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Afrobarometer Paper No. 23

POVERTY, SURVIVAL AND DEMOCRACY IN SOUTHERN AFRICA

By Robert Mattes,
Michael Bratton, and
Yul Derek Davids

**A comparative series of national public
attitude surveys on democracy, markets
and civil society in Africa.**



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AFROBAROMETER WORKING PAPERS

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POVERTY, SURVIVAL AND DEMOCRACY IN SOUTHERN AFRICA¹

EXECUTIVE SUMMARY

One of the clearest findings of empirical political science is that the prospects for sustaining democratic government in a poor society are far lower than in a relatively wealthy one. Precisely why poverty undermines democracy, however, has been much less clear. In order to answer this question, we use data from seven 1999-2000 Afrobarometer surveys in Southern Africa to develop measures of poverty and well being, as well as its possible consequences both in terms of day-to-day survival, and political attitudes and behaviour. The data yield the following conclusions.

First, it is possible to isolate and measure a multifaceted but unidimensional *Lived Poverty Index* (LPI) that taps peoples' ability to obtain the basic necessities of life. This index measures one aspect of overall well-being and is empirically distinct from, though related to, other aspects such as health or access to state services. In contrast to recent efforts to simplify the concept of poverty, we find that well-being in Southern Africa is multi-dimensional and cannot be reduced to a single composite measure that combines securing basic necessities with things such as employment, access to public services and health status.

Second, our measure of lived poverty consists of several short subjective/perceptual items placed on relatively small sample surveys. Yet it obtains virtually the same cross-national and cross-provincial results as measures generally preferred by economists that are based either on national account data (GNP per capita) or on massive, expensive and intrusive surveys of household income, expenditure, infrastructure and circumstances). But the cost of such surveys usually means that they are undertaken relatively infrequently in developing countries. In contrast, the factors comprising the LPI can be included more frequently in surveys of relatively small samples. This enables policy makers to reliably track national and sub-national trends in the overall extent of lived poverty or of its subcomponents such as hunger. And because they are relatively few in number, the Index items can be placed on several different types of surveys, allowing poverty researchers to examine linkages between poverty and other elements of well being, as well as various types of economic, social and political behaviour.

Third, not only do we find quite extensive levels of lived poverty in Southern Africa, we also find that social capital networks (in the form of survival strategies) are quite limited. Most individuals rely on just one strategy to obtain basic necessities such as food, home security, cash or health care. While only small proportions can be considered "helpless" in that they have no primary survival strategy, large proportions are "vulnerable" to external shocks in that they have no backup strategies in case their primary ones fail.

Fourth, an examination of specific survival strategies reveals the extremely limited reach of the state across the region. With the exception of health care, few Southern Africans think of government as either a primary or backup source of food, cash or most astonishingly, home security.

Fifth, collectively Southern Africans rely on a variety of strategies to get by on a daily basis. This type of social capital cannot be neatly summarized by a single indicator such as interpersonal trust or participation in community organizations.

Finally, the Afrobarometer contains the unusual combination in the same survey of both measures of lived poverty and measures of political values and behaviours. In contrast to popular wisdom, we find that, net other correlates such as education and political efficacy, lived poverty has little observable

impact on political values and behaviours. If anything, it is associated with increased levels of some forms of political participation.

This suggests that the well-established relationship between national wealth and democratic endurance is not a result of micro-level dynamics (e.g., that poor people are less democratic than workers or middle class folk). Rather, it may simply be that poor countries are less able to afford or maintain the things vital to sustainable democracy, ranging from formal state institutions such as quality electoral machinery and a well-resourced legislature, to societal institutions such as effective political parties, an independent news media, and a vibrant web of civil society organizations.

POVERTY, SURVIVAL AND DEMOCRACY IN SOUTHERN AFRICA

INTRODUCTION

One of the clearest findings of empirical political science is that the prospects for sustaining democratic government in a poor society are far lower than in a relatively wealthy one.² Given Africa's widespread poverty, this is a sobering thought for all those committed to democracy on this continent.

Precisely *why* poverty undermines democracy, however, has been much less clear. It may be that poor people simply have far less time to devote to the types of participation that give life to democracy. Or it could be that poor people, given the imperative to satisfy a range of basic survival needs, have little reason to worry about satisfying "higher order" needs like self-government, freedom and equality that democracy fulfils. Or poverty may prevent people from taking part in processes that produce the shifts in values necessary for stable democracy: processes such as education, urbanization, or using the mass media. In short, poverty inhibits the modernization that breeds democratic values.³ Finally, others have pointed out that poorer societies are less able to distribute wealth equitably or facilitate accommodation and compromise in clashes over resources.⁴

In order to understand better the shape of poverty in Africa and its links with democracy, this Afrobarometer Working Paper examines responses from a common set of questions asked in Afrobarometer surveys in seven Southern African countries between September 1999 and August 2000. These responses help us describe the extent, depth and structural characteristics of poverty in Southern Africa, the strategies that ordinary people use to overcome poverty, and the consequences of poverty for citizen willingness to support, participate in, and defend democracy. The Afrobarometer is a systematic survey of ordinary Africans' views toward democracy, economics and civil society, conducted in countries that have introduced a degree of democratic and economic reform. Because the instrument asks a standard set of questions, countries can be systematically compared. While the first round of the Afrobarometer was based on surveys in 12 countries, this paper focuses on responses to a specific set of questions on various elements of well-being that were contained in seven Southern African surveys (Botswana, Lesotho, Malawi, Namibia, South Africa, Zambia and Zimbabwe).⁵ Each survey was based on a random stratified nationally representative sample. Trained enumerators conducted face-to-face interviews in local languages with a total of 9366 respondents in the seven countries. With sample sizes of 1200, responses based on the national sample are subject to a margin of sampling error of +/- 3.0 percentage points at a 95 percent level of confidence (South Africa had a sample size of 2200 and a margin of error of +/- 2.2 percentage points).⁶

MEASURING WELL-BEING

Poverty is normally described with data from national censuses or dedicated surveys of relatively large samples of households using extensive questionnaires devoted to assessing household income, expenditure and assets. In either case, the task requires a substantial number of questions and questionnaire space.⁷ When designing the first round of Afrobarometer surveys, the national research partners clearly understood that poverty was potentially a major obstacle to consolidating democracy in Africa, but they also knew that the great portion of the questionnaire would be devoted to measuring citizen support for democratic and economic reform.

Thus we attempted to design a limited number of questions that could assess poverty and well being without having to do a detailed mapping of household income, expenditure, consumption or assets. These questions simply asked respondents how often in the past year they or their family had to "go

without” a series of basic necessities. We also posed a series of standard questions about the respondents’ educational attainment, employment status, occupation, and household access to services. Finally, Afrobarometer interviewers also made a range of observations of the conditions of the household and immediate surrounding community (in the language of sampling methodology, the primary sampling unit, or in terms of census-based maps, the enumerator area). These totalled to 23 interviewer-observed items and 13 questions posed directly to the respondent.⁸

The Dimensionality of Well-Being

Spurred by discontent with a sole focus on money metric measures, poverty researchers in developing countries have over the past decade attempted to broaden the concept of poverty into a more multi-faceted definition that includes many aspects of well-being and inequality that better reflect the lived experiences of people, especially the poor. Perhaps the zenith of this trend can be found in the definition used by the 1995 World Summit on Social Development in Copenhagen.

Poverty has various manifestations, including lack of income and productive resources sufficient to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increased morbidity and mortality from illnesses; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion. It is also characterised by a lack of participation in decision-making and in civil, social and cultural life ... Absolute poverty is a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services.

Accordingly, researchers have attempted to build various, larger indices that add to or substitute for income data by including things such as life expectancy, caloric intake, height and weight, formal education, literacy, employment, quality of housing, and access to services. Others have resorted to more qualitative indicators of feelings of powerlessness and exclusion.

Thus we first ask whether there is a single underlying dimension running through these 36 separate measures that we can use as a single, though multifaceted measure of “poverty”? In order to test this we used statistical tests known as Factor Analysis and Reliability Analysis.⁹ In other words, we wanted to know whether those individuals who are impoverished on one item tend to be equally impoverished across all other items.

In fact, we found six separate, though related, underlying dimensions in the responses to these items. Two dimensions are reflected largely by items measuring individual responses to questions about well-being. The first, and for our purposes most important dimension is reflected by seven items that ask people how often they “go without” basic necessities: a cash income, food, medical treatment, home fuel, water, electricity and home safety.¹⁰ Our ability to extract a single valid and reliable dimension from these items means that people who have difficulty obtaining one type of basic necessity tend to be those who have difficulty obtaining all the others. While home safety is the item most weakly correlated with this underlying dimension, it is still sufficiently associated with it and illustrates that lived poverty is characterised by a lack of security, whether it be physical, or physiological.

A second dimension of well-being is tapped by two items that measure physical and mental ill health.¹¹ The fact that these items do not “load” on our lived poverty dimension illustrates that while ill-health is strongly related to lived poverty, these factors are not simply reducible to a single poverty measure.

Four other separate dimensions were tapped by question items measuring fieldworker observations of the primary sampling area, or the immediate community around the household. One dimension is tapped by eight items that measure various aspects of *development infrastructure*. For the most part, it is comprised of infrastructure that can only be provided by government.¹² A second dimension is tapped by twelve question items measuring various aspects of *community services*. It includes a mixture of things that can be provided by both local communities and government.¹³ A third dimension is tapped by three items that measure the extent of *agricultural activity*.¹⁴ Finally, a fourth, separate dimension is tapped by two items measuring *access to schools*.¹⁵

Each of these sets of indicators can be aggregated and averaged to create an index score for each respondent in the survey as well as for each country. These six indices represent empirically distinct indicators of development and well being. In addition, it is also important to note that several individual items measuring *educational attainment*, *employment* and *quality of housing* do not cluster with any of these broader indices. We now discuss national results on the Lived Poverty Index in detail. Findings with respect to the other five dimensions and the non-index variables are discussed in Appendix A.

The Lived Poverty Index

As already mentioned, poverty has traditionally been assessed through intensive surveys of relatively large household samples that measure cash income, expenditure and assets. In most African societies, however, this requires extensive questioning about transactions or possessions involving a range of money and non-money metric goods and services, and then converting the non-money metric goods into money terms. The Afrobarometer questionnaire simply had no space for this type of questioning.

In addition, we suspected that we could more effectively ask about what we call “lived poverty.” That is, while a lack of money, assets or access to services may prevent people from securing the basic necessities of life, what really matters is whether or not people do, in fact, secure these basic necessities. Thus, we felt we could more effectively borrow from an approach first pioneered in the New Democracies Barometer surveys in Central and Eastern Europe by Richard Rose.¹⁶ In order to measure poverty, we presented survey respondents with a list of basic necessities and asked: “In the last twelve months, how often have you or your family gone without (these things): Was it often, sometimes, rarely or never?” We asked about food, water, home safety, medical treatment, a cash income, home fuel and electricity. If Amartya Sen is right and the value of one’s standard of living lies in the living itself,¹⁷ we believe that people’s answers to how often they go without basic necessities, rather than how much money they make, or what they have in their home, offers us a valid, reliable and direct measure of poverty. The responses to these questions also paint a sobering picture of poverty across Southern Africa as of 1999-2000.

Food The responses reveal that hunger was already a significant problem in across Southern Africa in 1999-2000, particularly in Lesotho. The average (median) respondents in Lesotho, Zambia and Namibia say that they or their families have “sometimes” “gone without enough food to eat” in the previous twelve months.¹⁸ Just under one-half of all Basotho aged 18 and over (46 percent) say they did so “often.” When added to the 14 percent who say they “sometimes” went without, we see a staggering, depressing picture of food insecurity in the mountain kingdom. The median respondents in Malawi, Zimbabwe and South Africa say they “rarely” went without. Only in Botswana does the median response drop to “never” go without. Black South Africans parallel Malawians and Zimbabweans, with the average respondent “rarely” going without food, while white, coloured and Indians tend to “never” do without (see Table 1).

Water As of 1999-2000, water deprivation was on average worst in Zambia, where the median respondent fell between saying they “sometimes” or “rarely” went without “enough clean water to drink and cook with.” Elsewhere the average respondent “rarely” went without potable water, except in

Botswana and South Africa, where the central tendency was to “never” go without. However, it should be noted that one-third of Basotho (34 percent) say they “often” went without enough clean water to drink or cook with in the previous 12 months. Ironically, Lesotho’s Highlands Water Project is the source of much of South Africa’s water. Botswana’s achievement is all the more notable given the extreme aridity of its climate, and can be traced to the fact that 98 percent of Botswana live in areas with piped water systems. South Africa’s figure masks a great deal of variation; 14 percent of black respondents still often go without clean water, compared to all other South Africans among whom this condition is virtually unknown (see Table 2).

Home Security The average Zimbabwean “sometimes” “felt unsafe from crime in your home” in the previous 12 months. Elsewhere, the median response was to do so “rarely,” except in Botswana where the average respondent “never” felt insecure. Again, it should be noted that an exceptionally large share of Basotho (36 percent) “often” felt unsafe (see Table 3).

South Africa presents an interesting case study. The country has endured a rapid rise in violent crime in the past six years and has one of the highest rates of violent crime in the world (behind only Venezuela and Swaziland).¹⁹ Sixteen percent of all deaths in South Africa result from trauma, compared to 5 percent globally. Until recent escalations in AIDS mortality, crime has been the leading cause of injury and death.²⁰ Large proportions of South Africans rate crime as the “most important problem facing the country,” and there is a heated debate surrounding government performance in fighting crime, as well as the public availability of police crime statistics. Yet the average South African told Afrobarometer interviewers that he or she “rarely” felt unsafe in the previous year. And this figure is likely to be much higher now than just four years ago. In a differently worded and framed question, surveys by the Human Sciences Research Council show that the proportions who say they “felt safe” or “very safe on most days” fell dramatically from 73 percent in 1994 to 44 percent in 1999.²¹ In contrast to the usual patterns of racial inequality in South Africa, both black and white South Africans express fairly similar patterns of insecurity, and both are more insecure than coloured or Indian respondents.

Medical Treatment There is a wide variance in people’s ability to secure medicine and medical treatment across the region. The average Namibian, Zambian and Zimbabwean had “sometimes” “gone without medicine or medical treatment that you needed.” The median response in Malawi, Lesotho and South Africa was to “rarely” do without necessary treatment. Again, the average Botswana “never” does without. But aside from the average response, it should be emphasised that almost one-third of Zambians (32 percent) and Basotho (30 percent) say they “often” go without needed medicine or treatment (Table 4).

Cash Income Afrobarometer research partners in Southern Africa decided not to attempt to measure income because of their experiences with the difficulty of obtaining valid income data. However, we did decide to include it in this set of questions. Rather than asking people how much money they make, which brings with it a whole host of attendant problems, we asked people how often they had “gone without a cash income” during the previous 12 months (Table 5).²²

The median Mosotho (and fully 64 percent of all respondents) had “often” done so (a figure far higher than any other country in Southern Africa). Elsewhere, the median respondent “sometimes” went without a cash income. The only exception was South Africa, with its system of, albeit limited welfare and maintenance payments, where the average response was to go without “rarely.”²³ However, this masks great income inequality inside the country; the average black respondent goes without “sometimes,” compared to “never” for white, coloured and Indian respondents.

Table 1: Going Without Food

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Often	12	20	11	24	27	46	8	10	1	6	4
Sometimes	23	18	42	37	23	14	26	33	3	17	6
Rarely	15	19	13	13	15	12	18	21	14	11	4
Never	51	44	28	26	35	28	48	36	82	67	86

Table 2: Going Without Water

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Often	6	16	19	26	21	34	10	14	0	1	0
Sometimes	10	14	28	23	20	13	14	19	2	3	2
Rarely	13	22	8	11	15	11	13	17	1	6	2
Never	71	48	45	38	43	42	63	50	97	90	96

Table 3: Going Without Safety

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Often	10	19	11	20	29	36	14	14	16	11	17
Sometimes	17	18	30	28	24	11	28	29	33	19	22
Rarely	17	25	7	18	20	10	18	20	14	15	6
Never	54	38	46	34	26	42	40	37	36	55	55

Table 4: Going Without Medical Treatment

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Often	5	25	14	32	28	30	9	11	2	6	5
Sometimes	11	24	43	37	26	9	29	36	9	19	10
Rarely	15	23	12	10	16	11	21	24	15	13	9
Never	69	28	25	20	28	49	41	30	74	61	76

Table 5: Going Without A Cash Income

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Often	25	40	25	46	45	64	16	21	2	10	3
Sometimes	27	30	45	34	27	13	30	38	8	12	15
Rarely	15	18	8	8	12	10	18	20	12	18	11
Never	33	12	21	11	16	12	35	21	78	61	71

Table 6: Going Without Home Fuel

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Often	11	16	23	16	18	32	7	10	0	5	1
Sometimes	20	13	18	22	22	11	20	27	2	6	5
Rarely	15	21	13	10	17	9	16	21	3	9	2
Never	54	49	44	44	39	48	55	42	94	77	91

Table 7: Going Without Electricity

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Often	54	83	46	49	49	95	19	25	0	8	2
Sometimes	5	4	7	15	13	1	18	24	3	8	3
Rarely	4	7	3	6	11	1	13	16	5	11	2
Never	34	7	43	27	21	2	48	33	91	72	93

Table 8: Lived Poverty (percent “often” or “sometimes” going without)

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Food	49	38	54	61	50	60	34	43	4	23	10
Felt Unsafe	28	38	41	43	53	47	43	43	49	31	39
Medical Care	16	49	58	69	54	38	38	47	11	26	15
Cash	52	69	69	80	71	77	47	59	10	22	18
Water	16	30	47	50	41	46	24	33	2	4	2
Fuel	31	29	41	38	40	43	28	37	2	10	6
Electricity	59	87	53	64	62	96	37	49	3	16	5
Average (Mean)	36	49	52	52	53	58	36	44	12	19	14

Table 9: Lived Poverty (percent “often” going without)

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Food	12	20	11	24	27	46	8	10	1	6	4
Felt Unsafe	10	19	11	20	29	36	14	14	16	11	17
Medical Care	5	25	14	32	28	30	9	11	2	6	5
Cash	25	40	25	46	45	64	16	21	2	10	3
Water	6	16	19	26	21	34	10	14	0	1	0
Fuel	11	16	23	16	18	32	7	10	0	5	1
Electricity	54	83	46	49	49	95	19	25	0	8	2
Average (Mean)	18	31	21	30	31	48	12	15	3	8	5

Home Fuel In most of Southern Africa, the average person has “rarely” “gone without enough fuel to heat your home or cook your food.” In South Africa and Botswana, the average person “never” experienced this. Looking below the average response, we can see that, reflecting their sparse supplies of natural firewood and the cold winters that necessitate home heating, 32 percent of Basotho “often” go without enough fuel (Table 6).

Electricity In general, the typical Southern African had “often” (most probably meaning “always”) “gone without electricity in your home.” In Namibia, the average response is to “sometimes” go without, and in South Africa with its giant electrical parastatal, Eskom, the average response was to do so “rarely” (Table 7).

In general it appears that Southern Africans in 1999-2000 were most likely to go without electricity, medical treatment, and food. They were more likely to secure water, home fuel and home safety. But for the typical citizen, it appears that difficulties are more likely to be intermittent rather than chronic. For comparative purposes, these shortages appear to be far more frequent than in Russia, a society that has experienced considerable economic shock over the past decade. Comparable data shows that the median Russian reports that he rarely goes without essential food, heating, electricity or clothing.²⁴

Moreover, while a focus on the central tendency or median response is useful, it tends to under-emphasise the significant proportions of people who are living in severe destitution. Tables 8 and 9 recount how each country performs across each basic necessity, with Table 8 listing only the proportions who “often” and “sometimes” go without and Table 9 listing only those who do so “often.” Focussing on Table 9, it is evident that considerable proportions of Southern Africans chronically do without basic necessities. On average, almost one-half of Basotho are destitute across all basic necessities, as are approximately one-third of Malawians, Zimbabweans and Zambians.

Summarising the information in another way, Table 10 presents an average index score of lived poverty for each country that runs from 1 (complete satisfaction of basic needs) to 4 (frequent shortages of basic needs). Viewed in this way, Botswana (1.98) and South Africa (2.00) are the least impoverished, or relatively wealthiest countries in the region, and statistically indistinguishable from each other. Namibia (2.39) is third, with Malawi (2.48), Zimbabwe (2.55) and Zambia (2.60) tied for fifth. Lesotho rates seventh, the poorest country of those we have surveyed in Southern Africa (2.76). The standard deviations around these mean scores are largest in Zimbabwe and South Africa, and are almost as large as for the entire region, indicating that inequalities in the enjoyment of basic necessities are greatest in these countries.

