Optimism and Poverty in Africa: Adaptation or a Means to Survival?

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DRAFT/PRELIMINARY VERSION

Abstract

Recent research finds that higher levels of optimism and happiness are associated with other positive traits and behaviors, such as productivity in the labor market, better health, and support for democracy and markets. We compare these findings to new survey data for Africa, in an attempt to understand these relationships in conditions of extreme adversity. We find unusual levels of optimism among the poorest and most insecure respondents there, in contrast to the other regions, where optimism is positively correlated with wealth and education. This suggests that optimism may play a positive role in the survival of the very poor in such adverse circumstances. Future research, based on data which allows us to control for individual specific character traits, is necessary to test whether this proposition has any explanatory power, or whether the findings merely reflect the ability of individuals to adjust their own expectations downward but maintain hope for their children. The poor's optimism is positively correlated with preference for democracy but not with preference for markets. Attitudinal traits may be more important in respondents' assessments of democracy as a system, while economic outcomes seem to be more important in respondents' assessments of the market in a region where its operations are both incomplete and unpredictable.

Introduction

Much of the work in the novel field of happiness economics has explored the effects of income and other material or contextual variables on happiness. Much less research has focused on the extent to which happiness – and related traits such as optimism - have causal effects on material outcomes, such as income and health. While the question is interesting per se, understanding it better may also contribute to the debate on the relevance of happiness research to policy.

The economics of happiness combines the methods typically used by economists with empirical realities observed by psychologists. The approach is useful for addressing questions where the standard reliance on revealed preferences provides limited information, such as the welfare effects of economic and social arrangements which individuals are powerless to change, including inequality or macroeconomic volatility, or where behavior is driven by social norms or self-control problems, as in the case of

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excess consumption of addictive substances.[2] The approach can also enhance our understanding of the relationship between psychological traits and economic decision-making.

Our research on optimism and well being in Latin America and Russia finds that higher levels of optimism and happiness (variables which correlate very closely with each other) are also associated with other positive traits and behaviors, such as productivity in the labor market, better health outcomes, and higher levels of support for democracy and markets. In this paper we use these findings as a benchmark. We compare them to new survey data for several countries in Africa, a context where poverty is more widespread and democratic governments and market economies are, for the most part, very fragile, in an attempt to understand these relationships in conditions of extreme adversity.

One reason there has been little work on the role of happiness, optimism, and other attitudinal traits in influencing outcomes is the difficulty of disentangling cause and effect – particularly in light of the role of numerous unobservable variables. The problem of unobservables is made even more difficult by the paucity of panel data (over time data for the same respondents).

We consistently find strong positive correlations between happiness (as well as other positive attitudinal traits), and income, education, and health status. [3] These correlations hold for the U.S., Latin America, and Russia. We also find that happiness and positive expectations for the future are positively correlated with support for markets and for democracy in both Latin America and Russia.

For the most part, we cannot establish the direction of causality. However, in a few instances where panel data is available and includes happiness questions, we have been able to overcome some of these constraints, and to identify a role for happiness and related attitudinal traits in the explanation of various outcomes. In a study based on panel data for Russia, we find that happiness and positive future expectations are correlated with - and perhaps even cause – higher levels of income and better health.[4]

Related work by Manju Puri and David Robinson on U.S. data has linked optimism – defined as respondents predicting a longer life expectancy than would be predicted by objective variables such as parents' longevity and individuals income,

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[2] For detail see Carol Graham, "The Economics of Happiness" in Steven Durlauf and Larry Blume, eds., *The New Palgrave Dictionary of Economics*, 2nd Edition, forthcoming.

[3] See Carol Graham and Stefano Pettinato, *Happiness and Hardship: Opportunity and Insecurity in New Market Economies* (Washington, D.C.: The Brookings Institution Press, 2002); and Andrew Felton and Carol Graham, "Variance in Obesity Incidence Across Countries and Cohorts: A Norms-Based Explanation Based on Happiness Surveys", *CSED Working Paper* #42, The Brookings Institution, September 2005. See also the work of Jonathan Gruber and Sendhil Mullanaithan, "Do Cigarette Taxes Make Smokers Happier?" *NBER Working Paper* #8872, April 2002.

[4] Carol Graham, Andrew Eggers, and Sandip Sukhtankar, "Does Happiness Pay? An Initial Exploration Based on Panel Data for Russia", *Journal of Economic Behavior and Organization*, April 2004.

education, and health status – to better financial outcomes, higher risk taking, and higher likelihood of re-marriage, conditional on divorce.[5]

In this paper, we rely on analogous discrepancies between expected and/or perceived economic status and objective status measures as the basis for assessing optimism in Africa. Our initial results yield notably different patterns from those we have established in other countries. In Latin America, Russia, and the United States, we find that optimism – defined as positive expectations for the future for respondents and for their children and as assessing one's economic status more positively than objective measures do - is highly correlated with higher levels of income, better self reported health, and higher levels of reported well being in general. In contrast, in Africa, optimism – at least as defined as positive expectations for one's children – and income are *inversely* correlated. Optimism thus defined is also inversely correlated with a number of other indicators of higher standards of living, such as better health status and security from crime, and positively correlated with a number of variables associated with deep poverty.

