Poverty and Optimism in Africa: Adaptation or Survival?

Carol Graham and Matthew Hoover
The Brookings Institution/University of Maryland
Prepared for Gallup Positive Psychology Summit
October 5, 2006

Overview

- We and others have studied links between optimism and happiness and other positive traits and behaviors (labor market outcomes, health, support for markets and democracy)

- In other regions (U.S., Latin America, Russia), optimism is positively correlated with wealth and education

- In this paper we study these relationships in Africa, a context of extreme adversity

- In Africa, optimism about children's future (controlling for individual's own status, so close to "pure" optimism) is INVERSELY correlated with income and education – OPPOSITE of all other places

- Why? a) you need to be optimistic to survive in extreme poverty in Africa? b) reflects individuals' ability to adapt their expectations downwards due to extreme uncertainty but to also retain hopes for their children?

- We do not have panel data to test these hypotheses but results are suggestive

Market and Policy Support

- We also studied the relationship between these optimistic traits and support for democracy and markets, as we have in other regions

- We find that poor's optimism is positively correlated with preference for democracy but not with preference for markets (in other regions, happiness and/or optimism are correlated with both)

- Attitudinal traits may be more important in assessments of democracy – which is simply defined as the holding of elections, while economic conditions and outcomes may be more important in assessments of the market in a region where its definition is murky and its operations are incomplete and unpredictable

DATA - Afrobarometer

- Cross section survey, modeled on Euro and Latino-barometers
- Began in four countries; now 11 countries in our data set
- Provides individual level socio-economic and demographic information
- Includes a range of questions about attitudes about democracy, markets, corruption, trade, etc.
- Unlike Euro and Latinobametros, Afrobarometer does not have a happiness question. However, in other contexts we find that happiness and optimism about the future are positively correlated
- Income data is potentially flawed, as based on individuals self reporting themselves in particular income categories
- Data is publicly available: www.afrobarometer.org
- Some comparative analysis based on the Latinobarometro

Description of Variables

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

Regressions: Change_ELQ_Kids

Table 1: 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 1a: 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

Regression: ELQ_Income_Gap in Africa

Table 2: 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

Regressions: Living Conditions on Crime in Africa

Table 3: Regressions of Living Conditions on Crime in Africa

Only includes observations where personal security >= 3			Only includes observations where personal security < 3		
Observations	11675		Observations	3954	
LRchi2(30)	1880.57		LRchi2(30)	605.18	
Prob > chi2	0.00		Prob > chi2	0.00	
Pseudo R2	0.05		Pseudo R2	0.05	
L_Conditions	**Coefficient**	**T-Score**	**L_Conditions**	**Coefficient**	**T-Score**
Age	-0.0442***	-7.34	Age	-0.0370***	-3.71
Age2	0.0003***	5.75	Age2	0.0003***	3.08
Yeduc	0.0822***	8.06	Yeduc	0.0854***	4.79
Male	-0.0833**	-2.46	Male	-0.1164**	-2.00
Income	0.0794***	11.24	Income	0.0787***	6.41
Urban	-0.0098	-0.25	Urban	0.2278***	3.20
Unemployed	-0.0300	-0.75	Unemployed	-0.0363	-0.53
Freq_Crime_Victim	-0.0794***	-4.08	Freq_Crime_Victim	-0.0459**	-2.43
Capeverde	0.3267***	4.58	Capeverde	0.0999	0.64
Lesotho	-0.8754***	-10.77	Lesotho	-1.2125***	-9.92
Mali	-0.1684**	-2.16	Mali	-0.2251	-1.21
Mozambique	0.8037***	10.22	Mozambique	0.3064**	2.39
Safrica	-0.0534	-0.76	Safrica	-0.2786**	-2.45
Kenya	0.3875***	5.61	Kenya	0.5895***	5.46
Malawi	-1.1061***	-13.71	Malawi	-0.3532	-1.43
Namibia	0.8630***	11.02	Namibia	0.8255***	5.89
Nigeria	1.0310***	15.86	Nigeria	0.7854***	5.82
Tanzania	-0.1136	-1.36	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

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

Regressions: Policy Support in Africa

Table 4: Regressions of Policy Support in Africa

Observations	12010		Observations	12492	
LRchi2(30)	403.75		LRchi2(30)	761.61	
Prob > chi2	0.00		Prob > chi2	0.00	
Pseudo R2	0.04		Pseudo R2	0.04	