Table 10: Lived Poverty Index

Country	Mean	N	Std. Dev.
Botswana	1.98	1147	.68
South Africa	2.00	2137	.76
Namibia	2.39	1045	.67
Malawi	2.48	1186	.62
Zimbabwe	2.55	1065	.78
Zambia	2.60	1042	.64
Lesotho	2.76	1114	.68
Total	2.34	8736	.75

Lesotho’s very high level of lived poverty is echoed by a recent national poverty study which, using a money metric poverty line, defined 68 percent of the population as “poor,” a significant increase since 1990. The authors outlined a paradox between the country’s income poverty and recent periods of economic growth (averaging 5 percent between 1990 and 1997) as well as a range of other indicators that

suggest that Basotho should be doing much better than they are. For example, Basotho have established homes with reasonably sized plots with gardens and trees, sufficiently sized fields, relatively high levels of livestock ownership, fairly equitable access to water and natural resources, high levels of access to schools, high levels of literacy, and a good system of primary health care that eradicated polio and other diseases common to other African countries. Asking “How can there be widespread poverty in a country which, by African standards, is relatively well-off?” the authors point to inequality. Sharp declines in wage employment due to retrenchment of mine workers and simultaneous increases in civil service and private sector salaries have resulted in an extremely high level of inequality: its GINI coefficient (.60) is one of the highest in the world.

The results also point to limited livelihood skills. Basotho tend to work in jobs created by others. And they rarely combine effectively the country’s abundance of soil, water and labour. Farmers continue dry-land mono-cropping even in the face of profitable alternatives.²⁵

In Zambia’s case, extensive poverty appears to derive less from the natural environment, which is much more bountiful than in Lesotho, than from the under-performance of its government and people. Indeed, the fact that well-managed development programs can overcome an unpromising resource endowment is illustrated by Botswana’s relatively strong record of meeting basic needs.

ADVANTAGES OF A “LIVED POVERTY” APPROACH

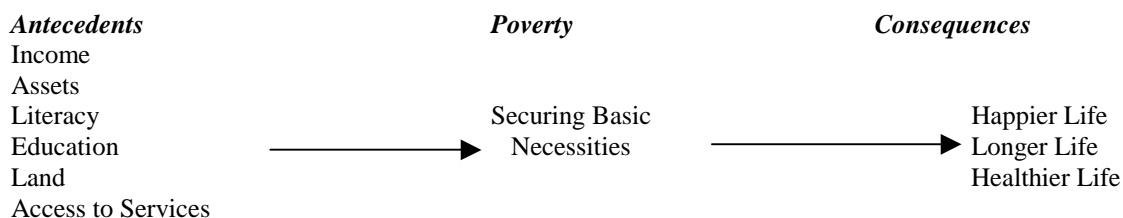
We have now seen that well being, at least in Southern Africa, is multi-dimensional and cannot be captured with one single construct. Let us now focus on the set of items that we argue measures lived poverty, which we believe has several things to recommend it as a new area of poverty research.

Face Validity

First of all, we believe a “lived poverty” approach is simply a more valid measure of the concept of poverty than other existing measures. While it may not measure it as precisely as economists might like, it is a direct (rather than indirect) measures of people’s ability to secure the basic necessities of life: what we argue lies at the core of poverty. Moreover, it isolates poverty and measures it separately from the *antecedent conditions* that may (or may not) enable people to secure these necessities (such as a cash income) or the *consequences* that may or may not result from securing these necessities, such as a longer, healthier or happier life.

The poverty literature often fails to distinguish these things operationally and thus conflates measures of poverty with measures of antecedent causes (often referred to as resources, assets or capabilities) and measures of consequences such as health, longevity or happiness. We realize that what we call antecedent causes are not totally “exogenous” (to use the language of the economist). For example, shortfalls in income may mean people “go without” health care, which, in turn, might mean that people lose their job and thus face increased health problems. However, while we may not be able to demonstrate conclusively a strict temporal sequence between antecedent capabilities, poverty and its consequences, the alternative of mixing them together in one measure is worse.

Figure 1: Poverty, Its Antecedents and Consequences



A great deal of effort has focussed on measuring antecedent conditions of poverty. The most obvious example can be seen in the measurement of income, assets or expenditure that lie at the core of the broad household survey tradition. Widely used as an indicator of welfare and poverty, income is very difficult to measure accurately and reliably. Because it is derived from multiple sources, it can be defined in different ways. Non-money metric forms of income are extremely difficult to identify and measure, such as the value of public services, public goods, barter or in-kind income. This is especially problematic in rural areas or barter economies where large numbers of people may depend on these types of income. In Malawi, for example, the Afrobarometer survey found that approximately two-thirds of the national sample was not receiving a cash income from a job nor looking for a job. In addition, the sensitivity of the subject can lead to inaccurate responses. But even if respondents are willing to answer honestly, they may not accurately recall all sources of income.²⁶

A different approach attempts to measure household assets as a proxy for income. Assets are seen as indicative of long-term household status since they represent sources of potential future income. While assets are seen to be easier to measure (since respondents can conceptualize them they can be visually verified rather than recalled), they must be turned into a money metric value, and such valuations must also take into account depreciation or appreciation – both of which may be very complex.²⁷

But a far more fundamental critique of measuring poverty through income is that while the lack or absence of income may be strongly related to poverty, they are not the same things. It is a means to an end. Higher income may enable people to do better in their quest to obtain the basic necessities of life, but this is by no means certain. Summarising the limited literature on the subject, Ravi Kunbar and Lyn Squire conclude that “while there is clearly an overlap – those who lack income are also those who are less well educated and suffer more sickness – the correspondence is less than complete and can, in some cases, be quite small.”²⁸

While there is a broad, aggregate, country-level correlation between income and things like life expectancy, literacy and infant mortality, income growth does not necessarily translate into improvements in health status or educational attainment. Growth provides an opportunity to improve basic well-being, but it is an opportunity that a country must seize.²⁹ Countries falling in the same per capita income brackets may have widely varying life expectancy and infant mortality rates.³⁰ For instance, South Africa has a higher GDP per capita than five other upper-middle income countries (Poland, Thailand, Venezuela, Botswana and Brazil), but performs worse than all of them with regard to life expectancy, infant mortality and adult illiteracy.³¹ At the household level, studies in South Africa have demonstrated that almost one-third of the most severely deprived households come from middle-level income quintiles. Approximately 3.7 million of 11.7 million severely deprived people would be missed by a pure income-based measure, the vast majority of whom live in rural areas.³² Similarly, a Cote d’Ivoire study found that less than half those identified as “poor” according to per capita consumption adjusted for family composition were also identified as “poor” by a criterion of average adult educational levels.³³ Finally, a study of six developing countries has found only modest correlations between income and non-money metric welfare indicators.³⁴

For these and other reasons, poverty researchers have searched for alternative measures. Many have been attracted by Amartya Sen’s focus on the ability of households or individuals to command the resources necessary for a decent standard of living. Poverty, according to the United Nations Development Program is “the denial of opportunities and choices most basic to human development to lead a long, healthy, creative life and to enjoy a decent standard of living, freedom, dignity, self-esteem and respect from others.”³⁵ This had led to a shift away from pure income measures to focus on “capabilities-” or “opportunities-based” measures of poverty. According to South African development

researcher Julian May, a “capabilities” approach should measure the “inability of individuals, households or entire communities to command sufficient resources to satisfy a socially acceptable minimum standard of living.”³⁶

A common way to capture capabilities is to create a “poverty line” or “subsistence line” consisting of an estimated benchmark of what it costs to secure basic needs, and then comparing that to household consumption, or the goods and services consumed or used by a household measured through expenditure data. Poverty is usually expressed as the percentages of individuals or households living below that line.³⁷ While consumption is easier to gather and provides a better picture of the standard of living (since it tracks the actual goods and services used by the household), we do not always know whether the consumption came from increased income, spent savings, or borrowing.³⁸ Moreover, the resulting poverty depends a great deal on where the poverty line is set and the assumptions that go into deciding what is necessary to secure a decent living.³⁹

Another approach has been to include access to public services in the measure of poverty. In South Africa, for example, Stephen Klasen has developed a deprivation measure based on a composite index of 12 household indicators measured on five point scales: education of all adult members, income, number of household durables, type of house, type of water access, type of sanitation facility, main source of cooking fuel, proportion of adult members employed, type of transport used to get to work, proportion of stunted children in household, type of health facility used in last illness, and level of satisfaction of household.⁴⁰ Alternatively, Statistics South Africa has developed measures of household infrastructure (a formal house, electricity, water tap, flush toilet, refuse removal, telephone) and household circumstances (expenditure, levels of education, unemployment, size of household, number of children under five).⁴¹

But as we have already seen with the Afrobarometer data on access to water and electricity, access by itself does not ensure that basic needs have been met. People with no formal access may never go without if they have a repertoire of informal survival strategies: people with no access to piped water may be able to obtain potable water through other means; people who are not hooked up to an electricity grid may have a portable generator, or more simply may not need it if they live in a warm climate or in a country with an abundance of natural fuel resources. Thus, income-, consumption- and access-based measures all suffer the same flaw: they do not measure the actual enjoyment of life’s basic necessities, but rather draw inferences from plausible proxy measures.

Other approaches make the opposite mistake and conflate poverty with its consequences. Two prominent examples were created by the United Nations Development Programme (UNDP). The Human Development Index (HDI) is a composite national-level index drawn from aggregate measures of longevity (life expectancy), educational attainment (adult literacy and national school enrolment rates) and standard of living (GDP per capita). Its Human Poverty Index (HPI) consists of the percentage not expected to live to the age of 40, percentage of illiterate adults, and the percentage of people without access to safe water and health services. Attendance at school and literacy may enable people to escape from poverty (but may not). As demonstrated above, access to safe water and health care clinics does not necessarily mean people can afford the water, or are healthy. Life expectancy and longevity, surely, are related to poverty (or more precisely the absence of poverty). Yet a short, unhealthy life can as easily be the consequence of smoking and lung disease, or even of things normally associated with affluence, such as heart disease.

The LPI, on the other hand, asks people directly to assess their ability to secure the basic necessities of life, rather than inferring it from things such as income, expenditure, assets, or access to services. One objection that we have encountered in presentations to various audiences of economists and development researchers is that the LPI depends on self-reported perceptions and judgments, or what most economists appear to call “qualitative” data. This objection calls our attention to the peculiar way that economists

dichotomize poverty data. This dichotomy is nicely illustrated by May, Woolard and Klasen, who divide poverty research into “‘objective’ social indicators, such as income levels, consumption expenditure, life expectancy and housing standards” versus “subjective indicators, based upon the attitudes, needs and perceptions gathered directly from people – or indeed with people – through the use of participator research methodologies.”⁴² In other words, once we move beyond self reports of income or expenditure, many economists seem to think that subjective attitudes can only be captured through qualitative “participatory” research. This implies that people’s subjective experiences are interesting, but not sufficiently reliable or valid to merit quantitative measurement. As World Bank economist Martin Revallion notes: “oddly, while economists generally think that people are the best judges of their own welfare, they resist asking people how they feel.”⁴³ Or, in the words of Paul Krugman: “economics is marked by a startling crudeness in the way it thinks about individuals and their motivations.... Economists are notoriously uninterested in how people think or feel.”⁴⁴

But if we assume – as economists do – that representative, randomly selected sample respondents can accurately recall expenditures or income from a range of various sources, they certainly should also be able to give us a reasonable idea of how often they went without vital necessities in the previous 12 months. Thus the real issue is not between “objective, quantitative” and “subjective, qualitative” research, but whether we systematically measure the experiences, judgments and preferences of representative samples of people so that we can obtain estimates of the extent of lived poverty whose precision is knowable, and which allow us to conduct statistical tests of hypotheses about the extent, causes and consequences of poverty. This is not so much a matter of what Revallion calls a “sequential mixing” of techniques where participatory methods are used to generate hypotheses to be tested by quantitative research (which is to be desired), but of what he calls “simultaneous” mixing whereby measures of so-called “qualitative” indicators of experiences, judgments and preferences are incorporated into systematic poverty surveys.⁴⁵

Precision

While the Afrobarometer Lived Poverty Index (LPI) might be a more direct measure of differing levels of poverty, economists might desire a more precise, fine-grained measure than simply going without “rarely, sometimes or often.” It is certainly possible to add additional items to tap additional necessities, or to broaden the response scale to enable greater precision (e.g., “how many days a month do you go without ___?”). However, we believe that the existing index includes the most fundamental necessities of life and that any additions would alter the results marginally, although this remains an empirical question.⁴⁶

But we also believe that even in its existing form, the LPI already offers more precision than many other measures. First of all, we can use ordinal distinctions between response categories to draw our own “poverty line” and derive the total proportion of people or households falling under or over that line. For example, we can easily calculate the percentage that, on average, “often” go without these necessities; or we can broaden it and calculate the percentage that go without “often” or “sometimes.” At the same time, because the LPI yields a continuous variable we do not simply have to divide people into “poor” or “not poor,” but are able to see poverty as a matter of degree. It allows us to calculate a mean to compare average poverty rates between any two or more countries, provinces, or other groups of households or individuals – something that is not possible with the HDI, for example, since it is based on national aggregate data.

Comparability

Sometimes income or expenditure data is simply used to sort respondents or households into country-specific deciles or quintiles. Yet this limits our ability to make direct cross-national comparisons since the categories are country relative. Alternatively, if income and expenditure is converted to an internationally comparable money metric, such as U.S. dollars, researchers are forced to estimate values

of things like bags of flour, land or livestock. As discussed above, poverty line estimates also force researchers to estimate what it costs to “get by” in a given country. In contrast, the LPI provides an absolute scale whose meaning is not relative or contextual. Moreover, respondents tell us whether or not they “get by,” we do not have to infer it by comparing income or expenditure to a poverty line. Responses summarize the consequences of income and access to services; they obviate the need to make statistical adjustments to income for things like regional differences in cost of living, differential access to public goods, or household size, or from trying to attach monetary values to publicly provided goods, production for own use, or in-kind transactions.

Critics might argue that cross-national or cross-cultural comparisons of LPI results are equally invalid since what constitutes “enough” food or water to, for example, a middle class white South African may be very different than for a rural Zambian. In other words, wealthier people might readjust and expand their definition of what constitutes sufficient food, water or necessary medical treatment. However, an examination of the responses of the relatively wealthy countries and relatively wealthy respondents reveals that they respond as we would expect and generally say they “never” go without these things. The substantial racial differences within South Africa suggest that wealthier people do not appear to “raise the bar” or “move the goalposts,” and that responses reflect absolute rather than relative need. Indeed, the validity and reliability measures of the scale demonstrate that people across nations and across cultures are reacting to these things in similar ways.

Ease of Measurement

As we have seen, collecting valid and reliable income and expenditure data entails significant costs in both money and interview time. It is expensive in terms of money largely because economists want to maintain the fine distinctions enabled by money-based data even within small sub-groups: for example, they may want to examine differences in income by age among men versus women within a specific province. This requires relatively large samples of desired sub-groups, and often means national samples of 10,000 households or more. The exhaustive questioning needed to track all sources of income, all forms of expenditure and all household assets also means a very long survey, which increases labour costs. Such surveys are expensive in terms of interview space because the exhaustive tracking leaves little room for questions on other subjects. This makes the measurement of “income poverty” prohibitive for sample-based surveys on other subjects that want to measure poverty merely as one explanatory variable among others.

The LPI cannot substitute for the detailed mapping provided by dedicated surveys, and poverty researchers will certainly want to continue to use censuses and dedicated Living Standards Measures Surveys or Income and Expenditure Surveys for periodic in-depth investigations. But given the long time spans between national censuses, the prohibitive costs of LSMS’s or IES’s, and the limited resources of national statistical offices, the LPI has much to offer. It is “cheap” in terms of question space, and can be used far more frequently with relatively small samples to obtain regular “readings” of national or provincial poverty lines, monitoring changes in specific facets like the increase in hunger during a drought or famine.

COMPARING ALTERNATIVE POVERTY INDICES

If the Afrobarometer Lived Poverty Index offers an arguably more conceptually valid indicator of everyday lived poverty, how does it perform empirically? We have already seen that responses to the seven questions constitute a reliable and valid scale that is distinct from other measures of well-being. In this section, we compare aggregate results produced by the Afrobarometer index with poverty measures produced by other types of data.

National Mean Scores

The first line of comparison is to take the ordinal country rankings and national mean scores produced by the LPI and compare them with the country rankings and national mean scores of measures created by the World Bank and the UNDP for the same seven countries. The Bank produces two purely money metric-based indicators, Gross National Product (GNP) per capita, and GNP adjusted for purchasing power parity (GNP PPP); both of these are gathered from national accounts data. They also generate two indicators based on health data that measure average infant mortality and under-five mortality. The UNDP's Human Development Index (HDI) is an average index measure that summarizes average life expectancy at birth, adult literacy, school enrolment, and adjusted per capita income in purchasing power parity dollars (PPP\$).⁴⁷ Looking back to the previous discussion, the World Bank's money-metric indicators are measures of the antecedents of poverty, while its life expectancy indicators measure poverty's consequences. The HDI combines measures of antecedents and consequences.

A visual inspection of the results (see Table 11) shows that all five indices place either South Africa or Botswana as the least impoverished countries in the region. The Afrobarometer's LPI places Lesotho as the most impoverished, but the other four consistently rank Malawi as worst off. All five agree that Zambia is the second most impoverished country. The relative ranking of Malawi and Lesotho seem to be the major point of discordance. In terms of human development and money metric indicators, Lesotho should be relatively prosperous compared to Zambia and Malawi. This reflects the paradox painted by the authors of the recent Lesotho poverty study that we discussed earlier.⁴⁸ In contrast, Malawi is consistently seen as the most impoverished country in the region by the other indices; yet Malawians were far less likely in 1999-2000 to say they frequently go without basic necessities than Zambians and Basotho.

Table 11: Alternative Rankings of Average National Poverty

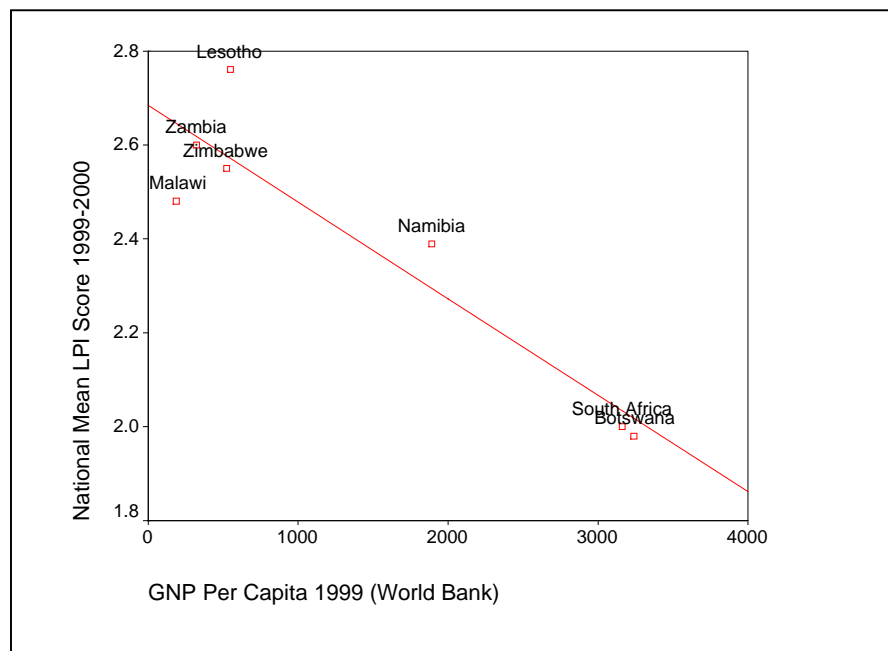
AB LPI National Mean Scores (On Scale of 1 to 4) (1999-2000)		World Bank GNP Per Capita (US\$, 1999) ⁴⁹		World Bank GNP PPP (US\$, 1999) ⁵⁰		World Bank Under 5 Mortality (per 1000, 1998) ⁵¹		World bank Infant Mortality (per 1,000 live births, 1998) ⁵²		UNDP Human Development Index (2000) ⁵³	
1	Botswana (1.98)	1	Botswana (3,240)	1	South Africa (8,318)	1	South Africa (83)	1	South Africa (51)	1	South Africa (.697)
	South Africa (2.00)	2	South Africa (3,160)	2	Botswana (6,032)	2	Botswana (105)	2	Botswana (62)	2	Namibia (.632)
3	Namibia (2.39)	3	Namibia (1,890)	3	Namibia (5,369)	3	Namibia (112)	3	Namibia (67)	3	Botswana (.593)
4	Malawi (2.48)	4	Lesotho (550)	4	Zimbabwe (2,470)	4	Zimbabwe (125)	4	Zimbabwe (73)	4	Lesotho (.569)
	Zimbabwe (2.55)	5	Zimbabwe (520)	5	Lesotho (2,058)	5	Lesotho (144)	5	Lesotho (93)	5	Zimbabwe (.555)
	Zambia (2.60)	6	Zambia (320)	6	Zambia (686)	6	Zambia (192)	6	Zambia (114)	6	Zambia (.420)
7	Lesotho (2.76)	7	Malawi (190)	7	Malawi (581)	7	Malawi (229)	7	Malawi (134)	7	Malawi (.388)

Table 12 reports Pearson's r product-moment coefficients, which reflect correlations of stepwise changes in absolute poverty estimates across two countries. In terms of relative country rankings, the LPI correlates rather strongly, though far from perfectly, with the alternative poverty measures. Figure 2 displays the discordance over the ranking of Botswana and South Africa, and Malawi and Lesotho.