Given the deep and persistent levels of poverty in Africa, we hypothesize that the explanation lies in human psychology as much as in economic, social, or cultural explanations. We posit that given such extreme conditions, optimism among the poor may be a result of selection bias: individuals in such conditions may have to be optimistic to survive. While we cannot fully test this hypothesis, not least because we do not have over time data on the same respondents, our initial results are certainly suggestive. Alternatively, our results may reflect these individuals' realistic assessment that conditions are so bad they can only improve. Optimism may be linked to other behaviors and attitudes, such as labor market performance and support for democracy, meanwhile, and we explore such links to the extent our data allow in this paper.

We also find that the usual links between income, education, employment, and support for market policies do not hold for in Africa. This is most likely due to the extent to which non-market variables – such as barter, corruption, clientelism, and inefficient public intervention – play a role in determining economic outcomes in the region. In contrast, the standard linkages between education and support for democratic government more closely resemble those of other regions. We posit that it may be easier for survey respondents to evaluate democracy (at least defined simply as the holding of elections) than to evaluate a functioning market economy in this context.

DATA

For our comparative analysis of Latin America, we use the annual survey provided by the Latinobarómetro organization (1997-2005). The survey consists of approximately 1000 interviews in each of 18 countries in Latin America.[6] The samples are conducted annually by a prestigious research firm in each country, and are nationally

[5] Manju Puri and David Robinson, "Optimism and Economic Choice", *NBER Working Paper* # 11361, May 2005.

[6] The Dominican Republic was included for the first year in 2004, raising the country total to 18.

representative except for Chile, Colombia, and Paraguay.[7] The survey is comparable to the Eurobarometro survey for European countries in design and focus.

The survey includes a standard set of demographic questions. Accurately measuring income in a context where most respondents work in the informal sector and cannot record a fixed salary is notoriously difficult. Many developing country surveys rely on reported expenditures, which tend to be more accurate, if less useful for measuring the assets of the very wealthy and the volatility of income flows. Instead of either of these measures, the Latinobarómetro instead includes a detailed list of questions about ownership of goods and assets, as well as the interviewer's assessment of household socio-economic status (SES). Our wealth variable is based on an index of ownership of the 10 types of assets, ranging from drinking water and plumbing to computers and second homes. [8]

The survey also includes standard questions about life satisfaction, perceived economic well being and future prospects for respondents' children, respondents' reported position on a notional economic ladder, and views about future prospects for the respondent's country. There are a range of questions about preference for and satisfaction with market policies and democracy, as well as confidence in public institutions and views about redistribution (these vary by year of the survey).

The survey does not interview the same people every year, so we cannot examine attitudes changing over time except in the aggregate. To avoid large swings in our sample size, we primarily use the 2005 data in our regressions. This is a large set (N=20,222) with each country having at least 1,000 observations. We occasionally use data from other years in order to make use of questions that were asked only in that year, such as health status. In a few instances, we use the entire pooled set of respondents for 1997-2005.

For Africa, we rely on the Afrobarometer, a relatively new survey which is modeled on the Euro and Latino Barometers, and carried out with the collaboration of those survey teams and the Michigan State University, the Institute for Democracy in South Africa (IDASA) and the Center for Democratic Development, among others. The survey was first conducted in 1999 (however the first survey included different questions and covered only five countries). The second round, conducted in 2002 and 2003,

[7] Due to logistical and other constraints, the survey only has 70% coverage in Chile; 51% in Colombia; and 30% in Paraguay. The survey is produced by the NGO Latinobarómetro, a non-profit organization based in Santiago de Chile and directed by Marta Lagos (www.latinobarometro.org). The first survey was carried out in 1995 and covered 8 countries. Funding began with a grant from the European Community and now comes from multiple sources. Access to the data is by purchase, with a 4 year lag in public release. Graham has worked with the survey team for years and assisted with fund raising, and therefore has access to the data.

[8] The correlation coefficient between the interviewer's assessment of SES and our index is .53. We also estimated a latent wealth variable using primary component analysis of the items in the wealth index, but this alternative does not substantively change our results. See Filmer, D., and L. Pritchett, "Estimating Wealth Effects without Expenditure Data-or Tears: An Application to Educational Enrollments in States of India", *Demography* 38(1):115-132, 2001.

includes 11 countries as of the time this paper was written: Cape Verde, Lesotho, Mali, Mozambique, South Africa, Kenya, Malawi, Namibia, Nigeria, Tanzania, and Uganda. At this juncture, the surveys have been carried out in one year per each country, and favor nations with liberalizing regimes.

The Afrobarometer interviews between 1,200 and 2400 individuals from each nation, and includes standard socio-demographic questions: age, education, gender, race, religion, and employment status. The survey includes both an interviewer's assessment of the respondent's socioeconomic status, as well as a question which asks respondents to place themselves in one of 11 income categories (in the respondent's local currency), rather than estimating a precise amount of earned income. The income data must be used with caution, given the difficulties of accurately estimating income flows in a context characterized by seasonal variation in employment and high levels of informality.

Unfortunately, in contrast to the Latino and Euro Barometers, the Afrobarometer does not have a happiness question. There are a number of questions about perceptions of past, current and future economic status, as well as about respondents' living standards compared to their children and to their parents which allow us to assess optimism if not happiness. There is an economic ladder question (as in the Latinobarómetro), which asks respondents to rank themselves on an eleven step ladder representing their society, where the poor are on the first step and the rich are on the 11th. In our previous research, the economic ladder question has proven to be a useful proxy for respondents' views of their relative position in society.

