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Introduction to Economic Growth

Introduction

Facts and Data on Economic Growth

Fact #1

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There is enormous variation in per capita income across countries. The poorest countries have per capita incomes that are less than 5 percent of per capita incomes in the richest countries.

Table 1

Per Capita Income, 2017 (I)

AVERAGE \$ 69.125

#	Country	pci
1	QAT Qatar	93.792,63
2	MAC Macao	82.995,45
3	IRL Ireland	75.916,08
4	LUX Luxembourg	74.605,23
5	SGP Singapore	67.138,11
6	ARE U Arab Emirates	65.500,45
7	CHE Switzerland	64.219,30
8	NOR Norway	60.590,25
9	USA United States	54.794,76
10	BRN Brunei	51.703,05
11	DEU Germany	47.556,00
12	AUS Australia	47.392,62
13	NLD Netherlands	46.601,56
14	AUT Austria	46.103,27
15	DNK Denmark	45.875,33
16	SWE Sweden	43.375,88
17	TWN Taiwan	43.211,00
18	CAN Canada	42.906,63
19	ISL Iceland	41.306,17
20	HKG Hong Kong	40.584,48
21	JPN Japan	40.373,75
22	FIN Finland	39.893,37
23	TTO Trinidad/Tobago	39.779,81
24	FRA France	39.461,11
25	KWT Kuwait	39.343,88

#	Country	pci
26	GBR United Kingdom	93.792,63
27	SAU Saudi Arabia	82.995,45
28	BEL Belgium	75.916,08
29	ITA Italy	74.605,23
30	BHR Bahrain	67.138,11
31	NZL New Zealand	65.500,45
32	BMU Bermuda	64.219,30
33	KOR South Korea	60.590,25
34	ISR Israel	54.794,76
35	ESP Spain	51.703,05
36	SYC Seychelles	47.556,00
37	CZE Czech Republic	47.392,62
38	MLT Malta	46.601,56
39	ABW Aruba	46.103,27
40	CYM Cayman Islands	45.875,33
41	CYP Cyprus	43.375,88
42	SVN Slovenia	43.211,00
43	OMN Oman	42.906,63
44	TUR Turkey	41.306,17
45	POL Poland	40.584,48
46	LTU Lithuania	40.373,75
47	EST Estonia	39.893,37
48	SVK Slovakia	39.779,81
49	ROU Romania	39.461,11
50	PRT Portugal	39.343,88

#	Country	pci
51	LVA Latvia	24.139,60
52	GRC Greece	23.765,19
53	HRV Croatia	22.995,55
54	MUS Mauritius	22.827,00
55	MYS Malaysia	22.775,84
56	CHL Chile	22.728,88
57	RUS Russia	22.580,94
58	HUN Hungary	22.571,65
59	BHS Bahamas	22.026,31
60	TKM Turkmenistan	21.989,58
61	CUW Curacao	21.952,86
62	PAN Panama	21.928,21
63	KAZ Kazakhstan	21.053,27
64	VGB Br. Virgin Isl.	20.312,86
65	URY Uruguay	19.722,97
66	KNA St. Kitts & Nevis	19.235,06
67	SXM Sint Maarten	18.673,80
68	BGR Bulgaria	18.639,95
69	MNE Montenegro	17.888,53
70	MEX Mexico	17.382,66
71	BLR Belarus	16.843,69
72	MSR Montserrat	16.816,26
73	ARG Argentina	16.466,73
74	IRN Iran	15.964,64
75	THA Thailand	15.740,31

Source: Feenstra, R. C., R. Inklaar and M. P. Timmer (2015): The Next Generation of the Penn World Table, American Economic Review 105, 3150-3182, available for download at www.ggdc.net/pwt; own calculations

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Per Capita Income, 2017 (ctd.)