Table 12: Correlations of the AB Lived Poverty Index and Other Indices

	World Bank GNP Per Capita (1999)	World Bank GNP PPP (1999)	World Bank Under 5 Mortality (Under 5 deaths per 1000, 1998)	World Bank Infant Mortality (per 1000 births, 1998)	UNDP Human Development Index (2000)
LPI National Mean Score	-.93**	-.84*	.59	.63	-.55
LPI Poverty Line (Average Percent “Often / Sometimes” Going Without	-.86*	-.75*	.47	.51	-.42

Figure 2: AB Lived Poverty Index by GNP per Capita



However, what is not immediately apparent from Table 12 is that changes in the absolute magnitude of poverty as estimated by the LPI correlate extremely strongly with changes as measured by the two World Bank money-metric indices. In fact, there is an almost linear relationship between the LPI and GNP Per Capita ($r = -.93$). It correlates at a slightly lower level with GNP adjusted for purchasing power parity ($-.84$). In contrast, the LPI has much less in common with the HDI or infant and child mortality indicators.

Poverty Lines

A second line of comparison is to use the Poverty Line approach, whereby an amount is calculated (usually based on the estimated cost of a basket of basic necessities) and then the proportion of people who live under that line is used as the poverty estimate for a given country. As noted earlier, one of the advantages of this approach is that it provides us with a gross estimate, or “headcount,” of the actual number of people living in poverty. Yet its drawback is that it forces the analyst to define the precise line between being poor and not being poor, a line that may often be arbitrary.

In order to draw alternative “poverty lines” in the responses to the Afrobarometer items, we first calculated the average proportion who said they “often” went without across the seven basic necessities (which could be seen as a measure of the most destitute), and then calculated the average proportions that

went without “often” and “sometimes” (the destitute and the poor). We also calculated the proportion of respondents whose average score across seven items on the four point scale is above 2.5. We then compared the national estimates produces by these three “poverty lines” with: (1) a World Bank International Poverty Line indicator that uses data gathered from national household surveys to calculate the proportions with an income of less than US\$1 per day at purchasing power parity; (2) a UNDP National Poverty Line indicator that measures the proportions living below nationally defined poverty lines; and (3) the UNDP’s Human Poverty Index, which measures the percentage of people not expected to survive to age 40, the percentage of illiterate adults, the percentage of people without access to safe water and health services, and the percentage of underweight children under five (Table 13).

First of all, we can see the large effect of relatively minor decisions over whether to define poverty in the LPI as only the most destitute, or the destitute and the poor. With the exception of Zimbabwe and Lesotho, every country is placed at a different ranking by the two indicators. Second, the LPI-based poverty line indices show more dissonance with other rankings than was the case with the national mean scores.

Table 13: Alternative “Poverty Line” Based Rankings

AB LPI Poverty Line (Average Percent “Often” Going Without, 1999-2000)		AB LPI Poverty Line (Average Percent “Often / Sometimes” Going Without, 1999-2000)		AB LPI Poverty Line (Percent With Average Score >2.5 On Scale of 1 to 4, 1999-2000)		World Bank Int’l. Poverty Line (Percent Living On Less Than \$1 A Day PPP, 1985-1993) ⁵⁴		UNDP National Poverty Line (Percent Living Under Line, 1989-1994) ⁵⁵		UNDP Human Poverty Index (2000) ⁵⁶	
1	South Africa (12%)	1	Botswana (36%)	1	Botswana (23%)	1	South Africa (12%)	1	South Africa (24%)	1	South Africa (20%)
2	Botswana (18%)		South Africa (36%)	2	South Africa (27%)	2	Botswana (33%)	2	Botswana (35%)		Lesotho (23%)
	Namibia (21%)	3	Malawi (49%)	3	Malawi (46%)		Namibia (35%)	3	Zimbabwe (41%)	3	Namibia (27%)
4	Zambia (30%)		Namibia (52%)		Namibia (46%)	4	Zimbabwe (36%)		Malawi (42%)		Botswana (28%)
	Malawi (31%)		Zambia (52%)	5	Zimbabwe (56%)	5	Malawi (42%) ⁵⁷	5	Lesotho (50%)		Zimbabwe (30%)
	Zimbabwe (31%)		Zimbabwe (53%)		Zambia (56%)		Lesotho (43%)	6	Zambia (85%)	6	Zambia (38%)
7	Lesotho (48%)	7	Lesotho (58%)	7	Lesotho (63%)	7	Zambia (73%)		Namibia NA	7	Malawi (42%)

An examination of the correlations (Table 14) reaffirms the last point: the LPI correlates at far weaker levels with other “poverty line” measures than with regard to national mean averages. But even within the poverty line approach, we again see that the LPI correlates most strongly with a money-metric measure (those living on less than US\$1 a day) than with an outcomes-based approach. One reason that these correlations are weaker than with GNP per capita may be that they were gathered via income and expenditure household surveys that face the problems of accurately measuring income or calculating money values for household assets as discussed previously.

Table 14: Correlations of Poverty Line Indices

	AB LPI Poverty Line (Percent With Average Score > 2.5 on Scale of 1 to 4, 1999-2000)	AB LPI Poverty Line (Average Percent “Often” Going Without, 1999-2000)	AB LPI Poverty Line (Average Percent “Often / Sometimes” Going Without, 1999-2000)	AB LPI National Mean Score
WB International Poverty Line	.63	.53	.58	.66
UNDP National Poverty Line	.62	.46	.58	.63
UNDP Human Poverty Index	.27	.20	.26	.35

Intra-National Indicators (South Africa)

A third possible line of comparison based on available data is to examine various permutations of the LPI measure with available South African data aggregated by province. Table 15 shows LPI results for each South African province calculated as a mean score, or as the percentages living under three different possible poverty lines. The rank-ordering of the provinces generally accords with common understandings of the national distribution of poverty, with Western Cape and Gauteng as the wealthiest provinces, and Eastern Cape, Limpopo (formerly Northern Province) and Mpumalanga as the poorest.

Table 15: Afrobarometer Provincial Level Rankings

AB LPI Provincial Mean Score (Mean Score On Scale of 1 to 4, 2000)s		AB LPI Poverty Line (Average Percent “Often“ Going Without, 2000)		AB LPI Poverty Line (Average Percent “Often / “Sometimes” Going Without, 2000)		AB LPI Poverty Line (Percent With Average Score > 2.5 On Scale of 1 to 4, 2000)	
1	W Cape (1.6)	1	W Cape (5%)	1	W Cape (21%)	1	W Cape (12%)
	N Cape (1.7)		Gauteng (7%)		N Cape (26%)		Gauteng (16%)
3	Gauteng (1.8)		N Cape (10%)		Gauteng (27%)		N Cape (17%)
	Free State (2.0)		Free State (10%)	4	N West (34%)	4	Free State (23%)
	N West (2.0)		N West (12%)		KZ Natal (38%)		N West (25%)
6	KZ Natal (2.1)		KZ Natal (13%)		Free State (38%)		KZ Natal (32%)
	Mpuma (2.2)		Mpuma (14%)	7	Mpuma (40%)		Mpuma (34%)
8	E Cape (2.3)		E Cape (17%)	8	E Cape (48%)	8	E Cape (44%)
	Limpopo (2.4)		Limpopo (24%)		Limpopo (51%)		Limpopo (46%)

Tables 16 and 17 display several indices generated by Statistics South Africa (Stats SA) based on a “poverty line” approach.⁵⁸ The indices in Table 16 display the percentages of people in each province who live in households with per capita income or expenditure less than R250 per month or R800 per month using, alternatively, the 1996 Census, the 1995 National Income and Expenditure Survey, or calculations based on the 1995 IES survey to impute values to all census households. The last two columns display Stats SA’s calculations of the proportion of “poor” and “very poor” households in each province using calculations from the IES to impute values to census households.

Table 17 displays a Household Infrastructure Index that is based on eight separate measures of household access to services, and a Household Circumstances Index that is based on three measures of household employment and composition.

Table 16: Alternative South African Money Based Provincial Poverty Rankings (Stats SA)

1996 Census (Percent In Households With Per Capita Monthly Income <R250)*		1996 IES % In Households with Per Capita Expenditure <R250*		1996 Census % In Households With Per Capita Monthly Imputed Expenditure <R250* /***		1996 Census % of Households With Monthly Income <R800*		1996 IES % of Households with Monthly Expenditure <R800*		1996 Census % of Households With Imputed Monthly Expenditure <R800*		1996 Census % of "Very Poor" Households (Imputed Monthly Expenditure <R600 based on 1995 IES)**		1996 Census % of "Poor & Very Poor" Households (Imputed Monthly Expenditure <R1000)**	
1	Western Cape (27%)	1	Gauteng (11%)	1	Western Cape (12%)	1	Western Cape (5%)	1	Western Cape (16%)	1	Western Cape (31%)	1	Gauteng (14%)	1	Gauteng (19%)
2	Gauteng (34%)		W Cape (12%)		Gauteng (13%)	2	Gauteng (6%)	2	Gauteng (19%)	2	Gauteng (34%)	2	Western Cape (25%)	2	Western Cape (23%)
3	Northern Cape (50%)	3	KwaZulu Natal (24%)	3	Mpumalanga (25%)	3	KwaZulu Natal (13%)	3	Mpumalanga (37%)	3	Northern Cape (59%)	3	KwaZulu Natal (52%)	3	Mpumalanga (46%)
4	KwaZulu Natal (55%)		Mpumalanga (26%)		KwaZulu Natal (26%)		Mpumalanga (13%)	4	KwaZulu Natal (40%)	4	North West (65%)		Northern Cape (53%)	4	Northern Cape (50%)
	North West (56%)	5	Limpopo (36%)	5	Northern Cape (35%)	5	Limpopo (16%)	5	Northern Cape (46%)		KwaZulu Natal (66%)		Mpumalanga (54%)		KwaZulu Natal (50%)
6	Free State (59%)		North West (37%)		Limpopo (37%)	6	North West (20%)	6	North West (51%)		Free State (66%)	6	Limpopo (58%)	6	North West (53%)
	Mpumalanga (60%)		Northern Cape (38%)		North West (37%)		Northern Cape (22%)		Limpopo (52%)	7	Mpumalanga (68%)		North West (59%)	7	Limpopo (60%)
8	Eastern Cape (68%)	6	Eastern Cape (45%)	8	Eastern Cape (48%)	8	Eastern Cape (33%)	8	Free State (63%)	8	Eastern Cape (76%)	8	Free State (62%)		Free State (60%)
9	Limpopo (72%)	7	Free State (51%)		Free State (48%)	9	Free State (39%)	9	Eastern Cape (69%)	9	Limpopo (80%)	9	Eastern Cape (68%)	9	Eastern Cape (67%)

* Source: Alderman et al, "Combining Census and Survey Data," p. 11-12.

** Hirschowitz, Orkin & Alberts, "Key Baseline Statistics," pp. 59-60.

*** This imputed value is based on an analysis of the Income and Expenditure Survey data with household expenditure as the dependent variable and a series of poverty related variables as predictor variables. Since those predictor variables were also present in the census, they were used to impute an expenditure figure for each household in the census.

Table 17: Alternative South African Money-Based Provincial Poverty Rankings (Stats SA)

Stats SA Household Infrastructure Index ⁵⁹		Stats SA Household Circumstances Index ⁶⁰	
1	Western Cape (8)	1	Western Cape (3)
	Gauteng (8)	2	Gauteng (4)
3	Northern Cape (14)	3	Free State (5)
4	KwaZulu Natal (17)	4	Northern Cape (6)
	Free State (17)		North West (6)
6	Mpumalanga (20)	6	Mpumalanga (7)
7	North West (23)	7	KwaZulu Natal (8)
	Limpopo (23)	8	Limpopo (9)
9	Eastern Cape (24)		Eastern Cape (9)

Because items had different measurement ranges, provincial totals were created and then divided into thirds. If a province fell into the top third, it received a score of one on the item, two if it fell into the middle third, and three if it fell into the lowest third. The Household Infrastructure Index consists of eight measures, thus the top score is 8 and the worst is 24. The Household Circumstances Index consists of three, thus the top score is 3 and the worst is 9.

Various derivations of the Afrobarometer LPI correlate very strongly with alternative Stats SA measures (Table 18). The two strongest correlations are between (1) the AB LPI Poverty Line (Average Scores >2.5) and the Stats SA Household Circumstances Index that measures household employment, household size, and the number of children under 5; and (2) between the LPI Poverty Line (Average Percent “often / sometimes” going without) and the percent in households with per capita monthly incomes under R800 ($r = .93$ for both). Looking across all correlations, the strongest consistent correlations are between the LPI estimate of those who “often/sometimes” go without on one hand, and the Stats SA measures of actual income and Household Circumstances and Household Infrastructure Indices. All variants of the LPI correlate most weakly with expenditure data and imputed data.

Finally, we examine the same data broken down by apartheid categories (Table 19). We see that the LPI aggregated by racial group correlates almost perfectly with Stats SA indices aggregated by race (Table 20). White and Indian South Africans experience the lowest levels of poverty, with higher levels of impoverishment among coloured respondents, and the greatest levels of poverty among black South Africans.

Table 18: Correlations Between Alternative South African Provincial Level Poverty Indicators

	Average Percent Who "Often" / "Sometimes" Go Without 7 Basic Necessities, 2000 (Afrobarometer)	Mean Lived Poverty Index Score, 2000 (Afrobarometer)	Percent With Average Lived Poverty Score Above 2.5, 2000 (Afrobarometer)	Average Percent Who "Often" Go Without 7 Basic Necessities, 2000 (Afrobarometer)
Percent in Households Per Capita Monthly Income <R800	.93***	.90***	.88**	.89**
Household Circumstances Index, 1996	.88**	.88**	.93***	.91***
Percent in Households Per Capita Monthly Income <R250	.89***	.87**	.85**	.86**
Household Infrastructure Index, 1996	.86**	.86**	.84**	.82**
Percent in Households Per Capita Monthly Imputed Expenditure <R250	.79*	.72*	.72*	.72*
Percent in Households Per Capita Monthly Expenditure <R250	.72*	.67*	.67*	.65
Percent "Very Poor" And "Poor" Households	.72*	.63	.62	.60
Imputed Monthly Expenditure <R1000				
Percent in Households Per Capita Monthly Imputed Expenditure <R800	.65	.55	.53	.53
Percent in Households Per Capita Monthly Expenditure <R800	.57	.46	.44	.47
Percent "Very Poor" Households, Imputed Monthly Expenditure <R600	.46	.34	.31	.26

Table 19: Alternative South African Racial Poverty Indicators

AB Index Mean Scores		AB Index (% Above 2.5 On Scale of 1 to 4)		1996 Census % of "Very Poor" Households (Imputed Monthly Expenditure R600 based on 1995 IES) ⁶¹		1996 Census % of "Poor & Very Poor" Households (Imputed Monthly Expenditure <R1000) ⁶²	
1	White (1.35)	1	White (2%)	1	White (1%)	1	White (3%)
	Indian (1.37)		Indian (6%)		Indian (1%)		Indian (3%)
3	Coloured (1.54)	3	Coloured (8%)	3	Coloured (8%)	3	Coloured (21%)
4	Black (2.24)	4	Black (37%)	4	Black (22%)	4	Black (54%)

Table 20: Correlations Between Alternative South African Racial Poverty Indicators:

	Mean Lived Poverty Score, 2000 (Afrobarometer)	Percent With Mean Poverty Score Below 2.5, 2000 (Afrobarometer)
Percent "Very Poor" Households Imputed Monthly Expenditure < R600)	.991**	.971*
Percent "Very Poor" and "Poor" Households – Imputed Monthly Expenditure <1000	.988*	.966*

Tentative Conclusions

Thus, a variety of permutations of the Afrobarometer Lived Poverty Index correlate at very high levels with alternative measures of poverty (Figure 3). This suggests some degree of robustness. In general, it appears that lived poverty reflects most strongly cross-national, cross-provincial and cross-racial money-metric differences, whether the data is based on national accounts or household surveys. In contrast, lived poverty shows much weaker linkages with measures of expenditure, and of factors such as education, literacy or health.

Figure 3: Aggregate-Level Linkages With Poverty

<i>Antecedents</i>	<i>Poverty</i>	<i>Consequences</i>
		Under 5 Mortality .59
GNP Per Capita	-.93	Infant Mortality .63
	Lived Poverty (Going Without Basic Necessities)	Human Development (Long, Healthy, Informed Lives) .55

INDIVIDUAL-LEVEL DETERMINANTS OF LIVED POVERTY

We have now presented both logical argument and empirical evidence that the Afrobarometer LPI provides a valid, reliable and apparently robust measure of poverty. We now turn to examine the individual-level correlates and predictors of lived poverty. Which of the various quality of life factors measured by the Afrobarometer shape the extent to which people enjoy the basic necessities of life? We conducted a multivariate regression analysis of the determinants -- or predictors -- of lived poverty across the region. Multiple regression is a tool that helps assess the correlation of a set of independent variables on a dependent variable (in this case, lived poverty). It enables us to determine how well the entire set of predictor variables correlates with the dependent variable. It also identifies the correlation between a specific independent variable and the dependent variable controlling for the simultaneous correlation of that variable with all the other independent variables.

We tested five gradually expanding models (see Table 21). The first is a purely structural model that tests the impact of age, gender and urban/rural location, which accounts for just 10 percent of the variance in personal poverty levels. The second model adds two measures – employment status and formal education – and increases r^2 to 0.17. The third model adds the measures of occupational class discussed earlier, using dummy variables for middle class, working class, agricultural / subsistence labour, and those who have never been employed (with housewives, students, retired people as the reference group). However, these variables add just one percentage point in explanatory power. The fourth model adds the indicators of development infrastructure, community services, agricultural activity and access to schools; this enables us to account for over one-quarter (28 percent) of variation in individual poverty. Finally, we add measures of race and national citizenship, which increase explained variance to 34 percent.

Table 21: Determinants of Poverty

	Pearson's r	Model 1		Model 2		Model 3		Model 4		Model 5	
		B	Beta	B	Beta	B	Beta	B	Beta	B	Beta
Constant		2.888		3.002		2.927		2.920		3.174	
Age	.10***	.003	.06***	-.000	-.00	.0001	.01	.002	.03**	.002	.05***
Gender	.01	-.006	-.00	.046	-.03**	.044	.03**	.037	.03*	.034	.02*
Rural / Urban	-.31***	-.467	-.30***	-.316	-.21***	-.308	-.20***	.063	.04**	-.004	-.00
Education	-.34***			-.106	-.22***	-.102	-.21***	-.056	-.12***	-.056	-.12***
Employment	-.22***			-.056	-.07***	-.044	-.05***	-.025	-.03*	-.022	-.03*
Unemployed In Past Year	.22***			.150	.10***	.146	.10***	.103	.07***	.114	.08***
Middle Class	-.17***					-.018	-.01	-.068	-.03*	-.053	-.02
Worker	-.04***					.015	.01	.020	.01	.006	.00
Subsistence Farmer	.14***					.101	.04***	-.047	-.02	-.023	-.01
Never Had A Job	.10***					.107	.05***	.109	.05***	.074	.04**
Development Infrastructure	-.47***							-.931	-.43***	-.662	-.30***
Community Services.	-.15***							.332	.12***	.179	.06***
Agricultural Activity.	.31***							.202	.11***	.025	.01
Access to Schools	-.10***							-.146	-.06***	-.159	-.06***
Asian	-.15***									-.678	-.11***
Coloured	-.18***									-.462	-.11***
White	-.25***									-.494	-.14***
Batswana	-.18***									-.263	-.12***
Basotho	.23***									.153	.07***
Malawian	.07***									-.029	-.01
Namibian	.01									.023	.01
Zambian	.11***									.258	.11***
Zimbabwean	.10***									.195	.08***
N	7323		8134		7829		7828		7149		7149
Adjusted R ²			.10		.17		.18		.28		.34
Standard Error of the Regression			.7179		.6859		.6849		.6388		.6109

There are several important things to note in this series of models. The first is the changing impact of urban/rural location. Bivariate analysis demonstrates that there is a strong urban bias to poverty and development in Southern Africa. People who live in urban areas are less likely to go without basic necessities,⁶³ and more likely to have gone farther in the educational system.⁶⁴ Urban areas are also much more likely to have been the beneficiaries of state- and/or donor-financed projects to build development infrastructure (such as electricity, water, sewerage, and clinics),⁶⁵ and to have more extensive community services (such as transportation service, civic facilities, and places to shop).⁶⁶ And, as reflected in Table 21, rural-urban location does play a strong role in shaping poverty when placed into the analysis along with age and gender. But once variables such as education and employment status are introduced into the analysis, the impact of rural-urban location becomes extremely small, and then completely disappears once racial and national differences are introduced.