PART I: OPTIMISM

Our point of departure for our Africa analysis is what we know about happiness and its relation to optimism in Latin America. The determinants of happiness in Latin America are fairly consistent across countries and over time. We ran our standard happiness regression on the entire pooled data set (including both country and year dummies). The determinants of happiness in Latin America are very similar to those in the United States and Europe, with the exception of a few variables.[9] [See Table 1] Women are happier than men in the US, for example, but there is no significant gender difference in Latin America, which may be explained by unequal gender rights. Age has the typical U-shaped curve in Latin America, with the low point in the mid fifties; it tends to be in the early forties for the U.S. and Europe.

Respondents' optimism about future mobility in Latin America, a variable that we call prospects of upward mobility or POUM, is positively correlated with happiness (simple correlation coefficient of .14). Respondents' optimism about their children's future mobility – as assessed by a question which asks respondents "how do you think your children will live compared to you: worse, the same, better" – is also positively

[9] Another major difference is that the self-employed are happier than average in the US and Europe but less happy in Latin America. While these respondents are self-employed by choice in the former context, in the latter, they are in the informal sector due to lack of other alternatives.

correlated with happiness (.11). Both kinds of optimism are correlated with higher levels of wealth and education, and with better self reported health.

Given the absence of a happiness question for Africa, we focus on the variables that we can use to gauge optimism. We relied on a number of questions which explore respondents' views about their current standard of living and about their achieved and expected income mobility – variables which typically correlate quite closely with happiness. These are phrased: how do you live today, with answers on a five point scale ranging from very bad to very good; and how will you live twelve months from now compared to today, with answers ranging from much worse to much better. [Table 2 – Descriptive Statistics]

We do not have a direct question about how respondents think their children will live in comparison to themselves. However, the economic ladder question (ELQ) asks respondents to rank, in turn, themselves, their parents, and their children on their society's economic ladder. We created a change_ELQ_kids variable by subtracting the respondent's ELQ from that of their children. Subtracting respondent's score from the children's ELQ "controls" for the individual's own rank and isolates, to the extent it is possible, respondents' subjective hopes for their children's future. As the children's ELQ variable is inherently more speculative than the respondents' own score, which is based on more objective information, and we subtract that out, we assume (perhaps somewhat heroically) that it is capturing elements of optimism which are based in character traits rather than in objective circumstances.

We found that African respondents' views about their *own* economic situation improving in the near future were positively correlated with income, education, and other variables which are indicative of better socioeconomic status, as they are in Latin America. In contrast, we found that the *poorest* respondents in Africa were the most optimistic about their *children's* future mobility. We posit that optimism about the short-term future (12 months hence) is more closely linked to respondents' objective conditions, such as income and education, and realistic prospects, while assessing ones' children's future status compared to one's own is a much more speculative exercise which likely captures innate optimism in addition to objective criteria.

We assessed poverty in a number of different ways: low reported income category, low levels of education, lack of access to health care, and higher likelihood of being a crime victim. Most of these measures were significantly and positively correlated with reported prospects for children's mobility. For example, respondents who reported that they had been a victim of a crime in the past year were more likely than the average to assess their children's future prospects for mobility positively. [Table 3]

One possibility, of course, is that the results are an artifact of construction: those that assessed their own status at the highest level could have, at best, a zero response even if they assessed their children at the highest level, and would have a negative response if they assessed their children's level lower than their own. In order to ensure that our results were not skewed by these responses, we re-ran the regressions based on a Tobit

model where optimism is a latent variable that is reflected in the gap but truncated at 0 and 10. This specification drops all of the responses that are below zero. Most of these below zero responses – 7.6% of all of our observations – were respondents in the highest income brackets assessing their children's prospects lower than their own, while an insignificant fraction were at the lower end of the scale (poor respondents assessing their children low or even lower than they). Yet our results were essentially unchanged with this specification. [Table 3a]

As an additional check to ensure that the results are not simply an artifact of variable construction, we created an analogous change_ELQ_kids variable with data from the year 2000 Latinobarómetro, the one survey year of that included a kids ELQ question. In Latin America, in contrast to Africa, the change_ELQ_kids variable ran in the SAME direction as the standard ELQ variable there and was *positively* correlated with income. Our results with the zero income respondents dropped and a Tobit specification – as in the case of the Afrobarometer – were essentially the same.[10] [Table 3b]

The results based on the Africa change_ELQ_kids variable – e.g. respondents' children's predicted rank compared to their own - are very different from those for other status variables in the Afrobarometer. Respondents' ELQ rankings are positively correlated (.43) with the simple ELQ_kids ranking (the children's rank without the respondent's rank factored in), as well as with ELQ_parents (.44). There is a negative correlation, however, between simple ELQ responses and change_ELQ_kids responses (-.36). In sharp contrast to change_ELQ_kids, change_ELQ_parents (respondents' ELQ minus where they ranked their parents), meanwhile, is positively correlated with ELQ (.41). Comparing the distribution of responses, we find that 64% percent of the sample compared their own ranking as the same or worse than that of their parents, but 71% predicted their children's future ranking would be better than their own.

