SUPPLEMENTARY INFORMATION

For "A consistent dataset for the net income distribution for 190 countries, aggregated to 32 geographical regions and the world from 1958-2015"

• **SI 1- Tables related to input data, mapping files (Pg 1-8)**

• **SI 2- Tables and figures related to PCA model, historical trends in income distributions (Pg 9-12)**

• **SI 3- Tables related to data validation (Pg 12-14)**

SI Table 1: Examples of research studies in UNU WIDER dataset. Example below shows income distribution data sources from research studies for 1 country (China)

Source	Data
Dowling and Soo 1983	Income (net)
Chai and Chai 1994	Income (net)
Chotikapanich et al. 2005	Income (net)
Zhang	Income (net)
Ravallion and Chen 2007	Income (net)
World Bank 2019	Income (net)
World Bank 2002	Income (gross)
Benjamin et al. 2005	Income (gross)
Benjamin et al. 2005	Consumption
Chuliang et al. 2018	Income (net)
Khan and Riskin 1998	Income (net)
Liu and Li 2011	Consumption
World Bank 2002	Income (net)
World Bank 2019	Consumption
Cai et al. 2010	Income (net)
Cai et al. 2010	Consumption
Xia et al. 2017	Consumption
Luxembourg Income Study (LIS) 2019	Income (net)
Luxembourg Income Study (LIS) 2019	Consumption
China Institute for Income Distribution at Beijing Normal University 2018	Income (net)

China Institute for Income Distribution at Beijing Normal University 2018	Consumption
Li 2005	Income (net)
National Bureau of Statistics of China	Income (net)
Institute of Social Science Survey of Peking University	Income (net)
OECD 2018	Income (net)
OECD 2019	Income (net)

SI Table 2: ISO to GCAM region mapping table

iso	GCAM_region_ID	GCAM region name
abw	9	Latin America
afg	27	Southeast Asia
ago	4	Africa
aia	9	Latin America
alb	15	Eastern Europe
and	13	Western Europe
ant	9	Latin America
are	21	Middle East
arg	31	Latin America
arm	10	Former Soviet Union
asm	29	Southeast Asia
atg	9	Latin America
aus	6	Australia_NZ
aut	13	Western Europe
aze	10	Former Soviet Union
bdi	2	Africa
bel	13	Western Europe
ben	5	Africa
bfa	5	Africa
bgd	27	Southeast Asia
bgr	12	Eastern Europe

bhr	21	Middle East
bhs	9	Latin America
bih	15	Eastern Europe
blr	14	Former Soviet Union
blz	9	Latin America
bmu	9	Western Europe
bol	26	Latin America
bra	7	Latin America
brb	9	Latin America
brn	29	Southeast Asia
btn	27	Southeast Asia
bwa	4	Africa
caf	5	Africa
can	8	Canada
cck	29	Southeast Asia
che	16	Western Europe
chi	13	Western Europe
chl	26	Latin America
chn	11	China
civ	5	Africa
cmr	5	Africa
cod	5	Africa
cog	5	Africa
cok	29	Australia_NZ
col	32	Latin America
com	2	Africa
cpv	5	Africa
cri	9	Latin America
cub	9	Latin America
cuw	9	Latin America
cym	9	Latin America
cyp	12	Western Europe
cxr	29	Southeast Asia
cze	12	Eastern Europe
deu	13	Western Europe
dji	2	Africa
dma	9	Latin America
dnk	13	Western Europe
dom	9	Latin America
dza	3	Africa