Second, controlling for all factors simultaneously, the most important determinants of lived poverty are the existence of development infrastructure in the immediate area around the respondent, and individual educational attainment. In other words, within each country and race group, within both rural or urban populations, and at equal levels of employment, the more governments have built electricity and water grids, sewerage systems, health clinics and paved streets in the immediate surrounding area, and the farther you have advanced through the educational system, the less likely you are to live in poverty. Not having a job, now or at any point in the past year, is also strongly associated with lower levels of poverty (underlining the lack of state unemployment benefits across the region, except in South Africa, and the very limited impact of these benefits in keeping the unemployed out of poverty).

Third, social or occupational class plays almost no role in distinguishing between degrees of lived poverty. Compared to housewives, senior citizens and students (the excluded category), for comparison, Africans who belong to the middle class, working class, or peasantry are neither less nor more impoverished. Only the hard core unemployed – those who have never worked – encounter significantly higher degrees of poverty. In general, once we control for educational, employment and rural-urban status, poverty appears to cut across occupational class in Southern Africa.

Fourth, the regression analysis also reveals that even at equal levels of education, employment or rural-urban status, there are still significant cross-national differences and racial differences in lived poverty. Controlling for differential education or employment opportunities does not make the impact of race or national citizenship disappear. We determined this by entering a series of dummy variables. Dummy variables take the value of 1 if a respondent belongs to a specific category and 0 if not); one of the categories is always omitted because it is implicitly captured when all the other categories equal zero. For example, if the coloured, Indian and white dummy variables all equal zero then the impact of the variables for black respondents is implicitly captured by the equation without having to enter a specific variable for being black. The excluded category then serves as a reference group that allows comparisons among the groups.

We entered dummy variables for coloured, Indian and white categories (with black being the implicit reference group), and one for each country except South Africa, which then served as the reference group.⁶⁷ What the results tell us is that compared to black respondents across the region, being white, coloured or Indian is associated with sharply reduced levels of poverty, largely reflecting the legacies of legally-enforced racial discrimination in South Africa, Namibia and Zimbabwe. And, compared to South Africans, being a resident of Botswana and Malawi is associated with a reduction in poverty (again, after controlling for factors like education, employment or rural/urban status). However, being from Zambia, Zimbabwe and Lesotho is associated with an increase in poverty compared to South Africa. We do not maintain that there is something essential or genetic to race or to national culture that accounts for these results. Rather, we see race and country as summary, proxy measures of differing

socialization and historical experiences, as well as variations in current perceptions about how these different groups are affected by economic trends and government performance.⁶⁸

SURVIVAL IN SOUTHERN AFRICA

We have witnessed a fairly depressing picture of poverty across Southern Africa. How then do people survive? In this section we report the results of a unique set of questions asked in Afrobarometer surveys in Southern Africa that measure what social scientists call “social capital.” We adopt Richard Rose’s definition of social capital as a stock of informal social networks or formal organizations used by people to produce goods and services. It is the way that people “get things done.”⁶⁹ And because “getting things done” in Southern Africa often amounts to no more than simple day to day survival, these questions can also be said to measure people’s “survival strategies.”

These questions focus on survival strategies in four key domains of life: (1) food and sustenance; (2) physical security; (3) income; and (4) health. Within each domain, we asked people how they obtain these goods on a normal basis (“Describe the things you currently do to obtain _____. Is there anything else?”) But because social capital also encompasses people’s overall stock of strategies, existing and potential, we also asked people what they would do if they could no longer obtain these things through their existing strategies (“If you could not longer get _____ in this way, what other methods would you use? Is there anything else?”). Because these questions were asked in a slightly different way in Namibia, this section only reports responses from six countries.

We begin this section by describing the frequencies with which people use different *types of survival strategies*. All responses were recorded verbatim but later classified into broader categories to aid with analysis. At its broadest, people’s survival strategies could be classified into at least six types of strategies. First of all, southern Africans use *market* strategies to obtain not only things such as food and income, but also security and health care. A market strategy is anything that involves an exchange of money, services, labour or any other in-kind payment or barter in return for a good. When they lack the cash or other resources to exchange for these goods, Southern Africans may turn to their *family and friends* for support, or look to some other form of *social cooperation* with neighbours, for example, in a rotating credit association. In some instances, they may turn to the *state* for help, or they may simply fall back on *self-reliance* and produce the good themselves. Others may be so desperate that they have no choice but to *beg*, or *ask anyone they can* for sustenance and support.

Then we move to a discussion of the *extent* of Southern Africans’ use these various strategies, or what might be called the *breadth* of their survival *repertoire*. Here we simply examine how many different existing or “back-up” strategies people count on to help them “get by.” If people have no alternative or back-up strategies, we consider them to be *vulnerable* to some shock, such as a drastic jump in prices or drought. If they can list no existing strategy, we label them as *helpless*. A broader repertoire of strategies might reflect a personal resourcefulness that helps people keep out of poverty and destitution, or it may simply reflect access to resources. Thus, we end with an analysis of the factors that distinguish between those with broader and narrower repertoires of action.

Food

We began by asking people to: “Describe the things you currently do to provide food for yourself or your family? Is there anything else?” Interviewers accepted up to four answers. This was followed up by the question: “If you could no longer get food in this way, what other methods would be most likely to use? Is there anything else?” Interviewers recorded up to three different answers. For each question, interviewers wrote down the responses verbatim. We later recoded them into broader categories for analysis (Tables 22 and 23).

Table 22: Existing Food Survival Strategies (percent naming approach as one of their strategies)

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
Market Strategy	67	70	65	63	73	66
Grow or Collect Food	14	77	49	45	62	4
From Family and Friends	28	3	8	13	7	43
From the State	7	1	1	2	1	9
Through Social Cooperation	3	1	1	10	4	5
Begging / Borrowing	4	2	1	1	2	3
Helpless	1	1	1	3	<1	1
Stealing	<1	0	<1	<1	<1	1
Through Corrupt Means	<1	0	<1	<1	1	<1
From traditional leaders	0	<1	0	<1	0	0
Through Dishonest Means	0	<1	0	<1	0	0
Eat From Hand to Mouth	0	0	0	0	0	0
From Community Leaders	0	0	0	0	0	0
Other Methods	0	0	2	<1	<1	4

Perhaps in contrast to the popular image of the self-sufficient peasant, only about one in three Southern Africans consume *food they grow themselves* as a main part of their monthly food supply. However, there is a wide variance, from the three-quarters of Malawians (77 percent) and six in ten Basotho (62 percent), to the one in ten Batswana (14 percent) and one in twenty South Africans (4 percent) who grow their own food. In 1999-2000, the vast majority of Southern Africans used *market strategies* to obtain their food, meaning that they either bought it or obtained it by exchanging in kind goods and services. At least one-half of every national sample said this was at least one of their primary methods of getting food. It was the modal response in every country except Malawi.

Family networks are an important source of food for about one in five Southern Africans. Again, there is wide cross-country variation: 43 percent of South Africans say they get food through family and friends, but less than one in ten in Zambia (8 percent), Lesotho (7 percent) and Malawi (3 percent). Notably, only around one in twenty people across the region listed *government or the state* as a current source of their food supply, with a high of one in ten South Africans (9 percent) suggesting the existence of at least some state welfare capabilities in that country. Finally, approximately 1 percent are *helpless* in that they report having no present strategy for securing the food they and their family eat each month.

When we ask people about their “backup” strategies for obtaining food, about one in three across the region are *vulnerable* to shocks in that they have no immediate back up strategy if their existing strategies fail them. However, there are huge differences, ranging from 70 percent of Basotho who say they have no alternative strategies if their present sources of food failed to just 2 percent of Batswana. However, fully four in ten Batswana (43 percent) say they would turn to begging and thus may also be classified as vulnerable. South Africans, on the other hand, are most likely to say they would use a different market strategy, such as performing services in kind.

Table 23: Backup Food Strategies (percent naming approach as one of their back-up strategies)

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
No Alternative	2	46	56	51	70	11
Market	20	30	19	17	12	46
Beg / Ask Anyone I Can	43	16	3	3	3	9
Grow or Collect Own Food	12	7	15	11	7	4
Family and Friends	12	1	4	9	2	14
State	8	3	1	9	1	6
Social Cooperation	2	1	2	5	3	7
Corruption	1	1	<1	1	1	<0
Dishonest Means	0	<1	0	<1	0	0
Stealing	2	<1	1	1	1	4
Traditional Leaders	<1	0	0	<1	0	0
Other	0	0	2	<1	2	18

Less than one in ten say they would turn to growing their own food in such a circumstance, ranging from 15 percent in Zambia to only 4 percent of South Africans. Less than one in ten see the state as a feeder of last resort, ranging from a high of 9 percent in Zimbabwe to just 1 percent of Malawians. Only in Botswana and South Africa do as many as one in ten feel they could turn to their family or friends. This suggests that most people feel that if they were facing a food crisis, neighbour, friends and families would as well, thus eliminating them as potential suppliers. These data shed important light on the famine that has spread across Southern Africa in 2002. If drought cuts down their own production, and that same drought – together with economic mismanagement – seriously diminishes what is available in the marketplace, people have few other places to turn, and massive starvation becomes a real prospect.

Physical Security

When it comes to securing their home, most people either depend on themselves or are helpless. Thus, the most important finding from this set of questions may be how infrequently Southern Africans conceive of the police as a part of their home security framework. At most, one in ten South Africans (12 percent) and Zimbabweans (12 percent) see the police as a prime actor in keeping their home safe (Table 24). One might say that this is understandable since most people secure their house on an everyday basis on their own and only turn to the police when their methods have failed and the house has been broken into. But even when we turn to backup strategies, no more than one in ten people in South Africa (11 percent) and Botswana (10 percent) and less elsewhere say they would turn to the police if their existing strategies failed.

Table 24: Existing Methods of Home Security

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
Self reliance	48	87	47	70	22	71
Helpless	40	10	18	16	49	12
Social cooperation	3	6	5	12	8	12
From state	6	2	7	9	11	12
Family and friends	4	<1	1	7	1	7
Market related Strategy	4	2	3	4	<1	8
Other methods	1	0	1	<1	<1	8
Traditional leaders	<1	1	<1	2	12	<1
Begging or asking anyone	<1	<1	0	<1	2	0
Corruption	<1	0	1	1	0	0
Stealing it	<1	0	0	0	0	<1
Dishonest methods	<1	<1	<1	<1	0	0
Community Leaders	0	0	0	0	0	0

In contrast, self help is the modal response in every country except in Lesotho. Nine in ten Malawians (87 percent) use this approach, compared to just one in five Basotho (22 percent). One in ten look to their families (often merely leaving someone home at all times to watch the house), and one in twenty rely on their neighbours to keep an eye on their house. Eight percent of South Africans are able to buy their way out of insecurity, principally through professional security firms. Across the region, fully one in five are “helpless” with no particular strategy, with as many as 50 percent responding this way in Lesotho. In every country except South Africa, the largest percentage of people are vulnerable, meaning that they cannot conceive of any alternative way to protect their home (Table 25).

Table 25: Alternative Security Strategies

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
No alternative /helpless	48	48	71	63	67	14
Self reliance	9	29	19	17	7	35
The state	10	3	1	6	5	11
Other strategies	5	<1	1	3	2	17
social cooperation	5	3	3	5	2	9
market	4	6	3	3	<1	12
family and friends	1	<1	<1	3	0	2
Begging	<1	2	<1	<1	2	<1
Traditional leaders	1	4	<1	1	2	<1
corrupt means	2	<1	<1	<1	<1	0
Dishonest means	<1	<1	<1	<1	<1	0
Stealing	<1	0	0	0	0	0

Cash Income

Unsurprisingly, market exchanges are the chief means by which Southern Africans obtain cash income, primarily by exchanging labour or some other form of service for cash. It is the modal response in every country (Table 26). The second most frequently cited strategy is to get cash from friends and family, which as many as one-third of South Africans (35 percent) and Batswana (34 percent) depend on, as well as a-quarter of Basotho (27 percent), and one-fifth of Zimbabweans. Again, few people rely on the state as a primary provider of cash, underlining the virtually non-existent state welfare systems across the region.

Table 26: Existing Strategies to Obtain A Cash Income

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
Market Strategy	67	76	77	69	67	64
Family and friends	34	15	12	21	27	35
Helpless	4	<1	3	5	5	6
Self reliance	3	27	13	16	2	1
Other methods	.3	<1	3	<1	0	6
Obtain cash from State	2	<1	<1	0	<1	2
Social cooperation	5	1	1	1	1	4
Begging or asking Anyone	2	1	<1	1	<1	<1
Corruption	<1	0	0	<1	0	1
Obtain cash by stealing it	<1	0	0	<1	1	<1
Obtain cash from traditional leaders	0	<1	0	<1	1	<1
Dishonest methods	<1	0	0	<1	0	0

While just one in twenty can be classified as helpless, claiming no present strategy for obtaining cash, approximately four in ten Southern Africans are vulnerable to a loss of their primary cash provider, with as many as six in ten Zambians (60 percent), Basotho (59 percent) and Zimbabweans (57 percent) with no alternative methods of obtaining cash if the economy fails and they lose their jobs (Table 27). Interestingly, friends and families are not a popular source of backup funds during a crisis. At most, one in ten South Africans (12 percent) and Batswana (9 percent) could look in this direction.

Table 27: Alternative Cash Strategies

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
No alternative Strategy	38	47	60	57	59	15
Market strategy	32	42	27	24	27	47
Other Strategies	5	<1	2	3	2	18
Family and friends	9	2	5	5	2	12
Beg, Ask Anyone	3	5	1	2	1	3
Self Reliance	3	6	2	3	2	2
State	3	0	0	0	0	3
Stealing	1	<1	<1	<1	1	3
Community leaders	0	000	0	0	0	0
Corrupt means	<1	0	<1	2	<1	1
Social cooperation	1	<1	1	2	<1	1
Dishonest means	0	<1	0	<1	0	0
Traditional leaders	<1	0	0	0	<1	0

Health Care

Health care is the only one of the four areas examined where people see the state as a major provider. Almost two-thirds of respondents across the region say they use government clinics and hospitals or get drugs from government pharmacies and dispensaries (Table 28). It is the modal response in every country. Approximately four in ten use market strategies, paying for medicine and visits to doctors, or receiving it as part of their job; this ranges from a high of 56 percent in South Africa to just 6 percent in Lesotho. *Traditional healers* are used by around one in ten respondents, ranging from a high of one in four in Malawi (24 percent) and Lesotho (23 percent) to 9 percent in South Africa and 8 percent in Zimbabwe.

Table 28: Existing Health Care Survival Strategies

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
The state	93	89	63	52	91	63
Market related Strategy	14	18	39	32	6	56
Traditional leaders	11	24	19	8	23	9
Self reliance	5	10	8	21	<1	10
Helpless	6	3	6	6	6	4
Other methods		<1	1	<1	<1	4
Family and friends	<1	0	2	4	<1	1
Begging or asking Anyone	<1	<1	<1	<1	0	<1
Corruption	<1	<1	<1	1	<1	<1
Social cooperation	2	<1	<1	<1	<1	1
Begging or asking Anyone	<1	<1	<1	<1	0	<1
Dishonest methods	0	0	0	<1	0	0
Stealing it	<1	0	<1	0	0	0

Just 4 percent are helpless, with no existing strategy to secure medicine or medical treatment. However, four in ten (39 percent) can be classified as vulnerable, saying they would have no place to turn to if their present methods failed (Table 29). This includes two-thirds of Basotho (66 percent) and approximately one-half of Zambians (56 percent), Zimbabweans (54 percent), Malawians (50 percent) and Botswana (46 percent). The most popular backup strategies are either to turn to the market or a traditional healer. The proportions willing to turn to traditional healers range from one-quarter of

Malawians (24 percent) and Basotho (23 percent) and one-fifth of Zambians (19 percent) to one in ten South Africans (9 percent). Slightly less than one-quarter of South Africans (22 percent) would resort to a market strategy if their existing methods failed, but slightly more than one-quarter (29 percent) would expect to be able to turn to the state.

Table 29: *Alternative Health Strategies*

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
No alternative / Helpless	46	50	56	54	66	18
Traditional healers	28	30	28	14	18	21
Market strategy	9	5	11	10	4	22
The state	4	17	3	13	7	29
Self Reliance	2	1	1	4	<1	4
Family and friends	1	<1	1	3	0	4
Community leaders	3	<1	<1	6	<1	<1
Social cooperation	5	1	1	<1	<1	1
Stealing	<1	<1	<1	<1	<1	<1
Corrupt means	<1	0	<1	1	<1	<1
Begging	<1	0	<1	<1	1	<1
Dishonest means	0	0	0	<1	0	0

The Sources of Social Capital

What shapes Southern Africans' social capital networks? Are there any patterns to the frequency with which people resort to various strategies across or within specific situations, or domains? Are there any consistent reasons why some people use certain strategies and some use others, or why some people have recourse to a broad repertoire of strategies and others do not?

Drawing on prominent theories of social capital, Rose has deduced three competing predictions about the sources of social capital.⁷⁰ One approach, contained in Frances Fukuyama's analysis of the relationship between trust and prosperity, sees social capital as a set of norms (rather than networks) that permit cooperation. On this view, patterns of norms are primarily a function of national cultural differences.⁷¹ Thus, patterns of social capital in our data should be consistent across situations or domains and within societies, but differ across countries. Alternatively, Ronald Inglehart sees social capital as a "culture of trust and tolerance in which extensive networks of voluntary associations emerge."⁷² Social networks are a consequence of social trust. Incidentally, Rose cites Inglehart as the source of this hypothesis rather than the more well known formulation of Robert Putnam because Putnam's definition of social capital as "features of social life—networks, norms and trust—that facilitate cooperation and coordination for mutual benefit"⁷³ conflates cause and effect.⁷⁴ But for both scholars, social capital spills over from one domain to the next, and for Putnam it spills upward to make institutions work.⁷⁵ Thus, our data should reveal consistencies in social network use across domains, and differ mainly by differing levels of interpersonal trust (or differing levels of membership or activity in civil society organizations). Finally, Joseph Coleman places social capital in a political economy (rather than social psychological) framework. Social capital consists of networks (rather than norms); it is a way of "getting things done" that is situational and instrumental.⁷⁶ If this interpretation is correct, the data should reveal survival strategy patterns that differ principally by domain, as well as by differences in individual need.

In order to test these hypotheses, it necessary to determine whether there are underlying patterns that enable us to reduce people's survival strategies to broader summary indicators. We ask the following questions. First, are there coherent patterns of network use across all situations, or domains? In other words, are some strategies consistently used on their own or in conjunction with others regardless of the situation? For example, do those who rely on friends and neighbours also tend to rely on social cooperation? On the other hand, do those who use market strategies tend not to look to the state?

Second, are there coherent patterns of network use within domains? In other words, if people may alter their strategies across domains, do they tend to use specific strategies on their own or in conjunction with each other within a survival domain?

The answer to both questions is a clear “no.” Looking across all strategies (primary and backup) and across all domains, it is impossible to extract anything resembling a valid or reliable summary indicator or set of indicators.⁷⁷ The same is true if we only look at primary strategies⁷⁸ or backup strategies,⁷⁹ or within specific domains. There is thus no strategy (or set of strategies) that is consistently employed across all domains.

At most, we could identify three valid (though not necessarily reliable) two-item indicators that measure the extent to which people pursue three specific *primary* strategies to obtain food and cash income: the first measures the degree to which people rely on the *market to obtain food and cash*;⁸⁰ the second assesses the extent to which people rely on their *own initiative*;⁸¹ and the third taps the extent to which they utilize *family and friends*.⁸² However, it is possible to create a valid and reliable scale that measures *helplessness* (the extent to which people have no primary strategies) across all four domains,⁸³ as well as one that assesses *vulnerability* (the extent to which people have no backup strategies) across the four domains.⁸⁴ We then regress these strategy-specific constructs on the same set of variables we used to explain poverty, also adding individual scores on the Lived Poverty Index, as well as measures of interpersonal trust⁸⁵ and participation in community organizations into the model.⁸⁶

The results appear to lend strong support to both the Coleman and Fukuyama approaches (Table 30). In support of the Coleman thesis that social capital is situational and context specific, we begin by noting the fact that the most frequently employed strategies differed across three of the four situations. We also point to the strong impact of (un)employment and occupational class on market and family and friends strategies, and the fact that the probability of turning to self reliance increases substantially in areas that lack development infrastructure or widespread community services. In other words, people seem to adopt strategies that fit their situations.

