

Table C8.1: Human Capital Index and components: 2020, 2018 back-calculated, and 2010

Components of HCI 2020								HCI		
Rank	Economy	Probability of survival to age 5	Expected years of school	Harmonized test scores	Learning-adjusted years of schooling	Adult survival rate	Fraction of children under 5 not stunted	HCI 2020	HCI 2018 back-calculated	HCI 2010
1	Singapore	1	13.9	575	12.8	0.95	-	0.88	0.89	0.85
2	Hong Kong SAR, China	0.99	13.5	549	11.9	0.95	-	0.81	0.82	0.78
3	Canada	1	13.7	534	11.7	0.94	-	0.8	0.8	0.77
4	Finland	1	13.7	534	11.7	0.93	-	0.8	0.81	0.82
5	Japan	1	13.6	538	11.7	0.95	-	0.8	0.84	0.82
6	Korea, Rep.	1	13.6	537	11.7	0.94	-	0.8	0.83	0.82
7	Macao SAR, China	0.99	12.9	561	11.6	0.96	-	0.8	0.76	0.65
8	Sweden	1	13.9	519	11.6	0.95	-	0.8	0.8	0.76
9	Ireland	1	13.9	521	11.6	0.94	-	0.79	0.81	0.77
10	Netherlands	1	13.9	520	11.5	0.95	-	0.79	0.8	0.8
11	Estonia	1	13.5	543	11.7	0.9	-	0.78	0.77	0.73
12	New Zealand	0.99	13.7	520	11.4	0.94	-	0.78	0.77	0.78
13	United Kingdom	1	13.9	520	11.5	0.93	-	0.78	0.78	0.77
14	Australia	1	13.6	516	11.2	0.95	-	0.77	0.78	0.75
15	Norway	1	13.7	514	11.2	0.94	-	0.77	0.77	0.77
16	Portugal	1	13.9	509	11.3	0.93	-	0.77	0.78	0.74
17	Slovenia	1	13.6	521	11.4	0.93	-	0.77	0.79	0.75
18	Belgium	1	13.5	517	11.2	0.93	-	0.76	0.76	0.75
19	Cyprus	1	13.6	502	10.9	0.95	-	0.76	0.75	0.69
20	Denmark	1	13.4	518	11.1	0.93	-	0.76	0.77	0.75
21	France	1	13.8	510	11.3	0.93	-	0.76	0.76	0.76
22	Switzerland	1	13.3	515	10.9	0.95	-	0.76	0.77	0.77
23	Austria	1	13.4	508	10.9	0.94	-	0.75	0.77	0.74

24	Czech Republic	1	13.6	512	11.1	0.92	-	0.75	0.76	0.73
25	Germany	1	13.3	517	11	0.93	-	0.75	0.76	0.76
26	Iceland	1	13.5	498	10.7	0.95	-	0.75	0.74	0.76
27	Poland	1	13.4	530	11.4	0.89	-	0.75	0.76	0.7
28	Israel	1	13.8	481	10.6	0.95	-	0.73	0.76	0.72
29	Italy	1	13.3	493	10.5	0.95	-	0.73	0.75	0.75
30	Spain	1	13	507	10.5	0.95	-	0.73	0.74	0.71
31	Croatia	1	13.4	488	10.4	0.92	-	0.71	0.73	0.69
32	Latvia	1	13.6	504	11	0.84	-	0.71	0.74	0.68
33	Lithuania	1	13.8	496	11	0.84	-	0.71	0.73	0.69
34	Malta	0.99	13.4	474	10.2	0.95	-	0.71	0.71	0.68
35	Belarus	1	13.8	488	10.8	0.85	-	0.7	-	-
36	United States	0.99	12.9	512	10.6	0.89	-	0.7	0.71	0.69
37	Greece	1	13.3	469	10	0.93	-	0.69	0.69	0.71
38	Luxembourg	1	12.4	493	9.8	0.94	-	0.69	0.69	0.7
39	Vietnam	0.98	12.9	519	10.7	0.87	0.76	0.69	0.69	0.66
40	Hungary	1	13	495	10.3	0.88	-	0.68	0.71	0.69
41	Russian Federation	0.99	13.7	498	10.9	0.8	-	0.68	0.73	0.6
42	Serbia	0.99	13.3	457	9.8	0.89	0.94	0.68	0.76	0.65
43	United Arab Emirates	0.99	13.5	448	9.6	0.94	-	0.67	0.68	0.62
44	Slovak Republic	0.99	12.6	485	9.8	0.9	-	0.66	0.68	0.68
45	Bahrain	0.99	12.8	452	9.3	0.93	-	0.65	0.66	0.6
46	Chile	0.99	13	452	9.4	0.92	-	0.65	0.67	0.63
47	China	0.99	13.1	441	9.3	0.92	0.92	0.65	0.65	-
48	Turkey	0.99	12.1	478	9.2	0.91	0.94	0.65	0.63	0.63
49	Qatar	0.99	12.8	427	8.8	0.96	-	0.64	0.63	0.59
50	Brunei Darussalam	0.99	13.2	438	9.2	0.88	0.8	0.63	-	-
51	Costa Rica	0.99	13.1	429	9	0.92	-	0.63	0.6	0.6
52	Kazakhstan	0.99	13.7	416	9.1	0.84	0.92	0.63	0.78	0.59
53	Montenegro	1	12.8	436	8.9	0.91	0.91	0.63	0.62	0.59
54	Seychelles	0.99	13.1	463	9.7	0.85	-	0.63	0.63	0.57

