



Supplementary Materials for
Income Inequality in the Developing World

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Table S1: Inequality measures (MLD) between and within countries by region and year

Region	1981	1984	1987	1990	1993	1996	1999	2002	2005	2008	2010
Total inequality											
East Asia and Pacific	0.283	0.234	0.229	0.272	0.313	0.296	0.322	0.349	0.328	0.366	0.362
Eastern Europe and Central Asia	0.283	0.274	0.283	0.409	0.340	0.358	0.305	0.281	0.279	0.291	0.285
Latin America and the Caribbean	0.636	0.652	0.655	0.657	0.695	0.715	0.713	0.725	0.648	0.609	0.613
Middle East and North Africa	0.358	0.379	0.311	0.290	0.292	0.298	0.311	0.333	0.261	0.266	0.265
South Asia	0.164	0.173	0.175	0.165	0.166	0.186	0.194	0.191	0.193	0.195	0.198
Sub-Saharan Africa	0.503	0.533	0.552	0.552	0.521	0.471	0.475	0.509	0.502	0.531	0.541
Total	0.651	0.591	0.569	0.576	0.585	0.540	0.518	0.528	0.520	0.567	0.578
Inequality between-countries											
East Asia and Pacific	0.158	0.100	0.079	0.093	0.113	0.092	0.104	0.108	0.089	0.110	0.108
Eastern Europe and Central Asia	0.155	0.144	0.152	0.151	0.067	0.095	0.089	0.077	0.062	0.066	0.074
Latin America and the Caribbean	0.096	0.101	0.090	0.058	0.037	0.051	0.043	0.042	0.045	0.048	0.061
Middle East and North Africa	0.101	0.122	0.063	0.054	0.060	0.071	0.081	0.104	0.042	0.052	0.043
South Asia	0.008	0.008	0.007	0.010	0.009	0.008	0.012	0.009	0.011	0.014	0.016
Sub-Saharan Africa	0.165	0.186	0.176	0.177	0.166	0.140	0.149	0.164	0.141	0.184	0.185
Total	0.446	0.378	0.344	0.329	0.325	0.276	0.252	0.250	0.249	0.296	0.304
Inequality within-countries											
East Asia and Pacific	0.125	0.133	0.150	0.179	0.201	0.204	0.218	0.241	0.238	0.256	0.254
Eastern Europe and Central Asia	0.128	0.130	0.131	0.258	0.272	0.263	0.216	0.204	0.217	0.225	0.211
Latin America and the Caribbean	0.541	0.551	0.565	0.600	0.658	0.664	0.670	0.683	0.603	0.561	0.552
Middle East and North Africa	0.256	0.257	0.249	0.236	0.232	0.227	0.229	0.230	0.219	0.215	0.223
South Asia	0.156	0.165	0.168	0.155	0.157	0.178	0.182	0.182	0.182	0.181	0.182
Sub-Saharan Africa	0.338	0.347	0.376	0.375	0.355	0.331	0.326	0.345	0.361	0.347	0.356
Total	0.205	0.213	0.226	0.247	0.260	0.264	0.266	0.277	0.271	0.271	0.274

Table S2: Testing for higher inequality in LAC controlling for income surveys

Regressing MLD across countries on dummy variable for LAC plus dummy variable for income surveys (INC=1)

(a) Earliest survey

Dependent Variable: MLD1

Method: Least Squares

Date: 04/02/14 Time: 09:21

Sample: 1 130 IF IN=1 AND REPEAT=0

Included observations: 100

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.290998	0.019313	15.06750	0.0000
LAC	0.230060	0.060440	3.806443	0.0002
INC	-0.070182	0.060607	-1.157992	0.2497
R-squared	0.177526	Mean dependent var		0.318451
Adjusted R-squared	0.160568	S.D. dependent var		0.195296
S.E. of regression	0.178931	Akaike info criterion		-0.574087
Sum squared resid	3.105596	Schwarz criterion		-0.495932
Log likelihood	31.70437	Hannan-Quinn criter.		-0.542457
F-statistic	10.46845	Durbin-Watson stat		2.117709
Prob(F-statistic)	0.000076			

(b) Latest survey

Dependent Variable: MLD2

Method: Least Squares

Date: 04/02/14 Time: 09:25

Sample: 1 130 IF IN=1 AND REPEAT=0

Included observations: 103

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.270733	0.017573	15.40578	0.0000
REG3	0.203482	0.047438	4.289454	0.0000
INC	0.004898	0.041660	0.117565	0.9066
R-squared	0.256788	Mean dependent var		0.317787
Adjusted R-squared	0.241923	S.D. dependent var		0.170671
S.E. of regression	0.148599	Akaike info criterion		-0.946437
Sum squared resid	2.208167	Schwarz criterion		-0.869697
Log likelihood	51.74148	Hannan-Quinn criter.		-0.915354
F-statistic	17.27553	Durbin-Watson stat		2.216325
Prob(F-statistic)	0.000000			

Table S3: Regressions for change in inequality at country level

MLDt=MLD for t=1,2 (earliest and latest survey date)

GINIt=Gini index for t=1,2

GM=annualized difference in log means between t=1 and t=2

GMSQ=annualized difference in squared log means

GPCE=annualized difference in log PCE between t=1 and t=2

GPCESQ=annualized difference in squared log PCE

PCE=private consumption expenditure per capita from national accounts

Mean and PCE are all real, 2005 prices.