Second, in support of the Fukuyama argument, there are clear and consistent differences by national citizenship in the degree to which people use the market, rely on friends and families, and depend on self-reliance to obtain food and income, as well as in the degree to which they are helpless or vulnerable in all four domains. At equal levels of education, need, and interpersonal trust, people who live in the other five countries are significantly more likely than South Africans (the reference group) to use the market, and less likely to rely on friends and family to get food and cash. And with the exception of Batswana, they are also more likely to look to self-reliance. The opposite signs on the coefficients for helplessness between Malawi and Lesotho indicate that Basotho are less likely to have survival strategies or networks than Malawians, and helps illuminate why the Lived Poverty Index finds so much more destitution in Lesotho even though it has significantly higher levels of GNP per capital than Malawi.

Third, in contrast to Inglehart’s thesis, people who are trusting of others are no more likely than others to make use of the market, rely on friends and family, or practice self reliance to obtain food and cash (though they are slightly less likely to be helpless or vulnerable). Membership or attendance in local community organizations also fails to yield the anticipated results. In fact, those who are more active in local groups are actually more likely to depend on self-reliance and to be vulnerable, and less likely to rely on friends and family for help. Thus, at least as measured here, participation in social survival networks seems to rely much more on factors related to the structure of the political economy and far less on social-psychological factors.

Table 30: Explaining Choice of Survival Strategies

	Uses the Market As Primary Strategy to Obtain Food & Cash	Relies on Family & Friends As Primary Strategy to Obtain Food & Cash	Relies on Self Help As Primary Strategy to Obtain Food & Cash	Helpless (No Primary Strategy Across All Four Domains)	Vulnerable (No Backup Strategy Across All Four Domains)
	Beta	Beta	Beta	Beta	Beta
Age	.00	-.10***	.05***	.02	.07***
Gender (Male)	.02	-.09***	.02*	-.04**	-.02
Location (Urban)	.08***	.00	-.14***	-.00	.00
Education	-.02	.06***	-.03*	-.04**	-.05***
Employment	.30***	-.22***	-.06***	-.03	-.07***
Unemployed in past 12 months	-.05***	.04***	.01	-.01	-.06***
Middle Class	.11***	-.13***	.01	-.04*	-.05***
Working Class	.21***	-.15***	-.02	-.03	-.01
Subsistence Farmer	.03*	-.08***	.12***	-.04**	-.03**
Never Had A Job	-.06***	.01	.01	.05***	.01
Development Infrastructure	.01	.09***	-.20***	.01	.01
Community Services	-.01	.01	-.05***	.01	.00
Agricultural Activity	.03	-.01	.02	-.03	.00
Access to Schools	.01	.01	.04***	-.05***	.02
Interpersonal Trust	-.02	-.00	-.00	-.03**	-.04***
Community Organization Participation	.01	-.04***	.08***	-.00	.06***
Asian	-.01	-.01	.02*	-.05***	-.04***
Coloured	-.02	-.03**	.03***	-.04**	-.06***
White	.04**	-.09***	.06***	-.04**	-.06***
Batswana	.08***	-.12***	.03**	.15***	.16***
Basotho	.18***	-.26***	.20***	.19***	.50***
Malawian	.19***	-.34***	.38***	-.06**	.34***
Zambian	.11***	-.29***	.21***	.04*	.28***
Zimbabwean	.08***	-.21***	.22***	-.00	.37***
N	6373	6373	6373	6373	6373
Standard Error	.3305	.3404	.2315	.1312	.2759
R Squared	.24	.28	.46	.10	.33

The Extent of Social Capital

Besides the question of the *kinds* or *types* of strategies and networks people employ in order to survive, a second important question has to do with the *extent* or *breadth* of individuals' survival repertoires. In an uncertain society where formal institutions do not work well, one might expect people to build a degree of redundancy into their survival strategies.⁸⁷ Redundancy might be accomplished by either actively using multiple strategies or networks, or by having one or several backup strategies in case of failure of an existing strategy.

However, the data suggest that the survival repertoires of Southern Africans are quite limited (Table 31). The median respondent uses only one strategy to obtain food in five countries; only in Malawi does the average person use two strategies (though a substantial number also pursue a second strategy in Lesotho). Echoing our earlier discussion, the average Mosotho, Zambian and Zimbabwean has no backup method to obtain food, and this is also true for almost half of Malawians. The average Mosotho has no method for protecting his own home, while the median respondent elsewhere uses just one strategy. With the exception of South Africa, the median person across the region has no strategy in

Table 31: Extent of Social Capital Within Each Domain

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
Primary Food Strategies						
0	1	<1	2	2	<1	0
1	70	47	65	58	50	61
2	25	43	28	34	47	30
3	4	9	5	5	3	7
4	1	1	<1	1	0	2
Backup Food Strategies						
0	7	47	58	51	70	12
1	85	46	38	43	28	64
2	7	7	4	5	2	19
3	1	<1	<1	1	<1	5
Primary Home Security Strategies						
0	40	10	44	16	54	14
1	49	49	37	47	31	37
2	10	34	15	28	14	32
3	2	6	3	7	2	13
4	<1	1	1	2	<1	4
Backup Home Security Strategies						
0	67	57	74	65	82	28
1	30	34	22	31	17	53
2	3	8	4	4	1	15
3	<1	1	<1	<1	<1	4
Primary Cash Strategies						
0	4	1	5	8	10	5
1	71	59	64	65	66	72
2	20	34	25	24	21	19
3	4	5	6	3	4	3
4	1	1	<1	<1%	<1	1
Backup Cash Strategies						
0	47	47	63	61	66	20
1	48	44	33	37	32	66
2	5	7	3	2	2	12
3	1	2	<1	<1	<1	2
Primary Health Care Strategies						
0	2	1	3	5	4	1
1	52	33	62	62	50	49
2	36	50	28	24	40	32
3	9	14	7	8	5	13
4	1	1	<1	2	<1	5
Backup Health Care Strategies						
0	48	51	58	53	69	19
1	47	44	39	40	30	62
2	5	5	3	6	1	15
3	<1	<1	<1	1	<1	4

reserve. With a few exceptions, the same depressing picture repeats itself with regard to cash income and health care.

An alternative way to examine this question is simply to sum all employed strategies or networks across all domains (Tables 32 and 33). Malawians (6.3) and South Africans (6.0) employ the highest average number of strategies in order to survive across the four domains and Basotho (4.8) the lowest. South Africans (4.1) can also point to the highest average number of back-up strategies, and Basotho (1.2) the lowest.

Table 32: Extent of Social Capital (Total Number of Primary Strategies) Across Domains

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
0	<1	0	1	1	0	0
1	<1	0	<1	1	1	0
2	2	<1	4	2	4	1
3	17	5	25	9	15	7
4	30	15	23	24	26	19
5	22	17	13	22	25	22
6	14	21	14	17	17	18
7	8	17	11	11	8	13
8	4	12	6	6	4	9
9	2	7	3	4	1	4
10	1	3	1	1	<1	3
11	<1	2	<1	1	0	2
12	<1	1	<1	1	0	1
13	0	1	0	1	0	1
14	0	<1	0	<1	0	1
15	0	0	0	<1	0	<1
16	0	0	0	0	0	<1
Mean	4.9	6.3	4.9	5.4	4.8	6.0

Table 33: Extent of Social Capital (Total Number of Backup Strategies) Across Domains

	Botswana	Malawi	Zambia	Zimbabwe	Lesotho	South Africa
0	2	25	30	21	34	3
1	22	13	23	23	31	5
2	27	13	20	23	20	9
3	26	22	14	17	10	18
4	15	17	8	12	4	31
5	6	5	3	4	1	17
6	1	4	1	1	<1	9
7	1	1	1	1	0	4
8	<1	<1	<1	<1	0	3
9	0	0	<1	0	0	1
10	0	<1	0	0	0	1
11	0	0	0	0	0	<1
12	0	0	0	0	0	<1
Mean	2.5	2.3	1.6	1.9	1.2	4.1

What explains the extent of people's survival repertoires? Are there any predictable differences between those people with broader or narrower survival repertoires? We regressed the two summary measures of the extent or breadth of existing and backup strategies on the same set of predictor variables used in the previous analysis. The results yield the same broad conclusions (Table 34).

There is some increased evidence for Inglehart's thesis. Membership and attendance in local community organizations is positively associated with the extent of both existing and backup strategies, but interpersonal trust is weakly and inconsistently correlated. The Coleman argument finds less support. Those people who are presumably in greatest need of a wider portfolio of options actually have less: the hard core unemployed have fewer existing strategies, while educated, urbanized, and employed people have more backup strategies. Ultimately, it is the Fukuyama type of argument about national differences that appears to find the greatest support. The best predictor of the extent of survival strategies is simply national citizenship.

Table 34: Explaining Extent of Survival Strategies

	Extent of Existing Strategies		Extent of Backup Strategies	
	B	Beta	B	Beta
(Constant)	5.445		3.583	
Age	-.002	-.01	-.007	-.05***
Gender (Male)	-.081	-.02	.068	.02
Location (Urban)	-.038	-.01	.155	.04*
Education	.023	.02	.064	.05***
Employment	.039	.02	.124	.05***
Unemployed in past 12 months	-.037	-.01	.100	.03*
Middle Class	.162	.03	.218	.04**
Working Class	.128	.03	.027	.01
Subsistence Farmer	.243	.04*	.296	.04***
Never Had A Job	-.355	-.06***	-.154	-.03*
Development Infrastructure	-.048	-.01	-.029	-.01
Community Services	-.067	-.01	-.024	-.00
Agricultural Activity	.274	.05**	.067	.01
Access to Schools	.313	.04***	-.012	-.00
Interpersonal Trust	-.126	-.03*	.155	.03**
Community Organization Participation	.143	.05***	-.121	-.04***
Asian	-1.245	-.07***	.029	.00
Coloured	-.614	-.05***	.061	.01
White	-.209	-.02	.099	.01
Batswana	-1.242	-.21***	-1.562	-.27***
Basotho	-1.370	-.25***	-2.732	-.51***
Malawian	-.067	-.01	-1.824	-.34***
Zambian	-1.505	-.25***	-2.499	-.42***
Zimbabwean	-.726	-.12***	-2.083	-.35***
N	6373		6373	
Standard Error	1.9345		1.6286	
R Squared	.10		.32	

The Impact of Social Capital on Lived Poverty

Finally, we enquire as to whether social capital is able to cushion people who might otherwise be seen as poor against the daily experiences of lived poverty and destitution. In order to ensure that we assess the impact of all relevant survival strategies in our data, we use the summary indicators of food and cash strategies discussed above, but also include the most frequently used primary strategies for home security and health care, as well the single summary indicator of absence of primary strategies (helplessness) and the extent of individual backup strategies across all domains.

Holding all else equal, three specific strategies appear to have an independent effect in reducing the experience of lived poverty (Table 35). Those who rely on themselves to secure food or health care, and those who are able to turn to the market to meet their health care needs, experience significantly lower degrees of lived poverty. On the other hand, the extent to which one is without a primary survival strategy across the four domains significantly increases lived poverty. Finally, the wider the extent of one's backup strategies, the lower the level of lived poverty.

Two other variables relevant to social capital display significant relationships with lived poverty. The more one trusts other people, the lower their level of lived poverty (though the impact is relatively small). Membership or attendance in local organizations is also related to poverty, however, the direction

of the impact is precisely the opposite to that which might be expected. Net all other effects, those who are most active in civil society experience higher levels of lived poverty.

Table 35: Impact of Social Capital on Lived Poverty

	B	Beta	B	Beta
(Constant)	3.217		3.434	
Age	.002	.05***	.002	.03**
Gender (Male)	.036	.02*	.036	.02*
Location (Urban)	-.019	-.01	-.029	-.02
Education	-.062	-.13***	-.058	-.12***
Employment	-.012	-.01	-.015	-.02
Unemployed in past 12 months	.111	.07***	.106	.07***
Middle Class	-.051	-.02	-.030	-.01
Working Class	-.000	.00	.010	.01
Subsistence Farmer	-.038	-.02	.012	.00
Never Had A Job	.059	.03*	.045	.02
Development Infrastructure	-.630	-.28***	-.651	-.29***
Community Services	.207	.07***	.185	.06***
Agricultural Activity	.035	.02	.047	.02
Access to Schools	-.218	-.08***	-.212	-.08***
Asian	-.714	-.11***	-.661	-.11***
Coloured	-.503	-.12***	-.470	-.11***
White	-.487	-.14***	-.426	-.12***
Batswana	-.274	-.13***	-.372	-.17***
Basotho	.140	.07***	.046	.02
Malawian	-.030	-.02	.001	.00
Zambian	.253	.11***	.193	.08***
Zimbabwean	.193	.08***	.179	.08***
Interpersonal Trust			-.054	-.03**
Community Organization Participation			.072	.06***
Markets Strategy for Food and Cash			-.036	-.02
Family & Friends Strategy for Food and Cash			-.043	-.02
Self Reliant Strategy for Food and Cash			-.251	-.10***
Self Reliant Strategy for Home Security			-.038	-.03
Social Cooperation Strategy for Home Security			-.003	-.00
State Strategy for Health Care			.003	.00
Market Strategy for Health Care			-.093	-.06***
Traditional Healer Strategy for Health Care			-.000	.00
Self Reliant Strategy for Health Care			-.106	-.04***
Helpless			.353	.06***
Extent of Backup Strategies			-.026	-.07***
N	6477		6071	
Standard Error	.6165		.6042	
R Squared	.34		.37	

THE POLITICAL CONSEQUENCES OF POVERTY

We began this paper by noting that the link between national wealth (or, inversely, poverty) and sustainable democracy is one of clearest and most consistent findings of empirical political science.⁸⁸ However, we also noted that the precise reasons behind this relationship have not been so obvious. Most importantly, we have not yet determined conclusively whether the linkage between development and democracy is a micro-level phenomenon that occurs because the poor are differentially “democratic” in their behaviours, interests and attitudes compared to the relatively wealthy,⁸⁹ or whether it is a macro-level dynamic with its roots in the greater abilities of wealthy societies to sustain democratic institutions and procedures.⁹⁰

In this final section, we investigate the micro-level consequences of lived poverty. That is, independently of its correlates such as lower levels of education, rural location, unemployment and ill health, does lived poverty affect political behaviour and political attitudes? The conventional wisdom implies that poverty decreases both participation in democratic life and popular support for democracy. Poorer people may have less time to devote to the types of participation that give life to democracy, independent of the fact they tend to be less educated and more rural. They may also have less reason to participate because they have less investment in a society in which they have not done as well as others. Their station in life may also demotivate people by reducing their belief in their ability to bring about political change. Given the imperative to satisfy basic survival needs, poor people may have little reason to worry about satisfying supposedly “higher order” needs like self-government, freedom and equality that democracy fulfils. On the other hand, it is also possible that, independently of correlates such as lower levels of education, poverty may provide people with greater incentives to mobilize politically in order to demand economic redress.⁹¹

Part of the reason that this issue has never been resolved is the lack of valid and reliable individual measures of poverty in politically-oriented survey data, as distinct from household income (which often contains a great deal of missing or unreliable data because space and time limitations mean it is usually measured with a single question). Thus, much of what we know about the democratic correlates of wealth and poverty comes from country-level correlations drawn from aggregate data. And much of the current wisdom about the political impacts of individual or household poverty is based on qualitative data that is not necessarily representative of whole societies. Rather than strategically include measures of political participation in household income and expenditure surveys, the World Bank chose to sponsor 81 focus group based “Participatory Poverty Assessments” (PPAs) in 50 countries, 28 of these in Africa. These PPAs were intended to be a qualitative complement to the Bank’s quantitative Living Standards Measures Surveys.⁹² This stems from the tendency discussed earlier for economists to presume that only quantitative data can capture concrete things such as assets and consumer behaviour, whereas attitudes about economics and politics can only be assessed through qualitative measures.⁹³

Analyses of these PPAs concluded that poor people’s experiences of poverty include a dimension of powerlessness. This is characterised by a dependency on others, and a lack of voice and options. More precisely, analysts concluded that poor people lack information about and access to government (especially the police and courts) and that they see the state as ineffective, irrelevant and corrupt. They are regularly victimised by public officials and encounter higher levels of crime. As a consequence, they are forced to rely on informal networks and associations in order to get by.⁹⁴ However, Ravi Kunbar and Lyn Squire have noted that the qualitative and focussed nature of these studies means that “we do not have household-level measures of vulnerability and powerlessness and so cannot distinguish the poor (in these dimensions) from the non poor.”⁹⁵ Yet this is precisely what the Afrobarometer data allow us to do.

We attempt to assess these questions by linking our measure of lived poverty with a range of possible political outcomes. First of all, we examine the correlation between poverty and various

measures of political awareness (Table 36): interest in politics,⁹⁶ television and newspaper use,⁹⁷ and political efficacy.⁹⁸ In doing so, we statistically control for the impact of other factors which are themselves related to poverty and may have independent impact on the phenomena in question (such as education, ill health, rural-urban location, and employment status). Net of these factors, we see that poverty not only fails to decrease respondent's interest in politics, but is in fact associated with a slight increase. However, poverty does appear to reduce people's exposure to news media through television and newspapers, and also slightly reduces people's sense of political efficacy.

Table 36: Linkages between Poverty and Political Awareness

	Poverty	Poverty (Controlling for Education, Ill-Health, Rural-Urban Location, Employment)
Interest in Politics	-.01	.05***
TV / Newspaper Use	-.43***	-.22***
Political Efficacy	-.14***	-.06***
	N=7802	N=7412

We then turn to examine whether poverty shapes key political values of interpersonal trust. Interpersonal trust has been argued to be a key predictor of political participation and effective political institutions.⁹⁹ We also test whether poverty shapes the way people understand democracy (Table 37).¹⁰⁰ Are poor people more likely to view democracy as a way to effect substantive outcomes than as a set of political procedures to make decisions? In order to ensure that we isolate the effect of poverty, we add the measures of political awareness examined above to our list of controls. Net these effects, we see that poverty reduces levels of interpersonal trust very slightly, and has no effect on the extent to which people define democracy as a set of political procedures. However, increased poverty is associated with a slightly greater propensity to define democracy in terms of substantive outcomes.

Table 37: Linkages between Poverty and Political Values

	Poverty	Poverty (Controlling for Education, Ill-Health, Rural- Urban Location, Employment, Political Interest, Media Use, Political Efficacy)
Interpersonal Trust	.01	-.03***
Political Understanding of Democracy	-.01	.01
Economic Understanding of Democracy	.07***	.06***
	N=6460	N=5659

So far, we have seen at best faint support for the conventional wisdom. When we turn to examine the linkages between poverty and political participation, the common wisdom is turned on its head (Table 38). Net the impact of correlates such as education, ill health or political awareness, the most impoverished respondents are as likely as the least impoverished to have voted in their most recent national election,¹⁰¹ or to have taken part in political protest.¹⁰² More importantly, those who suffer frequent shortages of basic necessities are actually more likely to attend meetings of community organisations,¹⁰³ contact political leaders,¹⁰⁴ participate in conventional political processes,¹⁰⁵ or comply with the law.¹⁰⁶ It is true however, that the poor are more likely to be the victims of abuse or extortion from government leaders who demand payments or favours in return for delivering services,¹⁰⁷ but the differences are very slight.

Table 38: Linkages between Poverty and Political Participation

	Poverty	Poverty (Controlling for Education, Ill-Health, Rural-Urban Location, Employment, Political Interest, Media Use, Political Efficacy, Interpersonal Trust)
Community Participation	.12***	.11***
Contact Leaders	.12***	.08***
Vote In Most Recent Election	.02	.01
Procedural Participation	.13***	.10***
Political Protest Participation	.02	.09***
Compliance With the Law	.14***	.13***
Victimisation by Corruption	.03*	.07***
	N=5789	N=4936

Next we test whether poverty shapes citizens' policy preferences. We examine responses to an open-ended question that asked people "What are the most important problems facing the country that government should address?" In order to facilitate a simple comparison we take the Afrobarometer LPI and divide respondents into poor and not poor using 2.5 on a scale of 1 to 4 as the dividing point.