55	Ukraine	0.99	12.9	478	9.9	0.81	-	0.63	0.64	0.63
56	Mauritius	0.98	12.4	473	9.4	0.86	-	0.62	0.62	0.6
57	Uzbekistan	0.98	12	474	9.1	0.87	0.89	0.62	-	-
58	Bulgaria	0.99	12.3	441	8.7	0.87	0.93	0.61	0.67	0.64
59	Malaysia	0.99	12.5	446	8.9	0.88	0.79	0.61	0.63	0.58
60	Mexico	0.99	12.8	430	8.8	0.86	0.9	0.61	0.61	0.59
61	Mongolia	0.98	13.2	435	9.2	0.8	0.91	0.61	0.62	-
62	Oman	0.99	12.8	424	8.6	0.91	-	0.61	0.61	0.55
63	Peru	0.99	13	415	8.6	0.89	0.88	0.61	0.59	0.55
64	Thailand	0.99	12.7	427	8.7	0.87	0.89	0.61	0.62	0.58
65	Antigua and Barbuda	0.99	13	407	8.4	0.9	-	0.6	0.58	-
66	Argentina	0.99	12.9	408	8.4	0.89	0.92	0.6	0.62	0.59
67	Colombia	0.99	12.9	419	8.6	0.89	0.87	0.6	0.6	0.58
68	Kyrgyz Republic	0.98	12.9	420	8.7	0.85	0.88	0.6	0.59	-
69	Sri Lanka	0.99	13.2	400	8.5	0.9	0.83	0.6	0.59	-
70	St. Lucia	0.98	12.7	418	8.5	0.87	0.98	0.6	0.59	-
71	Trinidad and Tobago	0.98	12.4	458	9.1	0.85	-	0.6	0.6	0.55
72	Uruguay	0.99	12.2	438	8.6	0.89	-	0.6	0.6	0.59
73	Ecuador	0.99	12.9	420	8.7	0.88	0.76	0.59	0.6	0.53
74	Iran, Islamic Rep.	0.99	11.8	432	8.2	0.93	-	0.59	0.59	0.56
75	Palau	0.98	11.7	463	8.7	0.87	-	0.59	0.57	-
76	St. Kitts and Nevis	0.99	13	409	8.5	0.88	-	0.59	0.57	-
77	Armenia	0.99	11.3	443	8	0.89	0.91	0.58	0.58	-
78	Azerbaijan	0.98	12.4	416	8.3	0.88	0.82	0.58	0.63	0.5
79	Bosnia and Herzegovina	0.99	11.7	416	7.8	0.91	0.91	0.58	0.62	-
80	Moldova	0.98	11.8	439	8.3	0.84	0.94	0.58	0.58	0.56
81	Romania	0.99	11.8	442	8.4	0.88	-	0.58	0.59	0.6
82	Saudi Arabia	0.99	12.4	399	7.9	0.92	-	0.58	0.58	0.55
83	West Bank and Gaza	0.98	12.2	412	8	0.89	0.93	0.58	0.57	-
84	Georgia	0.99	12.9	400	8.3	0.85	-	0.57	0.61	0.54
85	Grenada	0.98	13.1	395	8.3	0.85	-	0.57	0.54	-