We created another variable – ELQ_Income_gap - as an alternative measure of optimism (in this case about the respondent's present status rather than their children's future status). It is designed to assess discrepancies between perceived and actual status. This variable was constructed using the respondent's reported position on the ELQ minus their reported income level. As in the case of positive expectations for one's children, we again found remarkable and consistent optimism among the poorest. Having a higher ELQ-income gap (e.g. ranking oneself higher than corresponds with one's income level) was negatively correlated with education and with being male, and positively correlated with unemployment and with living in an urban area. (We did not include income as an independent variable in these regressions as it is a component of the dependent variable.) While some of this may be a result of less information/education among the poorest respondents and therefore more difficulty in making accurate assessments, attitudes are also likely at play. [Table 4]

The ELQ_Income_gap variable suffers from a similar construction problem to the change_ELQ_kids variable in that those in the highest income categories are more likely

[10] Results are available from the authors.

to have zero or negative scores. Accepting these limitations, we find that responses are normally distributed, with roughly 14% of respondents scoring zero and the majority of responses in the negative 3 to positive 5 range (the variable is bounded at 10 on each end). When we re-run the regressions with a Tobit specification and the zero responses dropped, as in the case of change_ELQ_kids, we find similar results.

Optimism or positive attitudes presumably affect the way in which people deal with adversity. We examined the well being costs of having been a crime victim. We split the sample into those respondents who reported high levels of personal security and those who reported low levels of personal security, with respondents' assessments of their living conditions as the dependent variable, and compared the coefficients on being a crime victim. We found that the costs were *lower* for those respondents who responded that they had *high* levels of insecurity than for those respondents who had *low* levels of insecurity. [Table 5]

There are several plausible explanations for this. On the one hand, if you expect that you will be a crime victim, some of those costs are already absorbed or adapted to in the expectations, and the actual event has less effects on well being. Alternatively, being a victim of crime in an area where it is the norm are less likely to feel or suffer stigma effects than are those who are victims of crime in an area where crime is rare. Or perhaps the negative effects of being a crime victim are mediated by the higher levels of optimism that we find among the poor and more precariously situated. All three explanations could be at play.

Our findings are preliminary, yet they suggest that optimism and poverty and insecurity are inversely correlated in Africa. While we cannot establish causality, we posit that these traits may enhance the survival prospects of the poor in such adverse circumstances. Unfortunately, we cannot test this hypothesis because we do not have over time data on the same respondents. In the next section, we turn to the relationship between optimism and support for democracy and markets in the region.

PART II: MARKETS AND DEMOCRACY: Africa versus Latin America

For most years for which we have data for Latin America, preference for markets and for democracy has a strong and consistent correlation with wealth and education variables.[11] In contrast, education is negatively correlated with satisfaction with markets and democracy, suggesting that while the educated support these systems in theory, they are also more critical of how they are working in practice. Also, in the most recent years, the wealthy and educated are less likely to prefer markets (although they still prefer democracy), reflecting the oft-discussed reform fatigue in the region.

[11] One outlier is support for privatization, which has dropped dramatically in recent years. See Carol Graham and Sandip Sukhtankar, "Does Economic Crisis Reduce Support for Democracy and Markets in Latin America? Some Evidence from Surveys of Public Opinion and Well Being", *Journal of Latin American Studies*, April 2004.

In Africa, our findings on attitudes about democracy are far more consistent than those on markets, most likely because of the mixed nature of most African economies, which are characterized by extensive barter, informality, corruption, and inefficient state intervention. We find, for example, that income and higher education are both positively correlated with having paid a bribe. This is in contrast to the simpler criteria of knowing whether or not elections are being held (which does not, in and of itself, reflect the quality of democracy, of course).

Generally in Africa, the more educated *prefer* democracy and markets but are not satisfied with them. This is in keeping with findings in other continents, where, as democracies develop, respondents are increasingly able to distinguish between systems of government and economic regimes and the record of particular governments or policies.[12] Income, meanwhile, is positively correlated with preferring markets but not significantly correlated with preferring democracy. Those respondents that favor free trade in Africa do not necessarily support democracy and markets, in contrast to Latin America where favoring economic integration and support for markets and democracy are positively correlated. [Tables 6, 6A]. This supports our hypothesis that the concept of a market economy is somewhat different in Africa than it is in other contexts where markets are more fully established.

African urbanites in general are more *satisfied* with democracy, while in Latin America, those that live in big cities tend to be less satisfied with both markets and democracy. In Latin America, those that live in urban areas are also less likely to be optimistic about their children's future than are those in small and medium sized cities. African urbanites are no more or less likely to be optimistic about their children's future.

Our participation index is positively correlated with *satisfaction* with democracy in Africa, as is our frequent politics question. Participation is also positively correlated with employment (not surprisingly), income, and education, but is negatively correlated with urban location. Political involvement in Africa is negatively correlated with assessments of current living standards, but positively correlated with optimism about the future. [Table 7] Corruption – as gauged by an index of a number of questions which ask respondents about the extent of corruption in a number of areas - is negatively correlated with happiness (or optimism), markets, and democracy in Latin America and with support for and satisfaction with markets and democracy in Africa.

In Latin America, *preferring* democracy is positively correlated with wealth and education. It is positively correlated with the frequent politics index, with favoring economic integration, believing the tax system is efficient, and with trust. Rather surprisingly it is also negatively correlated with believing that crime has increased (which may simply reflect greater awareness).[13]

[12] Graham and Sukhtankar (2004).