While there are some differences in policy preferences, they are not large (Table 39). Poor respondents are twice as likely (12 percent) as non-poor (6 percent) to list problems related to food as an important national problem requiring government attention. Approximately the same difference is also found with regard to water, where 9 percent of the poor cite this problem, compared to 5 percent of the non-poor. The poor are also more likely to cite problems related to farming, transportation, the national economy, health and health care, and poverty, but the difference is no more than four percentage points across any of these items. The non-poor are about twice as likely to call for government emphasis on fighting HIV/AIDS (11 percent) as the poor (5 percent), and one-third more likely to cite crime (30 percent) as the poor (20 percent). They are also more likely to cite job creation, education, housing and corruption, but the greatest difference on these issues is no more than seven percentage points.

Table 39: Policy Priorities of the Poor

	Not Poor	Poor
Issues of Greater Concern to Poor Respondents		
Economy	21	24
Health	18	20
Food	6	12
Poverty / Destitution	11	12
Farming	7	11
Transport	7	10
Water	5	9
General Services	5	7
Issues of Greater Concern to Non-Poor Respondents		
Jobs	54	47
Crime	30	20
Education	20	16
AIDS	11	5
Housing	9	6
Corruption	6	3
Issues Where There Is No Difference		
Welfare	4	4
Discrimination / Equality	3	2
Electricity	2	2
Wages	2	2
Traditional / Moral Values	2	2
Governance	2	2
N = 8626		

Finally, we test whether poverty reduces support for liberal economic and democratic political regimes. We find that poverty has no impact on the extent to which people see democracy as the only acceptable form of government,¹⁰⁸ though it does – net all other influences – reduce the extent to which people reject non-democratic alternatives to their present multiparty regime (Table 40).¹⁰⁹ Poverty does appear, however, to have a much stronger impact on support for various economic regimes, sharply reducing support for economic adjustment.¹¹⁰

Table 40: Linkages between Poverty and Support for Regime Change

	Poverty	Poverty (Controlling for Education, Ill-Health, Rural-Urban, Employment, Political Interest, Media Use, Political Efficacy, Interpersonal Trust)
Reject Non- Democratic Alternatives	-.09***	-.05***
Support Democracy	-.03	.02
Support Economic Adjustment	-.22***	-.11***
	N=-5934	N=5163

Thus, while social scientists have consistently found strong aggregate correlations between indicators of national wealth and democratic endurance, we are not able to find any important linkages between individual lived poverty and citizen behaviours and preferences that are key to the health of democracy. To the extent that these findings from seven southern African countries could be replicated elsewhere, this suggests that the key dynamics behind the link between democracy and wealth occur at the macro level: that is, rather than resulting from poor citizens who are less democratic in thought and deed, it may simply be that poor countries are less able to afford or maintain the things vital for sustainable democracy, ranging from formal state institutions such as quality electoral machinery and a well-resourced legislature, to societal institutions such as a effective political parties, an independent news media, and a vibrant web of civil society organizations.

APPENDIX A: OTHER INDICES OF WELL BEING

In addition to the Lived Poverty Index, the 35 variables included in the Afrobarometer surveys produce five other indices of poverty or well being. Details about the construction of and findings for each of these indices, as well as four additional variables that did not reduce into any of these indices, are discussed in this appendix.

Index of Ill-Health

The Afrobarometer measured individual health in two ways. First of all, we asked respondents about their physical health: “In the last month, how much of the time has your physical health reduced the amount of work you would normally do inside or outside your home: Was it often, sometimes, rarely or never?” A second item probed their state of mental health: “In the last month, how much of the time have you felt so worried or anxious that you have felt tired, worn out, or exhausted?”

In 1999-2000, the median respondent in Lesotho, Zambia and Zimbabwe indicated that they had “sometimes” been both unable to do any work due to physical health, and was mentally exhausted. This happened “rarely” to the average respondent in Malawi, Namibia, Botswana and South Africa. It “never” occurred for the typical white, coloured or Indian South African (see Tables A1 and A2).

Not only are Basotho most likely to go without basic necessities on a frequent basis, they are by far the most likely to report frequent mental or physical illness. Four in ten (42 percent) were “often” physically ill, and one-half (51 percent) had often been mentally exhausted. We wondered if the timing of the survey influenced the responses, but it was conducted in April and May – late summer and early autumn – so the weather presumably did not cause higher than usual levels of illness. The reasons for this very high level of illness are complex. First, due to labour migration to South Africa, the resident population is not a normally distributed population, but is largely female and disproportionately old. But while this accounts for some of the disparity, Basotho are still much sicker than anyone else in the region within each age category. Second, those who stay may be those who are unable to migrate because of poor health, thus creating a disproportionately unhealthy resident population.¹¹¹

Table A1: Physical Health

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black/ African	White	Coloured	Indian
Often	15	16	9	19	31	42	7	7	6	7	15
Sometimes	29	27	37	38	27	12	25	28	14	22	20
Rarely	19	21	16	14	18	13	18	19	18	16	10
Never	36	36	36	28	23	33	49	46	61	55	55

Table A2: Mental Health

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black/ African	White	Coloured	Indian
Often	15	20	8	22	36	51	12	12	10	11	18
Sometimes	34	25	36	42	29	14	32	34	23	26	37
Rarely	19	25	17	12	17	13	19	20	21	14	10
Never	32	30	37	22	16	21	37	33	45	49	35

Table A4: Access to Development Infrastructure

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black/ African	White	Coloured	Indian
Electricity grid that most houses could access*	97	40	51	53	41	31	70	65	85	86	60
Electricity hook up into Household	28	16	33	38	42	4	78	70	99	92	94
Piped water system that most houses could access*	98	35	59	47	39	59	65	58	88	86	71
Piped water in household	58	18	39	29	39	7	68	59	88	91	99
Sewerage system that most houses could access*	14	25	43	41	35	9	53	44	83	74	55
Health Clinic*	28	42	44	65	41	25	35	35	32	53	9
Pavements along the roads or streets*	16	10	25	16	13	4	44	35	71	61	69
Post Office*	10	21	23	20	13	16	24	21	41	30	5
Police Station*	5	13	26	44	24	16	26	22	36	39	13
Police or Police Vehicles*	24	22	21	31	26	21	18	20	10	18	4
Railway Station*	4	4	14	10	5	1	15	15	14	18	13

For all interviewer observed questions, the figures presented are proportions out of a total of 100 percent that *excludes* cases where interviewers did not fill in a response (around 15 percent in Namibia, 4 percent in Zambia, 3 percent in Zimbabwe and less than one percent in other countries). It *includes* cases where interviewers say they could not determine whether the service was present in the area or not.

* Interviewers recorded whether or not it was present in the Enumerator Area (EA) / Primary Sampling Unit (PSU). In each EA or PSU a cluster of eight interviewers (four in South Africa) was conducted.

The physical consequences of sickness and disease are also likely to lead to higher levels of anxiety and depression. Confirming this logic, we find a very strong correlation between physical and mental illness.¹¹² This enables us to create an *index of ill health*, where 1 means people missed no work due to physical or mental illness in the month preceding the interview, and 4 means they frequently missed work for these reasons (Table A3). By this standard, the healthiest country in the region is South Africa (2.05), followed by Namibia (2.17). Zimbabwe and Lesotho have the highest rates of sickness in the region, statistically indistinguishable at 2.77 and 2.79.

Table A3: *Index of Ill Health*

Country	Mean	N	Std. Dev.
South Africa	2.05	2188	.94
Namibia	2.17	1149	.92
Botswana	2.28	1183	1.01
Malawi	2.29	1206	.92
Zambia	2.57	1187	.97
Zimbabwe	2.77	1182	.99
Lesotho	2.79	1172	1.12
Total	2.38	9267	1.02

As indicated earlier, while poverty researchers have often attempted to include measures of individual health as an indicator of poverty, we find that, at least in Southern Africa, while there is a strong relation between the two, individual health is empirically distinct from individual incidence of poverty.¹¹³ More than one in ten (13 percent) respondents interviewed across the region were “often” *both physically and mentally ill*. With the exception of Lesotho (due to the considerations outlined above), the cross-national variations in these extreme cases correlate quite strongly with cross-national differences in AIDS illnesses, suggesting that our aggregate estimates of ill health reflect a good deal of AIDS related illness.¹¹⁴

Index of Development Infrastructure

Another dimension of well-being is tapped by a series of items that measure the presence of development infrastructure in the respondents’ immediate vicinity. The results reveal that with the exception of Botswana, and to a lesser extent, South Africa, governments in the region have not succeeded in delivering basic development infrastructure to communities.

Access to Electricity Grids and Piped Water In Botswana, Afrobarometer interviewers observed electricity grids *within the immediate enumerator area* of 97 percent of respondents and piped water systems in 98 percent. The numbers in South Africa were 70 and 65 percent respectively. For the other five countries, however, the proportions for both services generally ranged between 30 and 50 percent (see Table A4).

One reason that access to services is not the same thing as lived poverty is that the presence of infrastructure does not necessarily translate into widespread household access. This is most clearly observable in Botswana where 97 percent of respondents live in areas with an electricity grid but just 28 percent of households are hooked up to it. Virtually all Botswana live in areas serviced with water (98 percent), yet just 58 percent of households have piped water into the household (though in this case, many households probably have access to piped water outdoors or at communal taps).

Only in South Africa (68 percent) and Botswana (58 percent) do large majorities of people have piped water *into their household*. Elsewhere, the figures run from 39 percent in Zimbabwe to just 7 percent in Lesotho. Similarly, in South Africa 78 percent of households are linked to the electricity grid, while in the rest of the region the figure ranges from 42 percent in Zimbabwe to just 4 percent in Lesotho.

South Africa has only reached these levels since its democratisation in 1994. As recently as 1995 it was estimated that just 21 percent of all households had access to piped water. The 1996 census reported 45 percent of households with an inside tap and 58 percent of households with access to electricity.¹¹⁵ The measured level of access to electricity actually outstrips the target of 72 percent by 2000 set in 1994 by South Africa's Reconstruction and Development Programme, a target that required 450,000 new hook-ups per year.¹¹⁶ While apartheid legacies have left black South Africans clearly worse off than their white, coloured or Indian counterparts in terms of access to household services, some aspects of the new government's ambitious Reconstruction and Development Program have at least made them better off than people elsewhere in the region. For example, 59 percent of black South Africans have piped water in the home and 70 percent have electricity connections, figures that exceed national aggregates anywhere else in the region.

Again, it is clear that while state-driven water projects make an important contribution to water security, they do not guarantee it. Among those respondents who live in a serviced area and that have water piped into their house, 69 percent never go without, but 18 percent still say they go without "often" or "sometimes." This may represent people without sufficient cash to pay their water accounts, or signify interruptions in supply by state authorities. Among those who live in serviced areas but do not have it piped into their house, 50 percent "never" go without, and 36 percent do so "often" or "sometimes." One in ten people (12 percent) who live in unserviced areas still manage to have water piped into the house, most likely from a borehole or dam. Among this group, 64 percent "never" do without, and 26 percent go without "often" or "sometimes." But clearly the worst conditions are found among those who live in unserviced areas and do not have internal piped water: just one-third of these people (35 percent) "never" do without, while one-half (52 percent) go without "often" or "sometimes."

Similarly, state-financed electricity grids drastically reduce the likelihood that Southern Africans have to go without power, but do not totally determine their prospects. In serviced areas, 38 percent of houses are still not hooked up to the grid. Yet 16 percent of these households say they "never" go without electricity, either because they have their own generators, or because they have illegally "hooked up" into the grid. In *unserviced* areas, 13 percent of people say they have an electricity hook-up into their homes, possibly signifying incomplete power grids in those areas. Of those without any household hook-up, 11 percent say they "never" do without – either because they have their own generators, or because they actually do not think they need electricity and thus are not going without.

Health Clinics We see a very different pattern with regard to the presence of health clinics. Zambia leads the region with clinics present in 65 percent of the primary sampling units. Clinics were available in four out of ten sampling sites in Namibia (44 percent), Malawi (42 percent) and Zimbabwe (41 percent) and slightly less than that in South Africa (35 percent). Just one-quarter of sites have clinics in Botswana (28 percent) and Lesotho (25 percent).

Perhaps surprisingly, the construction of government health clinics does not reduce the degree to which people go without medical care: across the entire region, there is no statistical relationship between the frequency with which one goes without necessary medical treatment, and whether or not there is a health clinic present in the immediate area. However, having a health clinic in the immediate area does have a slight impact on health. Forty-five percent of respondents who live close to a health clinic report that they "never" miss work due to health problems, compared to 35 percent of those who do not have a health clinic in their area.¹¹⁷

Other Development Infrastructure South Africa has the highest levels of development in terms of *sewerage* systems (53 percent live in an enumerator area in which sewerage is available to most houses), *paved sidewalks* (44 percent live in areas in which interviewers could see pavements), *post offices* (24 percent live in enumerator areas with a post office) and *access to rail transport* (15 percent). At the other

end of the spectrum, Lesotho again has the lowest levels with regard to sewerage (9 percent), pavement (4 percent) and rail transport (1 percent). Botswana (10 percent) and Zimbabwe (12 percent) have the lowest rates of access to a post office.

We see very different patterns in terms of the *presence of security forces*. Interviewers observed police stations in the enumerator area of 42 percent of Zambian respondents, and witnessed police or police vehicles on the streets in 30 percent of cases, both the highest levels in the region. In contrast, there were police stations in the immediate area in just 5 percent of cases in Botswana, and police or police vehicles were observed before or after 18 percent of all interviews in South Africa.

We created an *index of development infrastructure* measuring the absence or presence of all the items just discussed, each scored 0 or 1 (Table A5). Across the region South Africa has the highest level of development infrastructure (0.46 on a scale of 0 to 1), followed closely by Botswana (0.39). The lowest levels of development are found in Malawi (0.12) and Lesotho (0.08).

Table A5: Index of Development Infrastructure

Country	Mean	N	Std. Dev.
South Africa	0.46	2119	.33
Botswana	0.39	1100	.17
Namibia	0.24	867	.40
Zimbabwe	0.23	1026	.37
Zambia	0.22	1074	.38
Malawi	0.12	1180	.28
Lesotho	0.08	1120	.20
Total	0.27	8486	.34

Index of Community Services

Well functioning communities are those that also have private and civic sectors that by themselves or in partnership with the state provide a range of services that meet community needs such as transportation, recreation, civic life and consumer goods. When viewed in these terms, communities in Malawi, Zambia, and to some extent Zimbabwe appear to be the most well developed, and communities in Lesotho and Botswana the least. However, the cross-national patterns do change depending on the type of service in question (Table A6).

Eight in ten Zimbabweans (84 percent) live in Enumerator Areas with *regular bus or taxi service*; at the other end of the range, just over one-third of Namibians (36 percent) do. Eight in ten Zambians (88 percent) and Malawians (82 percent) have *recreation facilities* in their immediate area, while just over one-third of Zimbabweans (36 percent) do. *Places of worship* could be found in the immediate enumerator area of nine in ten Zambians (93 percent) and Malawians (87 percent) compared to just one-half of Botswana (49 percent). Over one-half of Zambians have immediate access to *venues that can be used for community meetings*, compared to just one in ten Basotho (11 percent) and Botswana (9 percent).

Commercially, Zambians (70 percent) have the highest levels of immediate access to *informal markets* that sell food and clothes and Botswana the lowest (15 percent). However, when it comes to more formal commercial outlets, nine in ten Botswana (91 percent) and Basotho (90 percent) have a *small shop* (café, corner shop or spaza shop) close at hand, compared to just 16 percent of Malawians. Four in ten Botswana (42 percent) and South Africans (44 percent) have immediate access to *larger stores, or supermarkets* that sell food or clothes compared to just 14 percent of Malawians.

Table A6: Community Services

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black	White	Coloured	Indian
Regular bus or taxi service	62	42	36	55	84	65	62	62	54	64	85
Recreational facilities	53	82	43	88	36	67	42	36	59	61	45
Churches, mosques or temples or other places of worship	49	87	55	93	55	68	61	59	64	76	48
Town halls or community buildings that can be used for meetings	9	23	34	56	20	11	35	33	35	50	29
Cafes / corner shops / spaza shops	91	16	52	65	48	90	78	80	70	75	77
Market stalls (food / clothing)	15	52	33	70	49	27	25	26	19	28	22
Supermarket (food / clothing)	42	14	40	24	37	24	44	39	64	46	49
Petrol station	10	15	30	23	19	11	37	29	71	53	35

Interviewers recorded whether or not it was present in the Enumerator Area (EA) / Primary Sampling Unit (PSU). In each EA or PSU a cluster of eight interviewers (four in South Africa) was conducted.

Table A8 Agricultural Activity

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black/ African	White	Coloured	Indian
Crops / Vegetables	43	92	58	77	80	99	33	40	19	12	18
Livestock	42	83	53	73	59	98	21	26	10	15	2
Trees over one story	18	75	45	85	42	82	28	25	45	26	24

Interviewers recorded whether or not it was present in the Enumerator Area (EA) / Primary Sampling Unit (PSU). In each EA or PSU a cluster of eight interviewers (four in South Africa) was conducted.

Table A10: Access to Schools

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black/ African	White	Coloured	Indian
Individual Access to An Affordable School	90	93	78	93	94	77	88	89	84	88	93
Community Access to Schools*	74	79	73	85	80	65	74	78	64	77	41

* Interviewers recorded whether or not it was present in the Enumerator Area (EA) / Primary Sampling Unit (PSU). In each EA or PSU a cluster of eight interviewers (four in South Africa) was conducted.

We created an *index of community services* measuring the absence or presence of the items just reviewed (Table A7). The highest levels of community infrastructure can, perhaps surprisingly, be found in Zambia (0.53 on a scale of 0 to 1). The lowest level of community infrastructure, again perhaps surprisingly, is found in Botswana (0.33).

Table A7: Index of Community Services

Country	Mean	N	Std. Dev.
Zambia	0.53	1089	.24
South Africa	0.40	2200	.28
Malawi	0.36	1206	.23
Namibia	0.37	966	.36
Zimbabwe	0.37	1137	.26
Lesotho	0.37	1149	.24
Botswana	0.33	1198	.18
Total	0.39	8945	.27

Index of Agricultural Activity

Interviewers also observed three elements related to the agricultural activity of the community. In Lesotho, interviewers reported seeing “gardens or fields attached to households *growing crops or vegetables*” in the enumerator area of 99 percent of interviews, and “yards or fields attached to households containing *livestock* such as goats, sheep, cows or horses” in 98 percent of cases (see Table A8). In contrast, these were seen in only 33 and 21 percent of sites in South Africa. Interviewers also observed “yards, gardens or fields attached to households with *trees* growing in them that were *higher than one story*” within the immediate enumerator area of eight of ten sites in Zambia (82 percent) and Zambia, (81 percent) compared to just one in five in Botswana (18 percent). Combining these into a single index shows that the greatest frequency of agricultural activity can be found in Lesotho (0.93) and the least in South Africa (0.27) (Table A9).

Table A9: Agricultural Activity Index

Country	Mean	N	Std Dev.
Lesotho	0.93	1167	.16
Malawi	0.83	1207	.24
Zambia	0.78	1142	.29
Zimbabwe	0.60	1166	.32
Namibia	0.52	962	.42
Botswana	0.34	1200	.33
South Africa	0.27	2200	.34
Total	0.58	9044	.40

Index of Access to Schools

Compared to other dimensions of development, governments across Southern Africa have done a good job in constructing affordable schools to which large proportions of their populations have access. Interviewers were able to identify a nearby school in eight of ten Enumerator Areas in Zambia (85 percent), Zimbabwe (80 percent) and Malawi (79 percent), but just 65 percent in Lesotho (see Table A10). Nine in ten say there is “a school close by where you could afford to send your children?” in Zimbabwe (94 percent), Zambia (93 percent), Botswana (90 percent), and in South Africa (88 percent), compared to just 78 and 77 percent in Namibia and Lesotho respectively. We construct an *index of access to schools* and find that Zambia, Malawi and Zimbabwe lead the region (statistically indistinguishable between 0.87 and 0.90 on a scale of 0 to 1) and Lesotho has the lowest relative level of access (0.71) (Table A11).

Table A11: Access to Schools Index

Country	Mean	N	Std. Dev.
Zambia	0.90	1143	.25
Malawi	0.87	1200	.26
Zimbabwe	0.87	1155	.24
South Africa	0.83	2107	.30
Botswana	0.82	1186	.28
Namibia	0.77	989	.38
Lesotho	0.71	1160	.36
Total	0.83	8940	.30

Non-Index Variables

Formal Housing

As noted earlier, four other pieces of information remained distinct from the six dimensions of well-being that we have already discussed. One piece consisted of Afrobarometer fieldworkers' observations of the quality of people's shelters (Table A12). Improved houses (with cement or brick walls, windows and metal or tile roofs) are most common in Botswana (84 percent) and available to more than half the population in all countries except Namibia (36 percent). Half of the population occupies unimproved traditional housing (usually constructed of mud and thatch) in Namibia (50 percent), and over one third in Malawi (41 percent), and Zambia (35 percent) and Zimbabwe (33 percent). Just one in ten South Africans (10 percent) and Botswana (9 percent) live in traditional houses.