Prefer_Democ	Coefficient	T-Score	Prefer_Mkt_Econ	Coefficient	T-Score
Age	0.0163*	1.77	Age	0.0078	1.18
Age2	-0.0000	-0.84	Age2	-0.0001*	-1.70
Yeduc	0.0705***	4.67	Yeduc	0.0961***	8.44
Male	0.0543	1.10	Male	0.0309	0.82
Income	0.0158	1.60	Income	0.0399***	5.18
Urban	0.2892***	5.08	Urban	0.1315***	3.05
Unemployed	0.0689	1.17	Unemployed	0.0320	0.72
Freq_Crime_Victim	-0.1007***	-5.16	Freq_Crime_Victim	-0.0199	-1.25
Support_Trade	-0.0929***	-4.04	Support_Trade	0.0047	0.27
Capeverde	0.1883	1.40	Capeverde	-0.3344***	-3.77
Lesotho	-1.0113***	-9.49	Lesotho	-1.2501***	-14.16
Mali	0.1266	1.03	Mali	-0.3752***	-4.37
Mozambique	-0.6164***	-5.59	Mozambique	0.0662	0.77
Safrica	-0.5453***	-5.42	Safrica	-0.5679***	-7.51
Kenya	0.6074***	5.45	Kenya	-0.6551***	-9.29
Malawi	-0.6678***	-6.10	Malawi	-0.0183	-0.20
Namibia	-0.2536**	-2.22	Namibia	0.2238**	2.52
Nigeria	-0.2474***	-2.66	Nigeria	0.0904	1.26
Tanzania	-0.2664**	-2.22	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

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

Regressions: Policy Support in Latin America

Table 4a: Regressions of Policy Support in Latin America

Observations	15733		Observations	15448	
LRchi2(30)	1708.78		LRchi2(30)	544.36	
Prob > chi2	0.00		Prob > chi2	0.00	
Pseudo R2	0.05		Pseudo R2	0.02	

Democ_Best	Coefficient	T-Score	Mkt_Econ_Best	Coefficient	T-Score
Age	0.0038	0.25	Age	-0.0119**	-2.37
Age2	-0.0000	0.49	Age2	0.0001**	2.18
Yeduc	0.0177***	5.30	Yeduc	-0.0014	-0.32
Male	0.1196***	4.83	Male	0.0697**	2.26
Wealth	0.0378***	5.69	Wealth	-0.0218**	-1.97
Bigcity	-0.0523	-1.81	Bigcity	-0.0624*	-1.82
Unemp	-0.0941	-1.65	Unemp	-0.1221**	-2.01
Crime_Victim	-0.0366	-0.91	Crime_Victim	-0.0285	-0.89
Favor_Econ_Integration	0.3153***	-8.77	Favor_Econ_Integration	0.2359***	12.33
Argentina	-0.6510***	-12.99	Argentina	-0.4966***	-5.52
Bolivia	-1.0217***	-1.70	Bolivia	-0.1997**	-2.24
Brasil	-0.0256	-10.48	Brasil	0.3402***	3.64
Colombia	-0.7922***	-5.87	Colombia	-0.0711	-0.81
Costarica	-0.4559***	-5.44	Costarica	-0.0623	-0.64
Chile	-0.4067***	-8.70	Chile	0.0446	0.49
Dominican	-0.7004***	-14.06	Dominican	-0.4787***	-5.08
Ecuador	-1.0578***	-7.41	Ecuador	-0.1752*	-1.91
Elsalvador	-0.5759***	-13.64	Elsalvador	-0.8991***	-9.42
Guatemala	-1.0870***	-7.95	Guatemala	-0.7093***	-7.49
Honduras	-0.7100***	-11.53	Honduras	-0.1565	-1.62
México	-0.8928***	-4.48	México	-0.1462*	-1.68
Nicaragua	-0.3565***	-10.89	Nicaragua	0.0947	0.97
Panamá	-0.9242***	-20.30	Panamá	-0.5592***	-6.02
Paraguay	-1.4951***	-15.47	Paraguay	-0.3686***	-4.05
Perú	-1.2131***	9.42	Perú	-0.2637***	-2.93
Venezuela	0.8500***		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

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

Regressions: Political Involvement in Africa

Table 5: 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	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

Notes on Regressions

- Footnote for Table 3 in power point only not paper:

- In order to ensure that our results were not skewed by zero or below zero responses (most of these are the wealthiest respondents scoring their children than they), we used a Tobit specification, where optimism is a latent variable that is reflected in the gap but truncated at zero. The results are essentially unchanged.

Conclusions

- We find unusual levels of optimism for children's future outcomes among the poorest in Africa. This is the opposite of what we find in other regions, where such optimism is correlated with income and education

- We posit that this could be explained by a) the need to have optimistic traits to survive poverty in such adverse conditions or b) that it reflects the poor's ability to adjust expectations downward in such extreme circumstances but to retain hope for their children

- Need panel data to test these hypotheses

- Has implications for "happy peasant" debate or controversy. In this instance, the poor assess their own future prospects realistically, but retain high hopes for their children

- For example, those who are optimistic for their children's future are more likely to get involved in political events and to participate in the community

Conclusions, Cont.

- Optimism among the poor is positively correlated with support for democracy but not for markets

- Support for markets more closely linked to economic endowments and outcomes rather than attitudinal traits

- May reflect clearer definition/conceptual frame surrounding democracy in the African context (the holding of elections?) versus markets, which are both incomplete and unpredictable

- Need data for more years of Afrobarometer to explore this further as well as over time trends