[13] Those respondents that have a positive opinion about the US are less likely to prefer democracy, while those with a positive image of China are more likely to prefer democracy! These findings most likely reflect sentiments about the Iraq war.

Those Latin American respondents that think the market economy is best for the country (e.g. *preferring the market* as a system) are more likely to participate in political events and to favor trade integration and labor laws. Education is insignificant, and wealth is negatively correlated. This is a change from earlier years, when support for markets were positively correlated with wealth and most likely reflects reform fatigue among the middle income sectors in the region. Living in a big city is also negatively correlated with preference for markets. In contrast to Latin America, urbanites in Africa are more likely to prefer both markets and democracy; most likely reflecting reform fatigue in the former context and earlier stages – and urban concentration – of reforms in the latter.

Satisfaction with democracy in Latin America is negatively correlated with education, as well as with city size and with unemployment. It is positively correlated with believing privatization was beneficial for the country, with frequent politics, favoring economic integration, and having health insurance. Being satisfied with democracy is also correlated with higher prospects for children's mobility (likely reflecting optimism in both cases). There is no significant correlation in Africa, meanwhile, where the more general determinants of optimism seem to be quite different.

Being satisfied with the market in Latin America is positively correlated with wealth and with having health insurance (which is held mostly by wealthier respondents with formal employment), but negatively correlated with education. It is also positively correlated with frequent politics, support for privatization, practicing religion, supporting labor laws, believing the tax system is efficient, with leaning to the right, and with having confidence in national institutions and national pride (many of these variables may also be capturing latent optimism among these respondents).[14] It is negatively correlated with believing that crime has increased and with being a victim of crime.

What about our African optimists? We know that those respondents that assess their children's future prospects better than their own are typically poorer than the average. Rather surprisingly, though, they are also more likely to prefer democracy and to participate in neighborhood and other types of civic organization. It is plausible that optimists are more likely to believe that their involvement will result in positive change. African optimists are not more or less likely to prefer the market economy, however. In contrast, Latin Americans who think the market is best for their country are, on average, more optimistic about their children's future.

Our findings on democracy and markets in Africa are rather mixed, and it is difficult to draw any clear lessons or conclusions. Given the rather vague nature and definition of markets in Africa, it is plausible that reported opinions about the market are more closely correlated with individual respondents' *outcomes*, while views about democracy seem to be driven by *attitudinal* traits such as optimism, which in turn may be correlated with the likelihood of civic participation. It is impossible to determine the direction of causality, though, in the absence of over time data.

[14] There is no privatization variable in the 2005 Latinobarometro data set, but there are several privatization variables in earlier years. For detail see Graham and Sukhtankar (2004).

An example of the incomplete nature of markets in Africa – which helps explain the strong links between income and support for markets and much weaker ones between education and support for markets - is the weak link between education levels and labor market outcomes.[15]

Very Tentative Conclusions

We find unusual levels of optimism among the poorest and most insecure respondents in our sample based on surveys in eleven countries in Africa. This is a departure from other regions, where we find that optimism is positively correlated with wealth, education, and other signs of prosperity. We posit that optimism may be a necessary or at least helpful trait for survival among the very poor in such adverse circumstances, although we do not have adequate data to test the proposition.

Future research, hopefully based on panel data which allows us to control for individual specific character traits, is necessary to test whether optimism per se (that which is not explained by objective circumstances) plays a role in helping the poorest survive in Africa, or whether it merely reflects the ability of individuals to adjust their own expectations downward in adverse circumstances but maintain hope for better lives for their children. These two traits, of course, may be inter-twined.

More precision and better data is also necessary to better understand the relationship between optimism and opinions about markets and democracy in a region where both are still in a formative stage. Our results suggest that the poor's optimism is positively correlated with preference for democracy but not with preference for markets. We think that attitudinal traits may be more important in respondents' assessments of democracy as a system, while economic outcomes (income, wealth) seem to be more important in respondents' assessments of the market in a region where its operations are both incomplete and unpredictable.

[15] Research on South Africa shows that education institutions over-invest in the humanities and under-invest in medical sciences and engineering. Those that have degrees in the latter fields are more likely to be employed, while those with humanities degrees are much less likely. See Maboreng Maharsoa and Driekie Hay, "Higher Education and Graduate Employment in South Africa", *Quality in Higher Education*, Vol. 7, No.2, 2001.

Table 1: Regression of Happy in Latin America

Observations	19564
LRchi2(30)	2401.36
Prob > chi2	0.00
Pseudo R2	0.05

Happy	Coefficient	T-Score
Age	-0.0352***	-7.19
Age2	0.0003***	6.00
Yeduc	0.0168***	4.30
Male	0.0175	0.58
Married	0.1268***	4.26
Wealth	0.1531***	15.57
Bigcity	-0.1476***	-4.90
Selfemp	-0.0393	-0.94
Pubemp	0.0470	0.77
Privemp	0.0278	0.58
Retired	0.0211	0.31
Student	0.0735	1.10
Unemp	-0.3353***	-5.35
Argentina	0.0358	0.47
Bolivia	-0.6209***	-8.06
Brasil	-0.3630***	-4.97
Colombia	0.7316***	9.47
Costarica	0.9024***	11.03
Chile	-0.2151***	-2.82
Dominican	0.5408***	6.66
Ecuador	-0.4098***	-5.33
Elsalvador	0.1755**	2.20
Guatemala	0.6859***	8.53
Honduras	0.5067***	6.07
México	0.2614***	3.37
Nicaragua	0.3418***	4.09
Panamá	0.7249***	9.20
Paraguay	0.1882**	2.46
Perú	-0.7285***	-9.33
Venezuela	1.3263***	16.54