Sub-standard shelter in the form of temporary shack-type dwellings is most common in countries with an apartheid legacy of population displacement, namely South Africa (13 percent) and Namibia (8 percent), but it is also prevalent in Zambia (5 percent). However, the figure for South Africa is undoubtedly a point on a downward curve as over one million low cost housing units had been built by 2001.¹¹⁸

However, even in countries with large proportions of people living in formal houses, such as Botswana, it appears that other types of housing are scattered throughout neighbourhoods and towns (Table A13). While 84 percent of Botswana respondents live in formal houses, interviews observed that only 29 percent of respondents lived in enumerator areas consisting entirely of formal housing. Six in ten (59 percent) lived in enumerator areas counted as mostly formal, indicating the presence of at least some other types of housing in the immediate area. The prevalence of large private or government housing projects (indicated by enumerator areas consisting wholly of formal houses) is seen in South Africa (55 percent) and Zimbabwe (39 percent).

Education

To measure adult education, we asked respondents for their level of highest educational attainment (Table A14). Proportions of adults with no formal schooling are relatively high in four countries: Botswana (17 percent), Namibia (16 percent), Lesotho (15 percent) and Malawi (13 percent). The median respondent in Lesotho has only some primary education and in Malawi had completed primary school. In the other five countries, the median respondent had at least some high school. White and coloured South Africans possessed the highest educational attainment as the median respondent had completed high school.

Table A12: Quality of Housing

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Improved / Formal House	84	58	36	56	63	65	69	62	88	94	73
Traditional House	9	41	50	35	33	29	10	13	0	2	0
Flat / Hostel	0	0	2	2	2	4	4	2	9	1	26
Temporary Structure	1	1	8	5	1	1	13	17	0	1	0
Room in Backyard	1	<1	1	<1	<1	<1	2	2	0	1	0

Table A13: Quality of Housing in Community

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black/African	White	Coloured	Indian
All	29	10	22	34	40	6	55	43	87	76	83
Most	59	49	23	15	22	46	21	25	8	17	10
Some	11	41	33	42	29	49	17	22	4	7	1
None	0	1	23	10	9	0	8	10	<1	0	6

How many houses within the primary sampling unit are formal houses?

Table A14: Individual Educational Attainment

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
No formal schooling	17	13	16	7	8	15	4	5	0	5	2
Some Primary school	82	86	86	92	91	85	96	95	100	95	98
Primary school Completed	67	51	66	75	77	40	87	85	99	90	92
Some high school	52	35	51	60	61	22	78	75	99	80	79
High school completed	23	16	27	32	30	7	40	35	74	70	35
Some University/ College	8	3	9	12	11	2	10	9	20	29	6
University/ College completed	4	2	5	7	5	1	6	4	16	6	1
Post-grad	1.	0	1	<1	1	<1	1	1	7	0	0
Other post matric Qualifications	1	1	2	<1	1	<1	4	3	10	2	3
Don't know	0	<1	<1	0	<1	0	0	0	0	0	0
Refused	0	<1	0	0	<1	0	0	0	0	0	0
Missing Data	1	<1	1	1	1	0	0	0	0	0	0

Even with the legacy of apartheid education in their country, South Africans in general, and black South Africans in particular, exhibit higher levels of education than any other Southern African country. Forty percent of all South Africans (and 35 percent of blacks) have completed high school. At the other end of the spectrum, just 16 percent of Malawians and 7 percent of Basotho have done so. At the same time, while black South Africans exhibit higher levels of education than people in any other country in the region, they fall far behind white (74 percent) and coloured (70 percent) respondents in their own country.

Employment

Unemployment and underemployment are widespread in the region. Afrobarometer surveys in Southern Africa asked people a three-part question. First, were they working? If so, was it part time or full time? And if not, were they looking for work? Our unemployment estimate is then derived from the following formula:

$$\frac{\% \text{ Not Working but Looking for Work}}{100\% - \% \text{ Not Working and Not Looking For Work}}$$

Our confidence in our results is enhanced by the fact that our estimate for South Africa (36 percent of the workforce 18 years of age and above) is statistically the same as the “expanded rate” of 36 percent estimated by a Statistics South Africa labour force survey conducted at about the same time.¹¹⁹ Across six Southern African countries, unemployment in 1999-2000 ranged from 33 percent in Zimbabwe to 45 percent in Botswana, with the major exception of Lesotho; Lesotho’s figure stands far outside this range at an astounding 76 percent (see Table A15).

Lesotho’s extraordinary level of unemployment might be explained by the fact that many employed males were out of the country working in South African mines during the survey period. However, 81 percent of Basotho women are also unemployed, far higher than the regional average of 52 percent. This suggests that unemployment would be exceptionally high in this country even if all of the men had been present during the survey. At the same time, higher-than-average levels of female unemployment may be related to the phenomenon of mine migrancy, since the irregular delivery of remittances from the mines may force a unusually high proportions of Lesotho’s women into the labour force. This may be reflected in the fact that the female work force in Lesotho (69 percent of all women are working or looking for work) is as large as in South Africa (70 percent) and Botswana (67 percent), two much more developed economies, and significantly higher than countries with more similar economies such as Namibia (60 percent) or Malawi (27 percent). There is also a much smaller gender gap in Lesotho’s rate of unemployment than in the rest of the region. Across the region as a whole, female unemployment is one-third higher among women than men, but in Lesotho it is just ten percent higher (81 percent versus 72 percent).

Not only is unemployment extensive, but the employment that does exist is fractional and temporary, especially in the region’s more industrial economies. Approximately one-third of all current employment is part time in Zimbabwe (34 percent), Lesotho (31 percent) and South Africa (30 percent), and between one-fifth and one-quarter is in the other four countries. Needless to say, part-time jobs do not provide full salaries and usually lack benefits. Second, many jobs are temporary, especially in the more advanced economies. Across the region, 14 percent of those who currently enjoy full-time employment went without a cash job for at least one month in the previous year, a figure that goes as high as 18 percent in Zambia and 22 percent in Lesotho. Four in ten South Africans (40 percent) with part time jobs were unemployed for at least one month during the previous year, rising to 51 percent in Malawi and Namibia and 58 percent in Lesotho.

Table A15: Unemployment

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
No (Not looking)	29	65	36	43	42	30	26	23	41	23	36
No (looking)	32	15	30	21	19	54	27	32	5	27	19
Yes, part-time (not looking)	2	2	2	2	6	1	4	4	3	6	6
Yes, part-time (looking)	7	2	5	5	7	4	10	12	4	5	9
Yes, full-time (not looking)	18	13	19	17	18	7	22	17	36	35	26
Yes, full-time (looking)	11	4	7	10	7	4	10	12	6	4	3
Don't know	<1	0	0	1	1	<1	1	1	5	1	1
Missing Data	2	<1	<1	<1	1	<1	0	0	0	0	
Unemployment Rate	45%	42%	47%	38%	33%	76%	36%	41%	8%	35%	30%

Do you have a job that pays a weekly or monthly cash income? Is it full-time or part-time? And are you looking for a cash job (or looking for another one if you are presently working)?

Table A16: Occupation

	Botswana	Malawi	Namibia	Zambia	Zimbabwe	Lesotho	South Africa	Black SA	White SA	Coloured SA	Indian SA
Owner / Employer	3	5	4	3	2	1	5	2	13	11	9
Professional / Supervisory	14	12	11	16	14	5	10	8	19	6	9
Worker	40	24	29	31	42	45	53	54	40	61	55
Subsistence Farmer	4	33	7	22	6	6	1	<1	3	1	1
Student	9	8	7	6	3	1	9	12	2	4	2
Housewife	8	10	19	14	10	17	8	5	20	11	15
Disabled	1	<1	2	1	1	1	1	1	0	2	0
Never had a job	22	8	21	8	22	23	14	18	3	5	8

Occupation

A final measure of well being looks at what people who are employed (or who recently have been) are actually doing. We took the myriad responses to our question about occupation and grouped them together into five main categories (Table A16).

First, the *owner/employer* category comprise anyone who owns a business and employs others, the self-employed, managing directors, or commercial farmers. This constitutes what Russell Dalton has called the “old middle class,” or in Marxist terms, those who own or manage the means of production.¹²⁰ Malawi (5 percent) and South Africa (5 percent) had the largest proportions falling into this category, with Lesotho (1 percent) the least. Second, the *professional/supervisory* category comprises office supervisors, industrial foremen, and professionals such as lawyers, engineers or doctors. This constitutes what Dalton calls the “new middle class,” those who live middle class lifestyles but do not own or run the means of production. Zambia (16 percent), Zimbabwe (14 percent) and Botswana (14 percent) have the largest proportions in this sector, and Lesotho (5 percent) the least.

The *worker* category consists non-manual and manual, skilled and unskilled workers in both the formal and informal sectors, as well as farm workers, domestic workers, and soldiers, police and other security workers. South Africa has the largest working class (53 percent) and Malawi (24 percent) the smallest. The *subsistence* farmer category comprises yeomen or peasant farmers, or any farmer who did not feel they ran a commercial farm. The largest proportion is found in Malawi (33 percent) and the smallest in South Africa (1 percent).¹²¹

Finally, the *never had a job* category comprises anyone who has either never worked or not worked long enough to consider themselves to be workers. It is important to note that this category does not include housewives. Lesotho (23 percent), Botswana and Zimbabwe (each at 22 percent) and Namibia (21 percent) have the largest proportions of “long-term” unemployed citizens. In South Africa, the proportion of hard core unemployed is at least twice as high among blacks (18 percent) than for any other racial group (Indians were the next highest at 8 percent).

Finally, there are three other categories that do not fit into the above occupational categories. As many as 19 percent report that they are housewives in Namibia, while just 8 percent do so in Botswana and South Africa (though 20 percent of white South Africans place themselves in this category). The proportions of the national samples (which include only those 18 years and older) who call themselves students is highest in Botswana and South Africa (9 percent), and lowest in Lesotho (just 1 percent). Finally, the disabled comprise 1 to 2 percent of all country samples.

Endnotes

¹ An earlier version of this paper, entitled “Going Without In Southern Africa,” was presented to the United Kingdom Department for International Development (South Africa) Poverty Workshop On “Measuring and Assessing Poverty” (Shere View Lodge, Pretoria, 13 March 2000).

² Seymour Martin Lipset, “Some Social Requisites of Democracy: Economic Development and Political Legitimacy,” *American Political Science Review* 53/1 (1959):69-105; Kenneth Bollen and Robert Jackman, “Democracy, Stability and Dichotomies,” *American Sociological Review* 54 (1989):438-57; and Adam Przeworski, Michael Alvarez, Jose Antonio Cheibub and Frenando Limongi, *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990* (Cambridge: Cambridge University Press, 2000).

³ Ronald Inglehart, “Culture and Democracy,” *Culture Matters: How Values Shape Human Progress*, eds. Lawrence Harrison and Samuel Huntington (New York: Basic Books, 2000); Ronald Inglehart and Wayne Baker, “Modernization, Cultural Change, and the Persistence of Traditional Values,” *American Sociological Review* 65: February (2000): 19-51; Christian Welzel, Ronald Inglehart and Hans-Dieter Klingemann, “Human Development as a Theory of Social Change: A Cross-Cultural Perspective,” Unpublished Manuscript (n.d.).

⁴ Samuel Huntington, *The Third Wave: Democratization In the Late Twentieth Century* (Norman: University of Oklahoma Press, 1991), pp. 59-72.

⁵ Ghana, Nigeria, Mali, Uganda and Tanzania are the other countries that comprise the Afrobarometer. However, the questionnaires used in those countries did not contain the full set of questions covered in this paper.

⁶ Actual sample sizes for each country are as follows: Botswana = 1200, Lesotho = 1177, Malawi = 1208, Namibia = 1183, South Africa = 2200, Zambia = 1198, and Zimbabwe = 1200. Fieldwork was conducted by national research institutions affiliated with the Afrobarometer project. Samples were designed using a common, multi-stage, stratified, area cluster approach. Random selection methods were used at each stage, with probability proportional to population size where appropriate. Sampling frames were constructed in the first stages from the most up-to-date census figures or projections available, and thereafter from census maps, systematic walk patterns, and project-generated lists of household members. With the exception of South Africa, each country sample was self-weighted and sufficiently representative of national characteristics on key socio-economic indicators (gender, age, region) that post-weighting was not necessary.

⁷ For example, Statistics South Africa’s 1995 Income and Expenditure Survey (which operated in tandem with its October Household Survey) in just the section on consumption contained 27 question on the cost of housing , 131 questions on monthly expenditures on food and beverages, and 22 questions on food consumed from own production. See Harold Alderman *et al.*, “Combining Census and Survey Data to Construct A Poverty Map of South Africa,” *Measuring Poverty In South Africa* (Pretoria: Statistics South Africa, 2000), p. 9.

⁸ For his valuable help in designing all the key question items reviewed in this paper, we owe a special debt of thanks to George Ellison.

⁹ We ultimately used 35 items; the question measuring occupation was omitted since it is a categorical variable and hence not suitable for this type of test.

¹⁰ The scale was verified through statistical procedures known as Factor Analysis (using Maximum Likelihood extraction and Direct Oblimin rotation) and Reliability Analysis. From these items, it is possible to extract a single unrotated factor with an Eigenvalue of 2.89 that explains 41.2 percent of the common variance. The items load on, or correlate with the underlying factor as follows: cash income (.71), food (.66), medical treatment (.61), home fuel (.55) water (.50), electricity (.50), and home safety (.35). The scale is reliable (Kronbach’s Alpha = .75).

¹¹ Factor analysis demonstrates that the items cannot be combined with any others to create one single scale. The two items are highly correlated (Pearson’s $r = .61$) and form a very reliable two item construct (Kronbach’s Alpha = .75).

¹² From these items it is possible to extract a single unrotated factor with an Eigenvalue of 4.35 that explains 54.4 percent of the variance common to all eight items. The reliability (Kronbach's Alpha) = .86. The items load on the factor as follows: household access to electricity (.77), household access to piped water (.76), community access to sewerage (.76), community access to an electricity grid (.75), community access to a piped water scheme (.72), the extent of formal houses in a community (.71), the quality of the respondent's house (.54), and pavement alongside roads in the community (.49).

¹³ From these items, it is possible to obtain a single, rotated factor with an Eigenvalue of 4.43 that measures 36.9 percent of the common variance of all 12 items. The reliability (Kronbach's Alpha) = .84. The items load onto the factor as follows: petrol station (.70), police station (.69), post office (.68), grocery or clothing stores (.64), meeting halls (.60), health clinics (.56), market stalls (.52), police on the streets (.45), bus/taxi service (.45), small shops (.41), recreation facilities (.39), and places of worship (.34). The same tests were used to confirm that additional items could not be added into this scale without either creating more than one underlying dimension, or appreciably weakening the validity and reliability of the factor.

¹⁴ From these items, a single unrotated factor can be extracted with an Eigenvalue of 1.95 that explains 65.0 percent of the common variance. Reliability (Kronbach's Alpha = .73). The strongest item loading onto the factor is community livestock production (.78), community crop production (.68) and the existence of tall trees in the community (.61).

¹⁵ Factor analysis demonstrates that these items cannot be combined with any other items to form a larger scale. The two items are correlated (Pearson's $r = .33$) and the two item construct is very reliable (Kronbach's Alpha = .92).

¹⁶ Richard Rose, *Getting Things Done With Social Capital: New Russia Barometer VII*, Studies In Public Policy no. 303 (Glasgow: Centre for the Study of Public Policy, University of Strathclyde, 1998).

¹⁷ For his latest contribution to this debate, see Amartya Sen, *Development as Freedom* (New York: Knopf, 1999).

¹⁸ The median is the value or response category where we find the case that divides the sample into two equal halves: for ordinal response scales such as the one here, the median provides us with the best estimate of central tendency.

¹⁹ David Bruce, "Suspect Crime Statistics Cannot Obscure Grim Truth," *Sunday Independent*, 10 June 2001, p. 9; Michael Dynes, "South Africa's Huge Steps On Long Walk to Prosperity," *Sunday Independent*, 26 August 2001, p. 4; S. Pedrag, "Crime Out of Control In South Africa," *NSNBC News*, 29 May 200 (www.mnsbc.com/news).

²⁰ Debbie Budlender, "Human Development," *Poverty and Inequality in South Africa: Meeting the Challenge*, ed. Julian May (Cape Town: David Philip/London: Zed Books, 2000), p. 133.

²¹ Nedbank/Institute for Security Studies, "Criminal Justice Monitor," *Crime Index /1* (January/February 2000).

²² The 2001 Tanzania Afrobarometer survey did ask people for actual monthly income. We found that while Tanzanians with lower reported levels of money income were more likely to go without basic necessities, the correlation was modest at best, and generally weak. The Pearson's r correlation for income and going without food was -.21, water -.09, medical treatment -.17, electricity -.15 and schooling -.12. All correlations were statistically significant at the .001 level of probability. See Amon Chaligha, Robert Mattes, Yul Derek Davids and Michael Bratton, *Uncritical Citizens or Patient Trustees? Attitudes Toward Democracy and Markets In Tanzania* Afrobarometer Working Papers No. 21 (Cape Town/Accra/East Lansing, Mi.: Afrobarometer, 2002) (www.afrobarometer.org).

²³ Approximately 7 percent of South Africans (in 2.9 million households) receive some sort of government social assistance on a monthly basis. Estimates place government pensions as accounting for 28 percent of all income for the "ultra poor" and 6 percent for the non-poor. Budlender, "Human Development," p. 127.

²⁴ Richard Rose, *Social Shocks, Social Confidence and Health*, Studies In Public Policy No. 362 (Glasgow: Centre for the Study of Public Policy, Univesity of Strathclyde, 2002), p. 8.

²⁵ John Gay and David Hall, *Poverty and Livelihoods In Lesotho, 2000 - More Than A Mapping Exercise: Summary Volume* (Maseru, Lesotho: Sechaba Consultants, 2000), pp. 1-3. The study uses a poverty line of M80 per household member per month (US1\$ = M6.8).

²⁶ Anne Inserra, *A Review of Approaches for Measurment of Microenterprise and Household Income*, AIMS Brief No. 8 (Washington D.C.: United States Agency for International Development, September 1996), p. 1; Ravi Kanbur, *Economic Policy, Distribution and Poverty: The Nature of Disagreements* (Unpublished Paper: Cornell University, 2001), p. 7; Kunbar and Squire, 1999, p. 13; and Alderman, *et al.*, “Combining Census and Survey Data,” pp. 5 and 13.

²⁷ Inserra, *A Review of Approaches*, p. 2.

²⁸ Ravi Kanbur and Lyn Squire, *The Evolution of Thinking About Poverty: Exploring the Interactions* (Unpublished Paper, September 1999), p. 15.

²⁹ Kunbar and Squire, *The Evolution of Thinking About Poverty*, p. 17.

³⁰ For instance, the 1994 Human Development Report placed Sri Lanka, Nicaragua, Pakistan and Guinea all in the same \$400 to \$500 per capita income bracket. Yet they had respective life expectancy rates of 71, 65, 58 and 44, and respective infant mortality rates of 24, 53, 99 and 135 per 1,000 live births. Kunbar and Squire, *The Evolution of Thinking About Poverty*, p. 17.

³¹ Julian May, Ingrid Woolard and Stephan Klasen, “The Nature and Measurement of Poverty and Inequality,” *Poverty and Inequality In South Africa*, p. 22.

³² Approximately 35 percent of the most severely deprived households (determined by a 12-indicator index of household well being) in South Africa in 1993 were drawn from the 2nd, 3rd and even 4th quintiles of the Income Poverty scale. See Stephen Klasen, “Poverty and Inequality In South Africa: An Analysis of the 1993 SALDRU Survey,” *Social Indicator Research* (1997) 41: 51-96 (cited in May, Woolard and Klasen, pp. 40-46).

³³ P. Glewwe and J. van der Gaag, “Identifying the Poor in Developing Countries: Do Different Definitions Matter?” *World Development* 18: pp. 803-14 (cited in Kanbur and Squire, 1999, p. 15).

³⁴ Simon Appleton and Lina Song, *Income and Human Development at the Household Level: Evidence From Six Countries* (Mimeo: Centre for the Study of African Economies, 1999) (cited in Kanbur and Squire, 1999, p. 15).

³⁵ United Nations Development Program, *UNDP Poverty Report, 1998* (New York: United Nations Development Program, 1998), p. 14 (cited in Ros Hirschowitz, Mark Orkin and Piet Alberts, “Key Baseline Statistics for Poverty Measurement”).

³⁶ Julian May, “Growth, Development, Poverty and Inequality,” p. 5.

