	Non-Poor	ALL
Very Poor	28.7 (14.5) 44.9 88.0	27.4 (13.8) 42.9 46.7	7.8 (3.9) 12.2 7.3	63.8 (32.2)
Mid-Poor	2.6 (1.3) 4.5 8.0	20.8 (10.5) 36.4 35.6	33.9 (17.1) 59.1 31.7	57.3 (28.9)
Non-Poor	1.3 (0.7) 1.7 4.0	10.4 (5.3) 13.6 17.8	65.1 (32.9) 84.7 61.0	76.9 (38.8)
ALL	32.6 (16.4)	58.6 (29.6)	106.8 (53.9)	198.0 (100.0)

(1988 is the row-variable label for the left side)

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