#	Country	pci	#	Country	pci	#	Country	pci			
76	IRQ	Iraq	15.300,66	101	TUN	Tunisia	11.126,99	126	BLZ	Belize	6.777,00
77	LBN	Lebanon	15.059,00	102	MNG	Mongolia	10.716,02	127	SLV	El Salvador	6.659,80
78	CRI	Costa Rica	15.043,89	103	IDN	Indonesia	10.594,07	128	LAO	Laos	6.518,45
79	BWA	Botswana	14.997,14	104	KGZ	Kyrgyzstan	10.572,49	129	IND	India	6.421,67
80	DOM	Dom. Republic	14.780,61	105	NAM	Namibia	10.301,68	130	MDA	Moldova	5.988,93
81	AZE	Azerbaijan	14.504,94	106	ARM	Armenia	10.182,28	131	VNM	Vietnam	5.846,18
82	GNQ	Equat. Guinea	14.478,68	107	ECU	Ecuador	9.879,77	132	BOL	Bolivia	5.838,07
83	SRB	Serbia	14.027,71	108	UZB	Uzbekistan	9.595,36	133	MMR	Myanmar	5.730,11
84	AIA	Anguilla	13.876,88	109	UKR	Ukraine	9.511,55	134	SYR	Syria	5.615,96
85	MDV	Maldives	13.829,85	110	BRB	Barbados	9.272,58	135	PAK	Pakistan	5.303,38
86	BRA	Brazil	13.812,99	111	JOR	Jordan	8.996,94	136	NIC	Nicaragua	5.209,72
87	MKD	N Macedonia	13.396,59	112	BTN	Bhutan	8.397,10	137	AGO	Angola	4.993,85
88	GEO	Georgia	13.077,33	113	MAR	Morocco	8.265,65	138	GHA	Ghana	4.988,86
89	CHN	China	13.042,65	114	VCT	St. Vincent	8.145,96	139	PSE	St. of Palestine	4.425,39
90	COL	Colombia	12.796,99	115	PRY	Paraguay	8.135,34	140	SDN	Sudan	4.391,04
91	LKA	Sri Lanka	12.696,96	116	LCA	Saint Lucia	7.909,06	141	TJK	Tajikistan	4.337,99
92	DZA	Algeria	12.323,57	117	ATG	Anti' & B'buda	7.879,68	142	NGA	Nigeria	4.285,06
93	ALB	Albania	11.941,20	118	VEN	Venezuela	7.696,67	143	HND	Honduras	4.254,99
94	SUR	Suriname	11.815,04	119	PHL	Philippines	7.679,18	144	DJI	Djibouti	4.048,02
95	GAB	Gabon	11.803,62	120	FJI	Fiji	7.600,84	145	COG	Congo – Br'ville	3.726,67
96	ZAF	South Africa	11.741,27	121	SWZ	Eswatini	7.309,02	146	ZMB	Zambia	3.699,01
97	GRD	Grenada	11.668,59	122	GTM	Guatemala	7.255,57	147	STP	S. Tome/ Princ.	3.541,94
98	BIH	B' & H'govina	11.572,86	123	DMA	Dominica	7.132,07	148	CIV	Ivory Coast	3.513,75
99	PER	Peru	11.370,37	124	CPV	Cape Verde	6.968,64	149	BGD	Bangladesh	3.436,05
100	EGY	Egypt	11.202,35	125	JAM	Jamaica	6.804,96	150	LSO	Lesotho	3.238,55

Source: Feenstra, R. C., R. Inklaar and M. P. Timmer (2015): The Next Generation of the Penn World Table, American Economic Review 105, 3150-3182, available for download at www.ggdcd.net/pwt; own calculations

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Per Capita Income, 2017 (ctd.)

#	Country	pci	#	Country	pci
151	SEN Senegal	3.208,14	176	TCD Chad	1.307,97
152	KHM Cambodia	3.161,06	177	MWI Malawi	1.038,32
153	CMR Cameroon	3.149,26	178	NER Niger	908,65
154	KEN Kenya	3.072,03	179	BDI Burundi	799,61
155	MRT Mauritania	2.988,79	180	LBR Liberia	760,74
156	COM Comoros	2.871,04	181	COD Congo – Kinsh'	760,47
157	NPL Nepal	2.720,20	182	CAF C. Afr. Republic	727,29
158	GMB Gambia	2.644,41			
159	TZA Tanzania	2.479,45			
160	MLI Mali	2.334,35			
161	GIN Guinea	2.281,50			
162	BEN Benin	2.113,94			
163	RWA Rwanda	1.997,62			
164	ZWE Zimbabwe	1.871,81			
165	YEM Yemen	1.850,24			
166	UGA Uganda	1.802,48			
167	HTI Haiti	1.668,65			
168	GNB Guinea-Bissau	1.667,89			
169	BFA Burkina Faso	1.628,46			
170	MDG Madagascar	1.591,55			
171	ETH Ethiopia	1.591,49			
172	TGO Togo	1.566,15			
173	SLE Sierra Leone	1.394,49			
174	MOZ Mozambique	1.376,55			
175	TCA Turks & Caic. Isl.	1.330,75			

Source: Feenstra, R. C., R. Inklaar and M. P. Timmer (2015): The Next Generation of the Penn World Table, American Economic Review 105, 3150-3182, available for download at www.ggdcd.net/pwt; own calculations