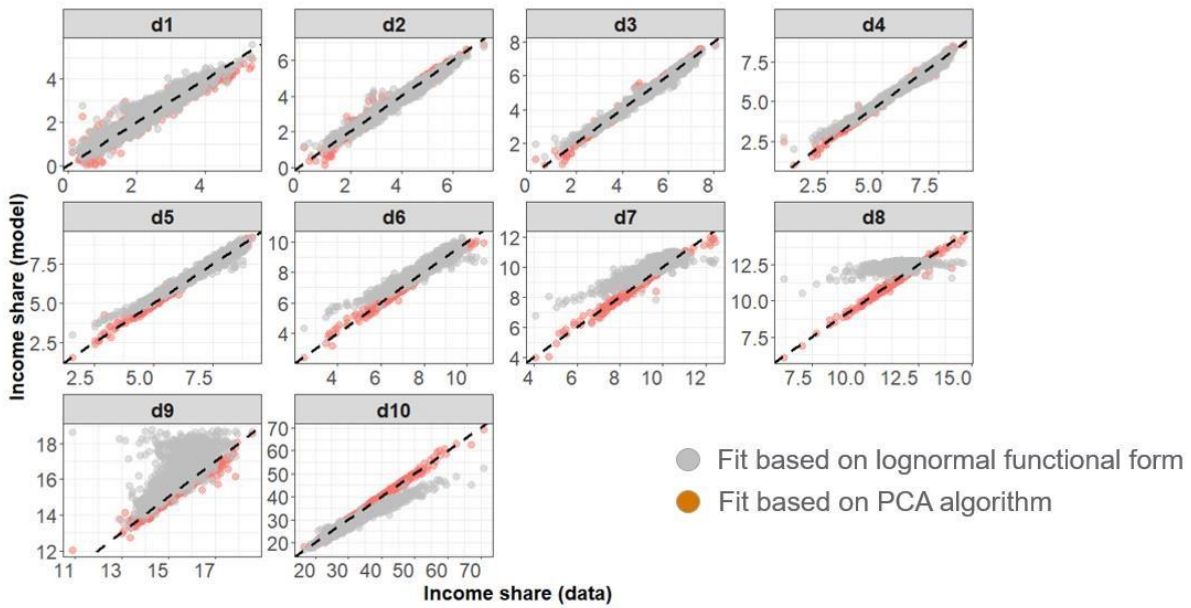
ecu	26	Latin America
egy	3	Africa
eri	2	Africa
esh	3	Africa
esp	13	Western Europe
est	12	Former Soviet Union
eth	2	Africa
fin	13	Western Europe
fji	29	Southeast Asia
flk	13	Latin America
fra	13	Western Europe
fro	13	Western Europe
fsm	29	Southeast Asia
gab	5	Africa
gbr	13	Western Europe
geo	10	Former Soviet Union
ggy	13	Western Europe
gha	5	Africa
gib	13	Western Europe
gin	5	Africa
glp	9	Latin America
gmb	5	Africa
gnb	5	Africa
gnq	5	Africa
grc	13	Western Europe
grd	9	Latin America
grl	13	Western Europe
gtm	9	Latin America
guf	25	Latin America
gum	29	Southeast Asia
guy	25	Latin America
hkg	11	Southeast Asia
hnd	9	Latin America
hrv	15	Eastern Europe
hti	9	Latin America
hun	12	Eastern Europe
idn	18	Southeast Asia
imn	13	Western Europe
ind	17	India
irl	13	Western Europe

irn	21	Middle East
irq	21	Middle East
isl	16	Western Europe
isr	21	Middle East
ita	13	Western Europe
jam	9	Latin America
jey	13	Western Europe
jor	21	Middle East
jpn	19	Japan
kaz	10	Former Soviet Union
ken	2	Africa
kgz	10	Former Soviet Union
khm	29	China
kir	29	Southeast Asia
kna	9	Latin America
kor	28	Korea
kwt	21	Middle East
lao	29	Southeast Asia
lbn	21	Middle East
lbr	5	Africa
lby	3	Africa
lca	9	Latin America
lie	16	Western Europe
lka	27	Southeast Asia
lso	4	Africa
ltu	12	Former Soviet Union
lux	13	Western Europe
lva	12	Former Soviet Union
mac	11	Southeast Asia
mar	3	Africa
mco	13	Western Europe
mda	14	Former Soviet Union
mdg	2	Africa
mdv	27	Southeast Asia
mex	20	Latin America
mhl	29	Southeast Asia
mkd	15	Eastern Europe