86	Kosovo	0.99	13.2	374	7.9	0.91	-	0.57	0.57	-
87	Kuwait	0.99	12	383	7.4	0.94	-	0.56	0.56	0.57
88	North Macedonia	0.99	11	414	7.3	0.91	0.95	0.56	0.54	0.54
89	Brazil	0.99	11.9	413	7.9	0.86	-	0.55	0.55	0.53
90	El Salvador	0.99	10.9	436	7.6	0.82	0.86	0.55	0.54	-
91	Jordan	0.98	11.1	430	7.7	0.89	-	0.55	0.55	0.56
92	Kenya	0.96	11.6	455	8.5	0.77	0.74	0.55	0.54	-
93	Samoa	0.98	12.2	370	7.2	0.89	0.95	0.55	0.52	-
94	Dominica	0.96	12.4	404	8	0.86	-	0.54	0.55	-
95	Indonesia	0.98	12.4	395	7.8	0.85	0.72	0.54	0.54	0.5
96	Jamaica	0.99	11.4	387	7.1	0.86	0.94	0.53	0.54	-
97	Paraguay	0.98	11.3	386	7	0.86	0.94	0.53	0.53	0.51
98	St. Vincent and the Grenadines	0.98	12.3	391	7.7	0.83	-	0.53	0.54	-
99	Tonga	0.98	11.6	386	7.1	0.83	0.92	0.53	0.52	-
100	Lebanon	0.99	10.2	390	6.3	0.93	-	0.52	0.52	-
101	Philippines	0.97	12.9	362	7.5	0.82	0.7	0.52	0.55	-
102	Tunisia	0.98	10.6	384	6.5	0.91	0.92	0.52	0.51	0.53
103	Fiji	0.97	11.3	383	7	0.78	0.91	0.51	-	-
104	Micronesia, Fed. Sts.	0.97	11.8	380	7.2	0.84	-	0.51	0.47	-
105	Nauru	0.97	11.7	347	6.5	0.93	-	0.51	-	-
106	Nicaragua	0.98	10.8	392	6.7	0.85	0.83	0.51	0.51	-
107	Dominican Republic	0.97	11.9	345	6.6	0.84	0.93	0.5	0.51	-
108	Guyana	0.97	12.2	346	6.8	0.77	0.89	0.5	0.49	-
109	Morocco	0.98	10.4	380	6.3	0.93	0.85	0.5	0.49	0.47
110	Nepal	0.97	12.3	369	7.2	0.86	0.64	0.5	0.5	-
111	Panama	0.98	10.7	377	6.5	0.89	-	0.5	0.51	0.51
112	Tajikistan	0.97	10.9	391	6.8	0.87	0.82	0.5	0.54	-
113	Cambodia	0.97	9.5	452	6.8	0.84	0.68	0.49	0.49	-
114	Egypt, Arab Rep.	0.98	11.5	356	6.5	0.86	0.78	0.49	0.49	0.48
115	India	0.96	11.1	399	7.1	0.83	0.65	0.49	0.48	-