Facts and Data on Economic Growth

Welfare Versus Productivity

Income per capita or income per worker?

$$\frac{Y}{N} = \frac{Y}{L} \cdot \frac{L}{N}$$

LABOUR PARTICIPATION RATE

International differences in labor force participation rates (LPRs)

YEM 19% ASE 20% SYR 22,7% EGY 30%
QAT 26% LUX 72% SGP 62%

Table 2

GDP per Worker, 2017

#	Country	GDP/worker	LPR	# pci
1	IRL	173.048,00	43,87%	3
2	ARE	158.205,92	41,40%	6
3	MAC	137.787,28	60,23%	2
4	USA	115.119,72	47,60%	9
5	NOR	114.577,15	52,88%	8
6	CHE	110.095,52	58,33%	7
7	QAT	107.969,05	86,87%	1
8	SGP	107.962,23	62,19%	5
9	BRN	107.596,80	48,05%	10
10	LUX	103.826,97	71,86%	4
11	SAU	102.260,12	37,70%	27
12	FRA	95.065,89	41,51%	24
13	AUS	94.523,91	50,14%	12
14	AUT	92.648,31	49,76%	14
15	BEL	92.114,95	41,62%	28
16	ITA	91.795,59	41,40%	29
17	DNK	90.611,94	50,63%	15
18	DEU	90.318,12	52,65%	11
19	NLD	87.848,83	53,05%	13
20	FIN	87.213,60	45,74%	22
21	SWE	87.055,80	49,83%	16
22	TWN	86.525,86	49,94%	17
23	ESP	86.291,39	41,37%	35
24	CAN	84.031,86	51,06%	18
25	TUR	81.451,04	33,47%	44

#	Country	GDP/worker	LPR	# pci
26	GBR	80.972,62	48,32%	26
27	KWT	79.604,97	49,42%	25
28	TTO	79.105,90	50,29%	23
29	HKG	77.264,25	52,53%	20
30	JPN	75.363,55	53,57%	21
31	CYP	75.242,59	38,85%	41
32	ISR	73.185,36	49,44%	34
33	ISL	71.809,08	57,52%	19
34	KOR	70.284,05	51,60%	33
35	NZL	67.979,08	53,75%	31
36	BHR	67.756,08	55,52%	30
37	MLT	67.061,16	45,97%	38
38	POL	63.007,81	42,28%	45
39	HRV	62.848,27	36,59%	53
40	ABW	62.514,82	47,78%	39
41	IRQ	62.449,26	24,50%	76
42	SYC	61.997,85	51,78%	36
43	CZE	61.733,95	50,44%	37
44	GRC	60.872,81	39,04%	52
45	ROU	60.235,86	40,42%	49
46	SVN	58.967,99	47,88%	42
47	IRN	57.421,23	27,80%	74
48	SVK	57.123,21	43,63%	48
49	BIH	56.067,64	20,64%	98
50	CUW	55.006,11	39,91%	61

#	Country	GDP/worker	LPR	# pci
51	LTU	54.321,29	47,85%	46
52	MNE	53.833,36	33,23%	69
53	LVA	52.666,77	45,83%	51
54	EST	52.038,78	49,85%	47
55	PRT	51.795,44	46,93%	50
56	MUS	51.295,39	44,50%	54
57	CHL	50.527,90	44,98%	56
58	OMN	49.905,63	54,78%	43
59	HUN	49.059,77	46,01%	58
60	MYS	48.525,88	46,94%	55
61	PAN	47.252,72	46,41%	62
62	RUS	47.199,33	47,84%	57
63	DZA	45.653,51	26,99%	92
64	GAB	44.596,91	26,47%	95
65	KAZ	44.487,85	47,32%	63
66	LBN	44.441,65	33,88%	77
67	TKM	42.370,14	51,90%	60
68	BHS	41.867,04	52,61%	59
69	GNQ	41.809,71	34,63%	82
70	URY	40.413,28	48,80%	65
71	MEX	39.951,48	43,51%	70
72	JOR	38.429,97	23,41%	111
73	BGR	38.229,16	48,76%	68
74	TUN	37.733,05	29,49%	101
75	EGY	37.607,70	29,79%	100

Source: Feenstra, R. C., R. Inklaar and M. P. Timmer (2015): the Next Generation of the Penn World Table, American Economic Review 105, 3150-3182, available for download at www.ggdcd.net/pwt; own calculations

Facts and Data on Economic Growth

Which measure to prefer?