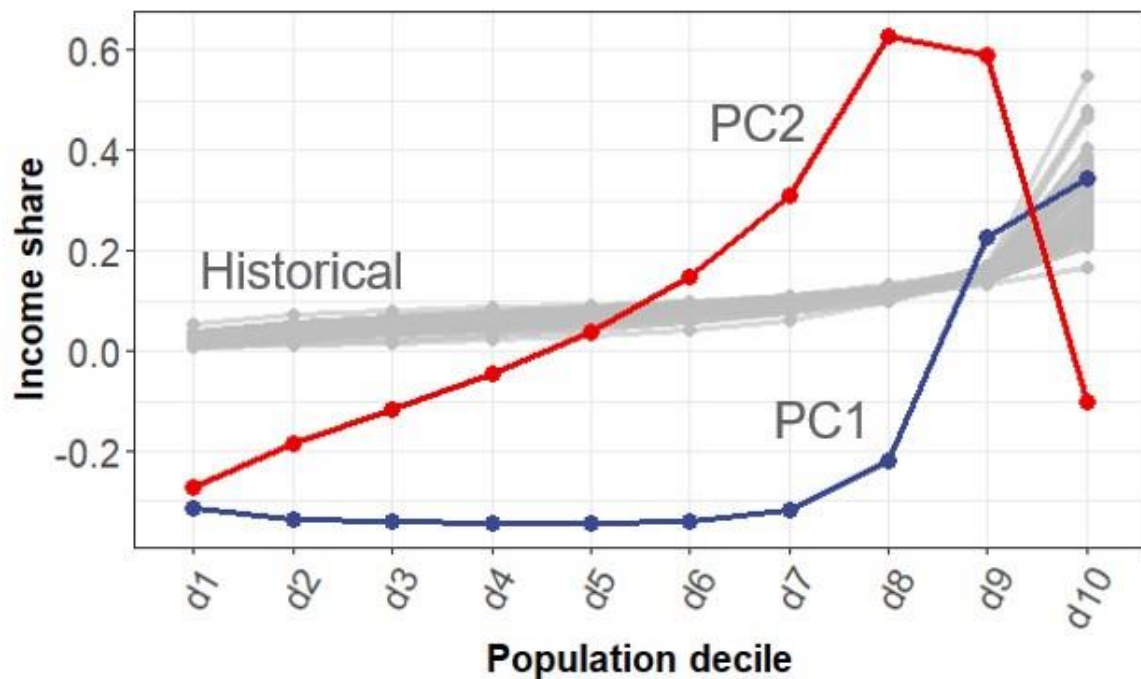
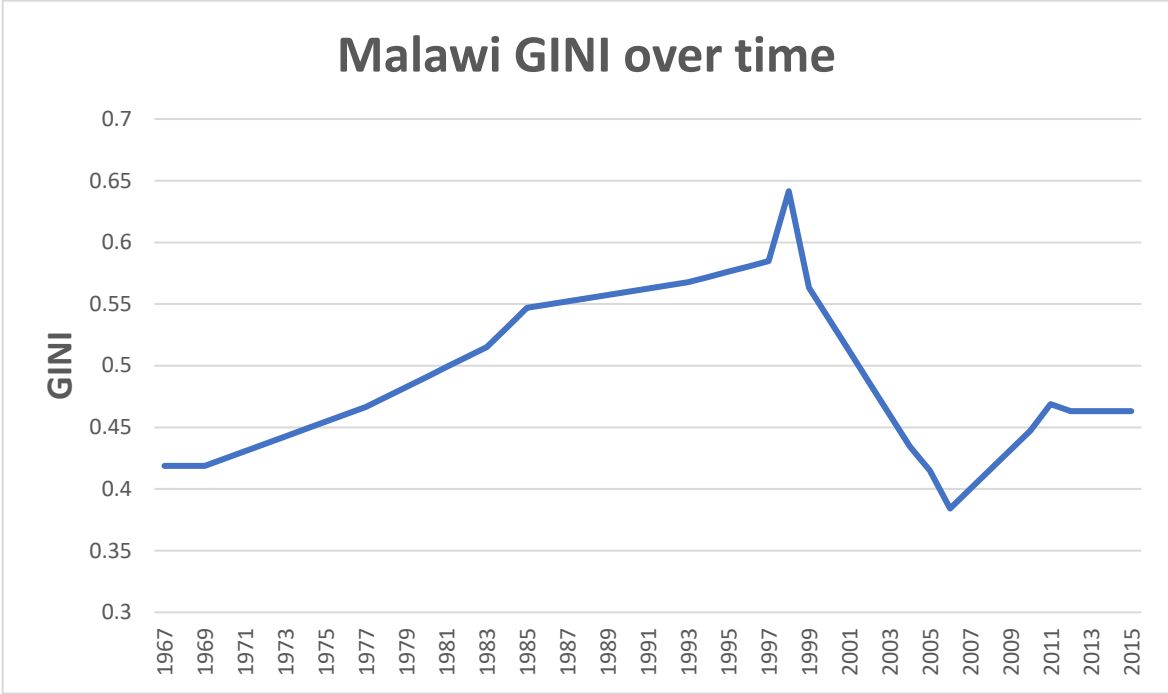
mli	5	Africa
mlt	12	Western Europe
mmr	29	Southeast Asia
mne	15	Eastern Europe
mng	10	China
mnp	29	Southeast Asia
moz	4	Africa
mrt	5	Africa
msr	9	Latin America
mtq	9	Western Europe
mus	2	Africa
mwi	4	Africa
mys	29	Southeast Asia
myt	29	Africa
nam	4	Africa
ncl	29	Southeast Asia
ner	5	Africa
nfk	29	Australia_NZ
nga	5	Africa
nic	9	Latin America
niu	29	Australia_NZ
nld	13	Western Europe
nor	16	Western Europe
npl	27	Southeast Asia
nru	29	Southeast Asia
nzl	6	Australia_NZ
omn	21	Middle East
pak	22	Southeast Asia
pan	9	Latin America
pci	29	Southeast Asia
pcn	29	Southeast Asia
per	26	Latin America
phl	29	Southeast Asia
plw	29	Southeast Asia
png	29	Southeast Asia
pol	12	Eastern Europe
pri	1	USA
prk	29	China
prt	13	Western Europe
pry	26	Latin America
pse	21	Middle East