(a) Using growth rates based on survey means

Dependent Variable: (MLD2-MLD1)/TAU

Method: Least Squares

Date: 02/08/14 Time: 16:50

Sample: 1 130 IF IN=1 AND REPEAT=0

Included observations: 99

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000645	0.001495	0.431770	0.6669
GM	-0.198293	0.146572	-1.352875	0.1793
GMSQ	0.013622	0.014846	0.917559	0.3611
R-squared	0.060825	Mean dependent var		-0.000155
Adjusted R-squared	0.041259	S.D. dependent var		0.014260
S.E. of regression	0.013962	Akaike info criterion		-5.675061
Sum squared resid	0.018715	Schwarz criterion		-5.596421
Log likelihood	283.9155	Hannan-Quinn criter.		-5.643243
F-statistic	3.108668	Durbin-Watson stat		1.712074
Prob(F-statistic)	0.049186			

Dependent Variable: (GINI2-GINI1)/TAU

Method: Least Squares

Date: 02/08/14 Time: 16:52

Sample: 1 130 IF IN=1 AND REPEAT=0

Included observations: 100

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.114978	0.088192	1.303727	0.1954
GM	-6.714924	12.06684	-0.556478	0.5792
GMSQ	0.081011	1.228045	0.065967	0.9475
R-squared	0.130763	Mean dependent var		0.067650
Adjusted R-squared	0.112841	S.D. dependent var		0.893229
S.E. of regression	0.841325	Akaike info criterion		2.521863
Sum squared resid	68.65923	Schwarz criterion		2.600018
Log likelihood	-123.0931	Hannan-Quinn criter.		2.553493
F-statistic	7.296076	Durbin-Watson stat		1.418286
Prob(F-statistic)	0.001117			

(b) Using growth rates based on national accounts consumption per person

Dependent Variable: (MLD2-MLD1)/TAU

Method: Least Squares

Date: 02/08/14 Time: 16:54

Sample: 1 130 IF IN=1 AND REPEAT=0

Included observations: 90

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001795	0.001773	1.012295	0.3142
GPCE	-0.617108	0.329791	-1.871207	0.0647
GPCESQ	0.053270	0.032318	1.648336	0.1029
R-squared	0.101568	Mean dependent var	-0.000174	
Adjusted R-squared	0.080914	S.D. dependent var	0.013741	
S.E. of regression	0.013173	Akaike info criterion	-5.788548	
Sum squared resid	0.015097	Schwarz criterion	-5.705221	
Log likelihood	263.4847	Hannan-Quinn criter.	-5.754946	
F-statistic	4.917682	Durbin-Watson stat	1.835567	
Prob(F-statistic)	0.009476			

Dependent Variable: (GINI2-GINI1)/TAU

Method: Least Squares

Date: 02/08/14 Time: 16:52

Sample: 1 130 IF IN=1 AND REPEAT=0

Included observations: 91

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.219759	0.118320	1.857337	0.0666
GPCE	-32.03168	17.51453	-1.828863	0.0708
GPCESQ	2.471500	1.687768	1.464360	0.1467
R-squared	0.104213	Mean dependent var	0.059895	
Adjusted R-squared	0.083854	S.D. dependent var	0.804731	
S.E. of regression	0.770252	Akaike info criterion	2.348213	
Sum squared resid	52.20936	Schwarz criterion	2.430989	
Log likelihood	-103.8437	Hannan-Quinn criter.	2.381608	
F-statistic	5.118810	Durbin-Watson stat	1.661664	
Prob(F-statistic)	0.007889			

Table S4: Testing for the impact of growth on inequality using an Instrumental Variables (IV) Estimator

IV regression of the growth rate in the headcount index for \$2 a day (GH2) on growth rate in survey mean (GM) using growth rate of private consumption (GPCE) from national accounts as the IV (following Ravallion, 2001, as suggested by a reviewer for Science). This assumes that errors in national accounts consumption are uncorrelated with those in survey means.

Dependent Variable: GH2
 Method: Two-Stage Least Squares
 Date: 03/22/14 Time: 16:35
 Sample: 1 130 IF IN=1 AND REPEAT=0
 Included observations: 90
 White heteroskedasticity-consistent standard errors & covariance
 Instrument specification: GPCE
 Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.050130	0.013303	3.768366	0.0003
GM	-3.628489	0.479484	-7.567487	0.0000
R-squared	0.718094	Mean dependent var		0.027030
Adjusted R-squared	0.714890	S.D. dependent var		0.213856
S.E. of regression	0.114190	Sum squared resid		1.147455
F-statistic	123.3449	Durbin-Watson stat		1.973433
Prob(F-statistic)	0.000000	Second-Stage SSR		2.462019
J-statistic	0.000000	Instrument rank		2

Same regression but this time using \$1.25 a day

Dependent Variable: GH1
 Method: Two-Stage Least Squares
 Date: 03/22/14 Time: 16:42
 Sample: 1 130 IF IN=1 AND REPEAT=0
 Included observations: 83
 White heteroskedasticity-consistent standard errors & covariance
 Instrument specification: GPCE
 Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.028159	0.012488	2.254936	0.0268
GM	-2.898388	0.561441	-5.162405	0.0000
R-squared	0.729232	Mean dependent var		0.010496
Adjusted R-squared	0.725889	S.D. dependent var		0.198597
S.E. of regression	0.103977	Sum squared resid		0.875702
F-statistic	92.60993	Durbin-Watson stat		1.582109
Prob(F-statistic)	0.000000	Second-Stage SSR		2.232920
J-statistic	0.000000	Instrument rank		2

Fig. S1: Rates of poverty reduction plotted against growth rates of mean household income