³⁷ See *Measuring Poverty In South Africa*; and Michael Carter and Julian May, *One Kind of Freedom: Poverty Dynamics in Post Apartheid South Afria* (Mimeo: University of Wisconsin, May 2001).

³⁸ Inserra, *A Review of Approaches*, p. 2.

³⁹ For example, based on expenditure data from the 1996 South African Income and Expenditure Survey, Statistics South Africa estimates household poverty in South Africa to be 28 percent using an income of R800 per household per month line (the line at which households are defined as poor for the equitable share grant from the national government to municipalities) and individual poverty to be 48 percent (using a poverty line set at an income of R250

per month per capita within the household). But using income data from the national census of the same year, the poverty estimates are 52 percent and 61 percent respectively. See Alderman, *et al.*, “Combining Survey and Census Data,” pp. 6-10.

⁴⁰ Klasen, “Poverty and Inequality In South Africa,” cited in May, Woolard and Klasen, pp. 40-46.

⁴¹ Stats SA, *Measuring Poverty In South Africa*..

⁴² May, Woolard and Klasen, “The Nature and Measurement of Poverty and Inequality,” p. 25. Alternatively, Carvalho and White define “quantitative research” as “one that typically uses random sample surveys and structured interviews to collect data – mainly quantifiable data – and analyzes it using statistical techniques. By contrast, the qualitative approach is defined as one that typically uses purposive sampling and semi-structured or interactive interviews to collect data – mainly data relating to people’s judgments, attitudes, preferences, priorities, and/or perceptions about a subject – and analyzes it through sociological or anthropological research techniques.” S. Carvalho and H. White, *Combining the Quantitative and Qualitative Approaches to Poverty Measurement and Analysis*, World Bank Technical Paper, No. 366 (Washington: World Bank, 1997), cited in Ravi Kanbur, “Qualitative and Quantitative Poverty Appraisal: The State of Play and Some Questions,” Workshop On *Qual-Quant: Qualitative and Quantitative Poverty Appraisal: Complementarities, Tensions and the Way Forward* (Cornell University: 15-16 March 2001), p. 18 (<http://www.people.cornell.edu/pages/sk145/>).

⁴³ Quoted in Kanbur, “Qualitative and Quantitative Poverty Appraisal,” p. 13.

⁴⁴ Paul Krugman, “Does Third World Growth Hurt First World Prosperity?” *Harvard Business Review* June-August 1994, pp. 113-121 (cited in Michael Fairbanks, “Changing the Mind of A Nation: Elements In A Process For Creating Prosperity,” *Culture Matters*, p. 272).

⁴⁵ Martin Revallion, “Can Qualitative Methods Help Quantitative Poverty Measurement?” *Qual-Quant: Qualitative and Quantitative Poverty Appraisal*, pp. 38-43.

⁴⁶ Round 2 of the Afrobarometer, to be conducted in 15 countries between June 2002 and May 2003, will use a five-point response category scale with these items.

⁴⁷ UNDP, *Human Development Report, 1999* (New York: Oxford University Press, 1999), p. 127.

⁴⁸ See Gay and Hall, *Poverty and Livelihoods In Lesotho, 2000*.

⁴⁹ World Bank, *World Development Report, 2000/2001: Attacking Poverty* (New York: Oxford University Press, 2001), p. 274.

⁵⁰ *World Development Report, 2000/2001*, p. 274.

⁵¹ *World Development Report, 2000/2001*, p. 276.

⁵² *World Development Report, 2000/2001*, p. 276.

⁵³ Vivienne Taylor, *South Africa: Transformation for Human Development, 2000* (Pretoria: UNDP, 2000), p. 53.

⁵⁴ Botswana data from 1985-1986, Zimbabwe data from 1990-1991, and South Africa, Namibia and Lesotho data from 1993. Data from *World Development Report, 2000/2001*, p.280.

⁵⁵ *Human Development Report, 1999*, p. 147.

⁵⁶ *Human Development Report 1999*, p. 127; data taken from *South Africa: Transformation for Human Development, 2000*, p. 61.

⁵⁷ Malawi figure from period 1989-1994. *Human Development Report, 2000*, p. 147.

⁵⁸ These indices can be found in *Measuring Poverty In South Africa*, p. 66.

⁵⁹ The Household Infrastructure Index and the Household Circumstances Indices were created by factor analyzing 11 items from the 1996 Census that yielded two principal components. The Household Infrastructure Index comprises 7 items that measure whether one lived in a formal house, had access to electricity for lighting, an inside water tap, a flush or chemical toilet, a telephone or cellular phone in the house, weekly refuse removal, level of education of head of household, and monthly household expenditure. Hirschowitz, Orkin and Alberts, "Key Baseline Statistics," pp. 76-77.

⁶⁰ The Household Circumstances Index comprises items measuring whether one was employed (using the broad definition), average household size, and the number of children under five years of age. Hirschowitz, Orkin and Alberts, "Key Baseline Statistics," pp. 76 and 79.

⁶¹ Hirschowitz, Orkin and Alberts, "Key Baseline Statistics," pp. 59-60.

⁶² Hirschowitz, Orkin and Alberts, "Key Baseline Statistics," pp. 59-60.

⁶³ Pearson's $r = -.31$, $\text{sig} = .000$, $n = 8422$.

⁶⁴ Pearson's $r = .35$, $\text{sig} = .000$, $n = 8949$.

⁶⁵ Pearson's $r = .69$, $\text{sig} = .000$, $n = 8402$.

⁶⁶ Pearson's $r = .44$, $\text{sig} = .000$, $n = 8830$.

⁶⁷ We tested this by entering a series of dummy variables measuring race (with black as the excluded group for comparison) and country (with South Africa as the excluded group). Decisions over which category of a discrete variable to exclude from the series of dummy variables are arbitrary. We used the criteria of excluding the category represented by the most respondents in the sample as well as in the population.

⁶⁸ For an illustration of how these factors can be usefully measured with macroeconomic data, see Michael Bratton and Robert Mattes, "Support for Economic Reform: Popular Attitudes in Africa," *World Development* (2003 forthcoming).

⁶⁹ Richard Rose, *Getting Things Done In An Anti-Modern Society: Social Capital Networks in Russia*, Studies In Public Policy No. 304 (Glasgow: Centre for the Study of Public Policy, University of Strathclyde, 1998), p. 5; and Rose, *Measures of Social Capital in African Surveys*, p. 1 (http://www.socialcapital.strath.ac.uk/catalog20_0.html).

⁷⁰ Rose, *Getting Things Done In An Anti-Modern Society*, pp. 5-9.

⁷¹ Frances Fukuyama, *Trust: The Social Virtues and the Creation of Prosperity* (New York: Free Press, 1995); and Fukuyama, "Social Capital," *Culture Matters*.

⁷² Ronald Inglehart, *Modernism and Post Modernism: Cultural, Economic and Political Change in 41 Societies* (Princeton: Princeton University Press, 1997), p. 188 (cited in Rose, *Getting Things Done In An Anti-Modern Society*, p. 8).

⁷³ Robert Putnam, "Democracy in America at Century's End," *Democracy's Victory and Crisis*, ed. Axel Hadenious (New York: Cambridge University Press), p. 31 (cited in Rose, *Getting Things Done In An Anti-Modern Society*, p. 8).

⁷⁴ Rose, *Getting Things Done In An Anti-Modern Society*, p. 8, fn. 1.

⁷⁵ Robert Putnam, *Making Democracy Work*, with Robert Leonardi and Raffaella Y. Nanettic (Princeton: Princeton University Press, 1993).

⁷⁶ Joseph Coleman, *Foundations of Social Theory* (Cambridge: Harvard University Press, 1990).

⁷⁷ Across all strategies and situations, factor analysis produced 13 factors with an Eigenvalue greater than 1.00, with no single factor accounting for more than 5 percent of total variance.

⁷⁸ Looking only at primary strategies across all situations, it is not possible to extract any single factor on which more than 3 items load at $> .20$.

⁷⁹ Looking only at backup strategies across all situations, factor analysis was unable to produce a solution.

⁸⁰ Dummy variables measuring use of the market for food and cash correlate with each other at $r = .32$ with a reliability of $\text{Alpha} = .52$ ($n=8185$).

⁸¹ Dummy variables measuring self reliance to get food and cash correlate with each other at $r = .32$ with a reliability of $\text{Alpha} = .49$ ($n=8185$).

⁸² Dummy variables measuring use of family and friends for food and cash correlate with each other at $r = .46$ and reliability of $\text{Alpha} = .63$ ($n=8185$). Using all four responses across all domains, it is possible to extract a single unrotated factor with an Eigenvalue of 1.52 that explains 38.1 percent of the common variance of all four items. However, reliability (Alpha) is .46. The dummy variables measuring the use of family and friends for home security and to provide for health care load with the overall item at only .16 and .10 respectively.

⁸³ Using all four dummy variables, it is possible to extract a single common factor with an Eigenvalue of 1.28 that measures 32 percent of the common variance, but with a very low reliability ($\text{Alpha} = .22$) ($n=8185$). The variables load on the common factor as follows: cash (.36), health care (.32), food (.31) and home security (.24).

⁸⁴ Using all four dummy variables, it is possible to extract a single common factor with an Eigenvalue of 1.88 that explains 46.9 percent of the common variance, with a reliability of $\text{Alpha} = .62$ ($n=8185$). The variables load on the common factor as follows: cash (.69), food (.61), health care (.47) and home security (.39).

⁸⁵ As measured by an item that asked: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?"

⁸⁶ The root of the question read: "In the last twelve months, how often have you attended meetings of a ____: Never, just once or twice, a few times, or often?" An average index measuring "Community Organization Participation" was created from responses to the following items: "Church group (other than religious services)," "Local self-help association (such as stokvel, burial association or neighbourhood watch)," "Group concerned with local matter such as schools, housing or rates," "Local commercial organization such as business group or farmers' association," "Group that does things for the community," and "A trade union."

⁸⁷ Rose, *Getting Things Done In An Anti-Modern Society*, pp. 19-20.

⁸⁸ Lipset, "Some Social Requisites of Democracy"; Bollen and Jackman, "Democracy, Stability and Dichotomies"; and Przewroski, *et al.*, *Democracy and Development*.

⁸⁹ Inglehart, "Culture and Democracy"; Inglehart and Baker, "Modernization, Cultural Change and the Persistence of Traditional Values"; and Welzel, Inglehart and Klingemann, "Human Development As A Theory of Social Change."

⁹⁰ Huntington, *The Third Wave*.

⁹¹ See Inglehart, “...” in A. Finifter, *Political Science: The State of the Discipline* (Washington: American Political Science Review, 1983).

⁹² Deepay Narayan, *Voices of the Poor: Can Anyone Hear Us?* (World Bank: Oxford University Press, 2000).

⁹³ For example, even as they set out to review a relatively comprehensive set of quantitative indicators of poverty and development in South Africa, development analysts Ingrid Woolard and Conrad Barberton argue that: “quantitative data fails to fully capture the qualitative aspects of inequality and poverty as people experience it day by day.” Astonishingly, they undercut much of the impact of their analysis by conceding that “We do not presume that this article captures what it really means to be poor.” Woolard and Barberton, “The Extent of Poverty and Inequality,” *Creating Action Space: The Challenge of Poverty and Democracy in South Africa*, eds. C. Barberton, M. Blake and H. Kotze (Cape Town: Idasa / David Philip Publishers, 1998), pp. 13-14.

⁹⁴ Narayan, *Voices of the Poor*.

⁹⁵ Kunbar and Squire, *The Evolution of Thinking About Poverty*, p. 22.

⁹⁶ As measured by an index of two items: 1) “When you get together with your friends, would you say you discuss political matters frequently, occasionally or never?”; and 2) “Some people seem to follow what’s going on in government and public affairs most of the time, whether there’s an election going on or not. Others aren’t that interested. Would you say you follow what’s going on in government and public affairs most of the time, some of the time, only now and then, or hardly at all?”

⁹⁷ As measured by an average index of responses to two items: “How often do you get news from 1) television, and 2) newspapers: every day, a few times a week, a few times a month, less than once a month, never?”

⁹⁸ As measured by an average index combining responses to three items: 1) “You think that you do not have enough information about political life and the actions of government”; 2) “Sometimes political and government affairs seem so complicated that you can’t really understand what’s going on”; 3) “In this country, you must be very careful of what you say about politics.” Responses were: Strongly agree, Agree, Neither agree nor disagree, Disagree and Strongly disagree.

⁹⁹ Putnam, *Making Democracy Work*.

¹⁰⁰ The root of the question read: “People associate democracy with many diverse meanings such as the ones I will mention now. In order for a society to be called democratic, is each of these things: absolutely essential, important, not very important, or not important at all?” One average index measuring “Political Understandings of Democracy” is created by responses to the following items: “majority rule,” “complete freedom for anyone to criticise government,” “regular elections,” “at least two political parties competing with each other.” Another index measuring “Economic Understandings of Democracy” is created by responses to these items: “basic necessities like shelter, food and water for everyone,” “jobs for everyone,” “equality in education,” and “a small income gap between rich and poor.”

¹⁰¹ As measured by a single item: “With regard to the most recent [INSERT YEAR] national elections, which statement is true for you? I decided not to vote, I was not able to vote, I voted in the elections, an election was not held in my area?”

¹⁰² The root of the question read: “Here are a number of different actions people might take if government were to do something they thought was wrong or harmful. For each of these, please tell me whether you have engaged in this activity or not: Yes-often, Yes-a few times, Yes-once or twice, No-but would do it if had the chance, No-would never do it?” One average index measuring “Political Protest Participation” is created by the responses to the following item: “attend a demonstration or protest march,” “participate in a boycott of rates, services or taxes,” “take part in a sit-in, disruption of government meeting or offices,” and “use force or violent methods (such as damaging public property).”

¹⁰³ This is the average index on Community Organization Participation described in Endnote 97.

¹⁰⁴ As measured by a single item: “In the past year, have you contacted a government or political party official about some important problem or to give them your views? If yes, was it just once or twice, a few times, or frequently?”

¹⁰⁵ The root of the question read: “Here is a list of things that people sometimes do as citizens. For each of these, please tell me whether you have engaged in this activity or not: Often, A few times, Once or twice, No - but would do it if had the chance, No - would never do this?” An average index measuring “Procedural Participation” was created from the responses to the following items: “participate with others to address and important problem affecting the community or nation (other than an election),” “attend an election rally,” “work for a political candidate or party,” and “write a letter to a newspaper.”

¹⁰⁶ The root of the question read: “We would like to remind you that your responses to this interview are confidential. Here is a list of actions ordinary people are taking in a political system. For each of these, please tell me whether you have engaged in this activity or not: Yes-often, Yes-a few times, Yes-once or twice, No - but would do it if had the chance, No - would never do this.” An average index measuring “Compliance With the Law” was created from the responses to the following items: “claim government benefits to which you are not entitled (like a pension, maintenance, or unemployment payment,” “avoid paying municipal/local rates,” “avoid paying income taxes,” “get services like electricity or water without paying for them.”

¹⁰⁷ The root of the question read: “In the past year, have you or anyone in your family had to pay money to government officials (beside paying rates or taxes), give them a gift, or do them a favour, in order to get the following; No, Once or twice, A few times, Often?” An average index measuring “Victimization by Corruption” was created from the responses to the following items: “a job,” “a government maintenance payment, pension payment or loan,” “electricity or water,” or “housing or land.”

¹⁰⁸ As measured by the single item: “With which of these statements are you most in agreement, A, B or C: A) Democracy is preferable to any other kind of government; B) In some circumstances, a non-democratic government can be preferable to democratic government; and C) For someone like me, a democratic or non democratic regime makes no difference?”

¹⁰⁹ The root of the question reads: “Our current system of governing with regular elections and more than one political party is not the only one [country] has ever had. Some people say that we would be better off if we had a different system of government. How much would you disapprove, neither disapprove or approve of the following alternatives to our current system of government with at least two political parties and regular election: Strongly disapprove, Disapprove, Neither approve nor disapprove, Approve, Strongly approve?” An average index measuring “Rejection of Non-Democratic Alternatives” was created from responses to the following items: “if only one political party, or candidates from only one party, were allowed to stand for elections and hold office,” “If all decisions were made by a council of elders, traditional leaders or chiefs?” “If the army came in to govern the country,” “If parliament and political parties were abolished, so that the President could decide everything,” “If the country returned to the old system we had under [former authoritarian regime].”

¹¹⁰ An additive index measuring “Support for Economic Adjustment” was created that counts agreement with the following statements: 1) “Is is better to have a wide variety of goods and many goods in the market, even if prices are high” (rather than “It is better to have low prices, even if there are shortages of goods”); 2) “It is better to be able to raise health care standards, even if we have to pay medical fees” (rather than “It is better to be able to visit clinics and get medicine for free, even if means we cannot raise health care standards”); 3) “The government cannot afford so many public employees and should lay off/retrench some of them” (rather than “The number of people who work for government should be reduced, even if paying their salaries is costly to the country”); and 4) “It is better for the government to sell its businesses to private companies and individuals” (rather than “The government should retain ownership of its factories, businesses and farms”).

¹¹¹ Alan Whiteside, Robert Mattes, Samantha Willan and Ryann Manning, *Examining HIV/AIDS in Southern Africa Through the Eyes of Ordinary Southern Africans*, Afrobarometer Working Papers No. 21 (Cape Town / Accra / East Lansing, Mi.: Afrobarometer, 2002) (www.afrobarometer.org).

¹¹² Pearson's $r = .60$, significance = .000, $n = 9267$.

¹¹³ Pearson's $r = .41$, significance = .000, $n = 8568$.

¹¹⁴ For the six counties other than Lesotho, a measure of "severe illness" (the national percentage of those who are both "often" physically *and* mentally ill) and modelled data on current AIDS cases correlates at (Pearson's r) .70. The same measure correlates with modelled AIDS deaths in the subsequent year at .59. See Whiteside, *et al.*, *Examining HIV/AIDS in Southern Africa*, p. 14.

¹¹⁵ Reconstruction and Development Programme, *Key Indicators of Poverty* (Pretoria: Reconstruction and Development Programme, 1995); and Ros Hirschowitz, Mark Orkin and Piet Alberts, "Key Baseline Statistics for Poverty Measurement," *Measuring Poverty in South Africa*, p. 66.

¹¹⁶ Stavrou, "Infrastructural Services," p. 152.

¹¹⁷ Kendall's Tau $b = .06$; Significance = .000.

¹¹⁸ Adele Sulcas, "Ministry Gets 'Realistic' About Housing Targets," *Sunday Independent*, 27 September 1998, p. 9; "Housing: A Good News Story," *RDP Monitor* 7/5 (May 2001), p. 2.

¹¹⁹ Jonathan Katzenellengen, "Jobless Figures Remain Over 25%," *Business Day*, 27 June 2001, p. 3. Based on the "narrow" definition of unemployment, the September 2000 Stats SA survey of 30,000 households put joblessness at 25.8 percent. Using the "expanded" or "broad" definition, unemployment was 35.9 percent. The expanded formulation includes discouraged job seekers, i.e., those who have not looked for jobs for the past month but would like to work.

% Not Working But Looking for Work Or Would Like to Work

100% - Not Working and Who Do Not Want To Work

It might be pointed out that the similarity is spurious since the Afrobarometer appears to use the "narrow" definition (which excludes those who are not actively seeking work but would like to work). But while the "narrow" official estimate excludes those who have not sought work in the past month, the Afrobarometer question merely asked people whether they were looking for work, with no stringent time period. But we feel the item captures *both* those who are either actively looking and those who simply desire to work, which makes it equivalent to the expanded definition. One other difference is that the Stats SA data are based only on respondents aged 16-64, while the Afrobarometer sample includes anyone over the age of 18. For discussion and debate about the "narrow" and "expanded" definitions, see Lawrence Schlimmer and Charisse Levitz, *Unemployment in South Africa: The Facts, the Prospects and an Exploration of Solutions*, Spotlight Series, No. 1/98 (Johannesburg: South African Institute of Race Relations, January 1998); Liv Torres, Haroon Borat, Murray Leibbrandt and Fuad Cassim, "Poverty and the Labour Market," *Poverty and Inequality In South Africa*, pp. 82-84; and Nicoli Nattrass, "The Debate About Unemployment in the 1990s," *Studies in Economics and Econometrics* 24/3: 73-90.

¹²⁰ Russell Dalton, *Citizen Politics: Public Opinion and Political Parties in Advanced Democracies*, 2d. ed. (Chatham, N.J.: Chatham House Publishers, 1998).

¹²¹ That South Africa has the smallest agricultural work force and the largest industrial workforce in the region supports arguments made by Jeremy Seekings about the inappropriate images of South Africa as a "society of peasants" still held by many international development researchers. Jeremy Seekings, "Visions of Society: Peasants, Workers and the Unemployed in a Changing South Africa," *Studies in Economics and Econometrics* 24/3: pp. 53-72.