$\frac{Y}{N}$ WELFARE MEASURE

$\frac{Y}{L}$ PRODUCTIVITY MEASURE

BUT: HOUSEHOLD PRODUCTION,
SUSTAINANCE & SHADOW ECONOMY!

$\frac{Y}{L}$: $\frac{\text{OFFICIAL OUTPUT}}{\text{OFFICIAL WORKERS}}$

Facts and Data on Economic Growth

Relative and absolute poverty

PAK, NIC < 10% USA pci

MLI,NER < 2% USA pci

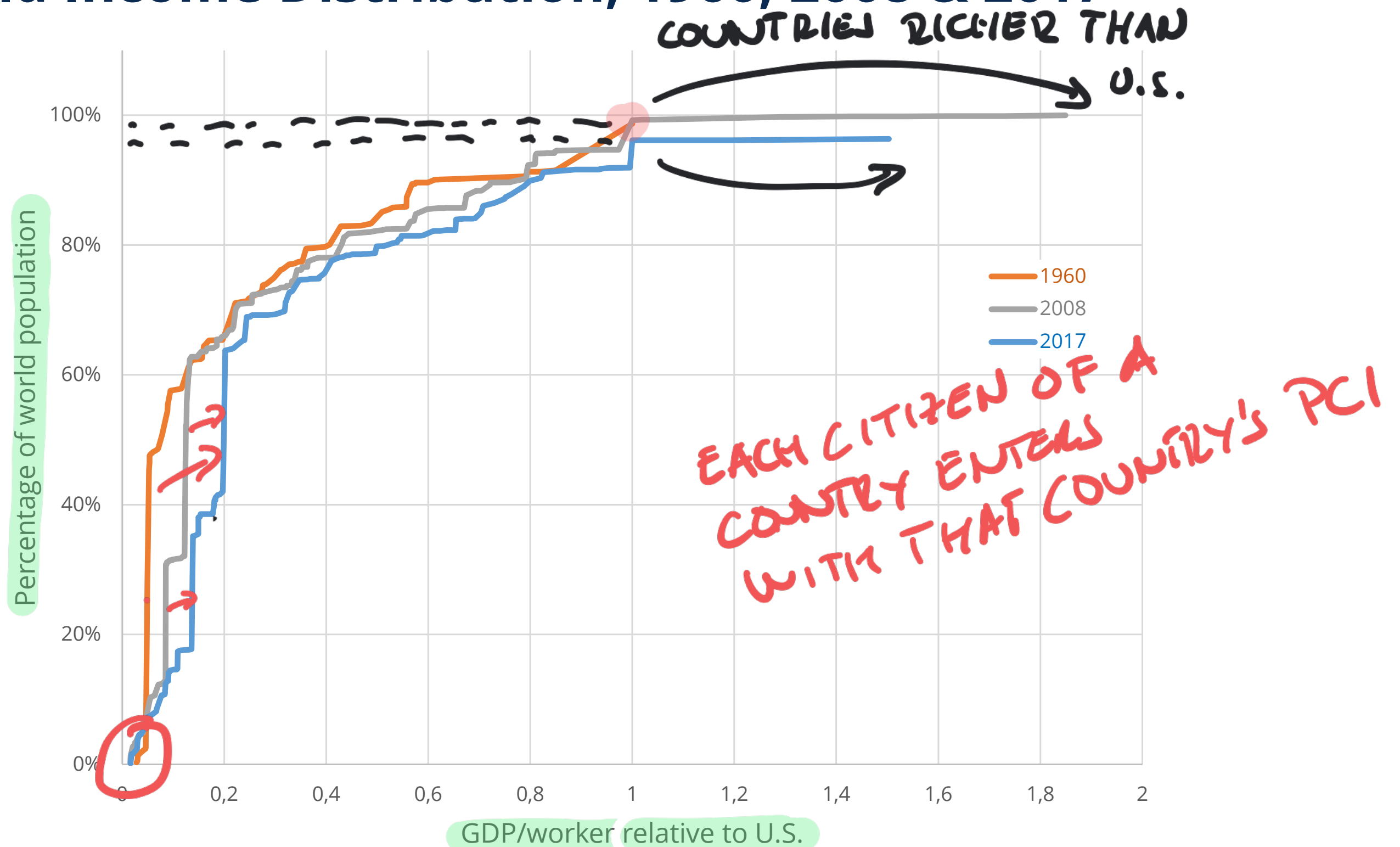
- Life expectancy (2015):
ANG 54.2 years; AFG 60.5 years; HTI 63.5 years;
USA 77.8 years; DEU 81.0 years; JPN 83.7 years
- Expenditure share for food: PHL 42%, USA 6%

How large is the fraction of poor countries?