pyf	29	Southeast Asia
qat	21	Middle East
reu	2	Africa
rom	12	Eastern Europe
rus	23	Former Soviet Union
rwa	2	Africa
sau	21	Middle East
scg	15	Eastern Europe
sdn	2	Africa
sen	5	Africa
sgp	29	Southeast Asia
shn	13	Africa
sjm	16	Western Europe
slb	29	Southeast Asia
sle	5	Africa
slv	9	Latin America
smr	13	Western Europe
som	2	Africa
spm	13	Canada
srb	15	Eastern Europe
ssd	2	Africa
stp	5	Africa
sur	25	Latin America
svk	12	Eastern Europe
svn	12	Eastern Europe
swe	13	Western Europe
swz	4	Africa
syc	29	Africa
syr	21	Middle East
tca	13	Latin America
tcd	5	Africa
tgo	5	Africa
tha	29	Southeast Asia
tjk	10	Former Soviet Union
tkl	29	Australia_NZ
tkm	10	Former Soviet Union
tls	29	Southeast Asia
ton	29	Southeast Asia
tto	9	Latin America

tun	3	Africa
tur	15	Western Europe
tuv	29	Southeast Asia
twn	30	Southeast Asia
tza	4	Africa
uga	2	Africa
ukr	14	Former Soviet Union
ury	33	Latin America
usa	1	USA
uzb	10	Former Soviet Union
vat	13	Western Europe
vct	9	Latin America
ven	25	Latin America
vgb	13	Latin America
vir	1	Latin America
vnm	29	China
vut	29	Southeast Asia
wlf	13	Australia_NZ
wsm	29	Southeast Asia
yem	21	Middle East
yug	15	Eastern Europe
zaf	24	Africa
zmb	4	Africa
zwe	4	Africa

SI 2 Figure 1: Comparison of fit of lognormal functional form (grey dots) with PCA based fit (orange dots) with data for each decile (facet). Lines represent 1 to 1 fit between x and y axis. Income shares are expressed as a percent of total income.

SI 2 Table 3: Principal Component values for first two components (PC1, PC2). Component values calculated based on centered and scaled data.

Population decile	PC1	PC2
1	-0.31	-0.27
2	-0.33	-0.19
3	-0.34	-0.12
4	-0.34	-0.04
5	-0.34	0.04
6	-0.34	0.15
7	-0.32	0.31
8	-0.22	0.63
9	0.23	0.59
10	0.34	-0.10

SI 2 Figure 2: Principal Components 1 and 2 compared to historical data on net income distributions (grey lines) for all countries in 2015. The y axis values are the 10-point functional forms for PC1 (blue line) and PC2 (red line) from Table 8 and the actual income shares for each country's income distribution