Notes: Uruguay is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Latinobarometro 2005

Table 2: Descriptive Statistics

Africa Variables	Observations	Mean	Std. Dev.	Min	Max	Description
ELQ	17818	3.70	2.32	0	10	Respondent's self ranking of economic status
ELQ_kids	16363	6.79	2.95	0	10	Respondent's expectations of childrens' economic status
Change_ELQ_Kids	16323	2.99	2.87	-10	10	ELQ_kids - ELQ
ELQ_Income_Gap	16029	0.51	3.33	-10	10	ELQ - Income
L_conditions	18102	2.76	1.17	1	5	Respondent's self ranking of living conditions
L_Conditions_12m_future	15649	3.63	1.08	1	5	Respondent's expectations of living conditions in 12 months
Prefer_democ	14584	0.83	0.38	0	1	1=prefers democracy, 0=sometimes non-democracy is best
Prefer_Mkt_Econ	16640	0.51	0.50	0	1	1=prefers market economy 0=prefer government economy
Freq_Pol_Index	17875	6.05	3.17	0	12	Sum of answers to 3 questions regarding political involvement
Freq_Crime_Victim	18117	0.64	1.18	0	8	Sum of answers to questions on being robbery or attack victims
Personal_Security	18132	3.15	1.24	0	4	Respondent's perceptions of how safe they feel

Latin America Variables	Observations	Mean	Std. Dev.	Min	Max	Description
Democ_Best	18207	2.98	0.76	1	4	4=Strongly agree that democracy is best. 1=Strongly disagree
Mkt_Econ_Best	17738	2.85	0.79	1	4	4=Strongly agree that market economy is best. 1=Strongly disagree
Bigcity	20222	0.45	0.50	0	1	1=Respondent lives in a city with a population exceeding 100,000
Crime_Victim	20042	0.42	0.49	0	1	1=Victim of a crime
Change_ELQ_Kids	16296	1.09	1.71	-8	9	ELQ_kids - ELQ

Table 3: Regression of Change_ELQ_Kids in Africa

Observations	14237
LRchi2(30)	1751.59
Prob > chi2	0.00
Pseudo R2	0.03

Change_ELQ_Kids	Coefficient	T-Score
Age	-0.0010	-0.20
Age2	-0.0000	-0.16
Yeduc	-0.0250***	-2.90
Male	0.0279	0.95
Income	-0.0157**	-2.55
Urban	-0.0055	-0.16
Unemployed	0.0093	0.27
Freq_Crime_Victim	0.0272**	2.12
Capeverde	0.9281***	13.27
Lesotho	-0.7496***	-9.98
Mali	0.7510***	10.21
Mozambique	0.4465***	5.86
Safrica	0.6849***	11.54
Kenya	1.0961***	18.57
Malawi	-0.1720**	-2.11
Namibia	0.5072***	7.76
Nigeria	1.4786***	26.81
Tanzania	-0.2524***	-3.52

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Table 3a: Tobit Regression of Change_ELQ_Kids in Africa

Observations	14237
LRchi2(30)	1483.34
Prob > chi2	0.00
Pseudo R2	0.02

Change_ELQ_Kids	Coefficient	T-Score
Age	-0.0027	-0.33
Age2	-0.0000	-0.11
Yeduc	-0.0456***	-3.37
Male	0.0528	1.16
Income	-0.0287***	-3.02
Urban	0.0076	0.14
Unemployed	0.0271	0.50
Freq_Crime_Victim	0.0513***	2.65
Capeverde	1.4107***	13.10
Lesotho	-0.9238***	-8.02
Mali	1.2142***	10.94
Mozambique	1.0454***	9.38
Safrica	0.9918***	10.97
Kenya	1.6558***	18.27
Malawi	0.0445	0.36
Namibia	0.7723***	7.36
Nigeria	2.1443***	24.91
Tanzania	-0.3414***	-3.02
_Cons	2.3832***	12.12

Notes: Uganda is the dropped country dummy
Only includes observations where Change_ELQ_Kids >=0
1078 obervations ignored (where Change_ELQ_kids < 0)
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Table 3b: Regression of Change_ELQ_Kids in Latin America

Observations	14279
LRchi2(30)	552.69
Prob > chi2	0.00
Pseudo R2	0.01

Change_ELQ_Kids	Coefficient	T-Score
Age	-0.0245***	-4.75
Age2	0.0001***	3.39
Yedu	0.0049	1.21
Male	0.0304	1.01
Wealth	0.0154**	2.07
Unemp	0.1465**	2.26
Crime_Victim	-0.037	-1.12
Argentina	0.9390***	5.05
Bolivia	0.5967***	3.19
Brazil	0.6956***	3.68
Colombia	0.0596	-0.32
Costa_Rica	0.3296*	1.76
Chile	0.9526***	5.15
Ecuador	0.0351	0.19
El_Salvador	0.1685	0.90
Guatemala	0.1505	0.80
Honduras	0.5891***	3.14
Mexico	0.6732***	3.61
Nicaragua	0.0674	0.36
Panama	0.3858**	2.05
Paraguay	0.4100**	2.12
Peru	0.6248***	3.32
Venezuela	0.4272**	1.98