~~PERSONAL WORLD
INCOME
DISTRIBUTION~~

Figure 1

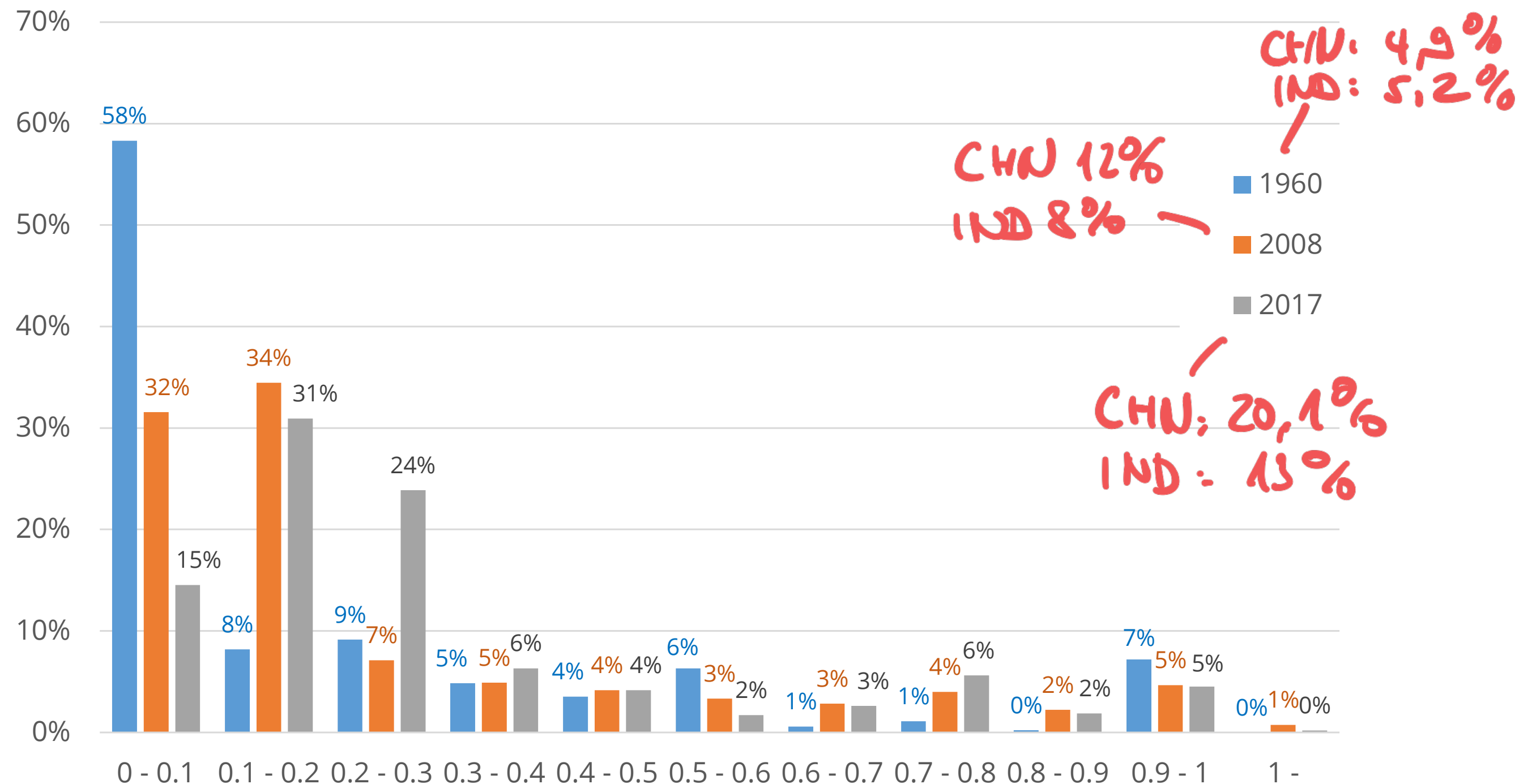
World Income Distribution, 1960, 2008 & 2017



Source: Feenstra, R. C., R. Inklaar and M. P. Timmer (2015): the Next Generation of the Penn World Table, American Economic Review 105, 3150-3182, available for download at www.ggdc.net/pwt; own calculations

Figure 2

World Population by GDP per Worker, 1960, 2008 & 2017



Source: Feenstra, R. C., R. Inklaar and M. P. Timmer (2015): the Next Generation of the Penn World Table, American Economic Review 105, 3150-3182, available for download at www.ggdgc.net/pwt; own calculations