SI 2 Figure 3: GINI coefficient in Malawi over time

SI 3 Table 4: *Population coverage at the regional level based on country level data for 5 years (2010-2015). Color scheme indicates high (green) to low coverage.*

GCAM_region_name	2010	2011	2012	2013	2014	2015
USA	100%	100%	100%	100%	100%	100%
Africa_Eastern	64%	64%	30%	21%	8%	0%
Africa_Northern	77%	77%	71%	50%	50%	50%
Africa_Southern	85%	80%	59%	27%	27%	27%
Africa_Western	99%	56%	50%	45%	23%	9%
Australia_NZ	100%	100%	100%	100%	100%	16%
Brazil	100%	100%	100%	100%	100%	100%
Canada	100%	100%	100%	100%	100%	100%
Central America and Caribbean	82%	82%	82%	70%	69%	43%
Central Asia	48%	48%	48%	48%	48%	44%
China	99%	99%	99%	99%	99%	99%
EU-12	80%	80%	80%	80%	80%	80%
EU-15	100%	100%	100%	100%	100%	100%
Europe_Eastern	100%	100%	100%	100%	100%	100%
Europe_Non_EU	100%	100%	96%	93%	94%	93%
European Free Trade Association	100%	100%	100%	100%	100%	100%
India	100%	100%	100%	0%	0%	0%
Indonesia	100%	100%	100%	100%	100%	100%
Japan	100%	100%	100%	100%	100%	100%
Mexico	100%	100%	100%	100%	100%	0%
Middle East	83%	83%	81%	65%	47%	37%
Pakistan	97%	95%	100%	100%	100%	0%
Russia	100%	100%	100%	100%	100%	100%
South Africa	100%	100%	100%	100%	100%	100%
South America_Northern	97%	95%	95%	95%	95%	0%
South America_Southern	100%	100%	100%	100%	100%	100%
South Asia	100%	34%	23%	9%	0%	0%
South Korea	100%	100%	100%	100%	100%	100%
Southeast Asia	76%	75%	73%	73%	72%	54%
Taiwan	100%	100%	100%	100%	100%	100%
Argentina	100%	100%	100%	100%	100%	100%
Colombia	100%	100%	100%	100%	100%	100%

SI 3 Table 5: *GDP using 2011 PPP coverage at the regional level based on country level data for 5 years (2010-2015). Color scheme indicates high (green) to low- coverage.*

GCAM_region_name	2010	2011	2012	2013	2014	2015
USA	100%	100%	100%	100%	100%	100%
Africa_Eastern	40%	42%	26%	16%	5%	0%
Africa_Northern	71%	77%	65%	37%	38%	39%
Africa_Southern	55%	38%	35%	17%	17%	17%
Africa_Western	95%	31%	27%	24%	14%	6%
Australia_NZ	100%	100%	100%	100%	100%	11%
Brazil	100%	100%	100%	100%	100%	100%
Canada	100%	100%	100%	100%	100%	100%
Central America and Caribbean	73%	72%	72%	70%	68%	53%
Central Asia	62%	62%	62%	62%	61%	58%
China	100%	100%	96%	96%	97%	97%
EU-12	87%	87%	87%	87%	87%	87%
EU-15	100%	100%	100%	100%	100%	100%
Europe_Eastern	100%	100%	100%	100%	100%	100%
Europe_Non_EU	100%	100%	98%	97%	97%	97%
European Free Trade Association	100%	100%	100%	100%	100%	100%
India	100%	100%	100%	0%	0%	0%
Indonesia	100%	100%	100%	100%	100%	100%
Japan	100%	100%	100%	100%	100%	100%
Mexico	100%	100%	100%	100%	100%	0%
Middle East	75%	75%	75%	65%	32%	31%
Pakistan	100%	100%	100%	100%	100%	0%
Russia	100%	100%	100%	100%	100%	100%
South Africa	100%	100%	100%	100%	100%	100%
South America_Northern	98%	98%	98%	98%	98%	0%
South America_Southern	100%	100%	100%	100%	100%	100%
South Asia	100%	44%	37%	28%	0%	0%
South Korea	100%	100%	100%	100%	100%	100%
Southeast Asia	94%	93%	74%	74%	73%	46%
Taiwan	100%	100%	100%	100%	100%	100%
Argentina	100%	100%	100%	100%	100%	100%
Colombia	100%	100%	100%	100%	100%	100%