Notes: Uruguay is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Latinobarometro 2000

Table 4: Regression of ELQ_Income_Gap in Africa

Observations	15440
LRchi2(30)	3354.66
Prob > chi2	0.00
Pseudo R2	0.04

ELQ_Income_Gap	Coefficient	T-Score
Age	-0.0969***	-19.58
Age2	0.0008***	16.18
Yeduc	-0.1535***	-18.93
Male	-0.0556**	-1.97
Urban	0.1735***	5.25
Unemployed	1.0237***	31.55
Freq_Crime_Victim	-0.0161	-1.32
Capeverde	1.0719***	16.45
Lesotho	0.1839***	2.77
Mali	0.4167***	6.12
Mozambique	-0.1345**	-2.01
Safrica	0.2072***	3.73
Kenya	0.4999***	8.97
Malawi	-1.1015***	-14.33
Namibia	1.4894***	24.10
Nigeria	0.6790***	12.71
Tanzania	0.3540***	5.33

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Table 5: Regressions of Living Conditions on Crime in Africa

Only includes observations where personal security >= 3

Observations	11675
LRchi2(30)	1880.57
Prob > chi2	0.00
Pseudo R2	0.05

L_Conditions	Coefficient	T-Score
Age	-0.0442***	-7.34
Age2	0.0003***	5.75
Yeduc	0.0822***	8.06
Male	-0.0833**	-2.46
Income	0.0794***	11.24
Urban	-0.0098	-0.25
Unemployed	-0.0300	-0.75
Freq_Crime_Victim	-0.0794***	-4.08
Capeverde	0.3267***	4.58
Lesotho	-0.8754***	-10.77
Mali	-0.1684**	-2.16
Mozambique	0.8037***	10.22
Safrica	-0.0534	-0.76
Kenya	0.3875***	5.61
Malawi	-1.1061***	-13.71
Namibia	0.8630***	11.02
Nigeria	1.0310***	15.86
Tanzania	-0.1136	-1.36

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Only includes observations where personal security < 3

Observations	3954
LRchi2(30)	605.18
Prob > chi2	0.00
Pseudo R2	0.05

L_Conditions	Coefficient	T-Score
Age	-0.0370***	-3.71
Age2	0.0003***	3.08
Yeduc	0.0854***	4.79
Male	-0.1164**	-2.00
Income	0.0787***	6.41
Urban	0.2278***	3.20
Unemployed	-0.0363	-0.53
Freq_Crime_Victim	-0.0459**	-2.43
Capeverde	0.0999	0.64
Lesotho	-1.2125***	-9.92
Mali	-0.2251	-1.21
Mozambique	0.3064**	2.39
Safrica	-0.2786**	-2.45
Kenya	0.5895***	5.46
Malawi	-0.3532	-1.43
Namibia	0.8255***	5.89
Nigeria	0.7854***	5.82
Tanzania	0.2647**	2.14

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Table 6: Regressions of Policy Support in Africa

Observations	12010
LRchi2(30)	403.75
Prob > chi2	0.00
Pseudo R2	0.04

Prefer_Democ	Coefficient	T-Score
Age	0.0163*	1.77
Age2	-0.0000	-0.84
Yeduc	0.0705***	4.67
Male	0.0543	1.10
Income	0.0158	1.60
Urban	0.2892***	5.08
Unemployed	0.0689	1.17
Freq_Crime_Victim	-0.1007***	-5.16
Support_Trade	-0.0929***	-4.04
Capeverde	0.1883	1.40
Lesotho	-1.0113***	-9.49
Mali	0.1266	1.03
Mozambique	-0.6164***	-5.59
Safrica	-0.5453***	-5.42
Kenya	0.6074***	5.45
Malawi	-0.6678***	-6.10
Namibia	-0.2536**	-2.22
Nigeria	-0.2474***	-2.66
Tanzania	-0.2664**	-2.22

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Observations	12492
LRchi2(30)	761.61
Prob > chi2	0.00
Pseudo R2	0.04

Prefer_Mkt_Econ	Coefficient	T-Score
Age	0.0078	1.18
Age2	-0.0001*	-1.70
Yeduc	0.0961***	8.44
Male	0.0309	0.82
Income	0.0399***	5.18
Urban	0.1315***	3.05
Unemployed	0.0320	0.72
Freq_Crime_Victim	-0.0199	-1.25
Support_Trade	0.0047	0.27
Capeverde	-0.3344***	-3.77
Lesotho	-1.2501***	-14.16
Mali	-0.3752***	-4.37
Mozambique	0.0662	0.77
Safrica	-0.5679***	-7.51
Kenya	-0.6551***	-9.29
Malawi	-0.0183	-0.20
Namibia	0.2238**	2.52
Nigeria	0.0904	1.26
Tanzania	0.0736	0.81

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Table 6a: Regressions of Policy Support in Latin America

Observations	15733
LRchi2(30)	1708.78
Prob > chi2	0.00
Pseudo R2	0.05

Democ_Best	Coefficient	T-Score
Age	0.0038	0.77
Age2	-0.0000	-0.27
Yeduc	0.0177***	3.94
Male	0.1196***	3.85
Wealth	0.0378***	3.37
Bigcity	-0.0523	-1.52
Unemp	-0.0941	-1.54
Crime_Victim	-0.0366	-1.14
Favor_Econ_Integration	0.3153***	16.35
Argentina	-0.6510***	-7.37
Bolivia	-1.0217***	-11.53
Brasil	-0.0256	-0.27
Colombia	-0.7922***	-9.12
Costarica	-0.4559***	-4.86
Chile	-0.4067***	-4.51
Dominican	-0.7004***	-7.51
Ecuador	-1.0578***	-11.54
Elsalvador	-0.5759***	-6.07
Guatemala	-1.0870***	-11.43
Honduras	-0.7100***	-7.32
México	-0.8928***	-10.24
Nicaragua	-0.3565***	-3.67
Panamá	-0.9242***	-10.04
Paraguay	-1.4951***	-16.67
Perú	-1.2131***	-13.62
Venezuela	0.8500***	9.36

Notes: Uruguay is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Latinobarometro 2005

Observations	15448
LRchi2(30)	544.36
Prob > chi2	0.00
Pseudo R2	0.02

Mkt_Econ_Best	Coefficient	T-Score
Age	-0.0119**	-2.37
Age2	0.0001**	2.18
Yeduc	-0.0014	-0.32
Male	0.0697**	2.26
Wealth	-0.0218**	-1.97
Bigcity	-0.0624*	-1.82
Unemp	-0.1221**	-2.01
Crime_Victim	-0.0285	-0.89
Favor_Econ_Integration	0.2359***	12.33
Argentina	-0.4966***	-5.52
Bolivia	-0.1997**	-2.24
Brasil	0.3402***	3.64
Colombia	-0.0711	-0.81
Costarica	-0.0623	-0.64
Chile	0.0446	0.49
Dominican	-0.4787***	-5.08
Ecuador	-0.1752*	-1.91
Elsalvador	-0.8991***	-9.42
Guatemala	-0.7093***	-7.49
Honduras	-0.1565	-1.62
México	-0.1462*	-1.68
Nicaragua	0.0947	0.97
Panamá	-0.5592***	-6.02
Paraguay	-0.3686***	-4.05
Perú	-0.2637***	-2.93
Venezuela	0.1068	1.17

Notes: Uruguay is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Latinobarometro 2005

Table 7: Regressions of Political Involvement in Africa

Observations	15410
LRchi2(30)	2378.43
Prob > chi2	0.00
Pseudo R2	0.03

Freq_Pol_Index	Coefficient	T-Score
L_Conditions	-0.0217*	-1.68
Age	0.0557***	10.99
Age2	-0.0005***	-9.14
Yeduc	0.1841***	21.37
Male	0.3477***	12.25
Income	0.0135**	2.30
Urban	-0.0868***	-2.66
Unemployed	-0.1311***	-3.89
Freq_Crime_Victim	0.0409***	3.35
Capeverde	-1.1697***	-17.18
Lesotho	0.3061***	4.47
Mali	-1.3679***	-19.36
Mozambique	-1.0756***	-16.04
Safrica	-1.3647***	-23.94
Kenya	-0.3597***	-6.60
Malawi	-0.6152***	-8.96
Namibia	-0.7507***	-11.61
Nigeria	-0.8265***	-15.44
Tanzania	-0.5040***	-7.65

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Observations	13486
LRchi2(30)	2077.67
Prob > chi2	0.00
Pseudo R2	0.03

Freq_Pol_Index	Coefficient	T-Score
L_Conditions_12m_future	0.0843***	5.42
Age	0.0577***	10.48
Age2	-0.0005***	-8.58
Yeduc	0.1784***	19.46
Male	0.3155***	10.42
Income	0.0100	1.60
Urban	-0.1106***	-3.16
Unemployed	-0.1463***	-4.10
Freq_Crime_Victim	0.0571***	4.38
Capeverde	-1.2565***	-17.40
Lesotho	0.3029***	3.89
Mali	-1.3661***	-17.46
Mozambique	-1.1433***	-15.51
Safrica	-1.3999***	-23.26
Kenya	-0.4202***	-7.09
Malawi	-0.6104***	-8.05
Namibia	-0.8167***	-12.06
Nigeria	-0.9748***	-16.94
Tanzania	-0.5118***	-6.99

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer

Table 7 (continued):

Observations	14042
LRchi2(30)	2103.68
Prob > chi2	0.00
Pseudo R2	0.03

Freq_Pol_Index	Coefficient	T-Score
Change_ELQ_Kids	0.0202***	3.66
Age	0.0539***	10.04
Age2	-0.0004***	-8.23
Yeduc	0.1832***	20.57
Male	0.3350***	11.28
Income	0.0106*	1.72
Urban	-0.1374***	-4.01
Unemployed	-0.1479***	-4.22
Freq_Crime_Victim	0.0431***	3.41
Capeverde	-1.1798***	-16.67
Lesotho	0.3323***	4.37
Mali	-1.3648***	-18.39
Mozambique	-1.0051***	-13.52
Safrica	-1.3402***	-22.48
Kenya	-0.4100***	-7.12
Malawi	-0.5901***	-7.51
Namibia	-0.7733***	-11.47
Nigeria	-0.8853***	-15.73
Tanzania	-0.4655***	-6.63

Notes: Uganda is the dropped country dummy
*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
Source: Afrobarometer