116	Kiribati	0.95	11.2	411	7.4	0.81	-	0.49	0.47	-
117	Bhutan	0.97	10.2	387	6.3	0.81	0.79	0.48	-	-
118	Honduras	0.98	9.6	400	6.1	0.86	0.77	0.48	0.48	-
119	Myanmar	0.95	10	425	6.8	0.8	0.71	0.48	0.47	-
120	Zimbabwe	0.95	11.1	396	7	0.65	0.77	0.47	0.46	0.41
121	Bangladesh	0.97	10.2	368	6	0.87	0.69	0.46	0.46	-
122	Gabon	0.96	8.3	456	6	0.79	0.83	0.46	0.46	-
123	Guatemala	0.97	9.7	405	6.3	0.85	0.53	0.46	0.46	0.44
124	Lao PDR	0.95	10.6	368	6.3	0.82	0.67	0.46	0.46	-
125	Ghana	0.95	12.1	307	6	0.77	0.82	0.45	0.44	-
126	Haiti	0.94	11.4	338	6.1	0.78	0.78	0.45	0.44	-
127	Namibia	0.96	9.4	407	6.1	0.71	0.77	0.45	0.45	0.39
128	Timor-Leste	0.95	10.6	371	6.3	0.86	0.54	0.45	0.45	0.41
129	Tuvalu	0.98	10.8	346	6	0.79	-	0.45	0.44	-
130	Vanuatu	0.97	10.1	348	5.6	0.87	0.71	0.45	0.44	-
131	Papua New Guinea	0.95	10.3	363	6	0.78	0.51	0.43	0.42	-
132	South Africa	0.97	10.2	343	5.6	0.69	0.73	0.43	0.42	0.43
133	Togo	0.93	9.7	384	6	0.74	0.76	0.43	0.42	0.37
134	Congo, Rep.	0.95	8.9	371	5.3	0.74	0.79	0.42	0.42	0.41
135	Gambia, The	0.94	9.5	353	5.4	0.75	0.81	0.42	0.4	0.37
136	Marshall Islands	0.97	9.4	375	5.7	0.7	0.65	0.42	0.4	-
137	Senegal	0.96	7.3	412	4.8	0.83	0.81	0.42	0.42	0.39
138	Solomon Islands	0.98	8.3	351	4.7	0.86	0.68	0.42	0.43	-
139	Botswana	0.96	8.1	391	5.1	0.8	-	0.41	0.41	0.37
140	Iraq	0.97	6.9	363	4	0.84	0.87	0.41	0.4	-
141	Malawi	0.95	9.6	359	5.5	0.74	0.61	0.41	0.41	0.36
142	Pakistan	0.93	9.4	339	5.1	0.85	0.62	0.41	0.4	-
143	Benin	0.91	9.2	384	5.7	0.77	-	0.4	0.4	0.37
144	Cameroon	0.92	8.7	379	5.3	0.7	0.71	0.4	0.39	0.38
145	Comoros	0.93	8.2	392	5.1	0.78	0.69	0.4	0.4	-
146	Lesotho	0.92	10	393	6.3	0.52	0.65	0.4	0.4	0.34

147	Zambia	0.94	8.8	358	5	0.73	0.65	0.4	0.39	-
148	Burundi	0.94	7.6	423	5.2	0.72	0.46	0.39	0.39	0.34
149	Madagascar	0.95	8.4	351	4.7	0.8	0.58	0.39	0.39	0.39
150	Tanzania	0.95	7.2	388	4.5	0.78	0.68	0.39	0.39	-
151	Burkina Faso	0.92	7	404	4.5	0.76	0.75	0.38	0.38	0.32
152	Cote d'Ivoire	0.92	8.1	373	4.8	0.66	0.78	0.38	0.37	0.3
153	Ethiopia	0.94	7.8	348	4.3	0.79	0.63	0.38	0.38	-
154	Mauritania	0.92	7.7	342	4.2	0.8	0.77	0.38	0.37	-
155	Rwanda	0.96	6.9	358	3.9	0.81	0.62	0.38	0.38	-
156	Sudan	0.94	7.1	380	4.3	0.79	0.62	0.38	0.38	-
157	Uganda	0.95	6.8	397	4.3	0.74	0.71	0.38	0.38	0.34
158	Congo, Dem. Rep.	0.91	9.1	310	4.5	0.75	0.57	0.37	0.36	-
159	Eswatini	0.95	6.4	440	4.5	0.6	0.74	0.37	0.37	0.31
160	Guinea	0.9	7	408	4.6	0.76	0.7	0.37	0.37	-
161	Yemen, Rep.	0.95	8.1	321	4.2	0.8	0.54	0.37	0.37	-
162	Mozambique	0.93	7.6	368	4.5	0.68	0.58	0.36	0.36	-
163	Nigeria	0.88	10.2	309	5	0.66	0.63	0.36	0.35	-
164	Sierra Leone	0.89	9.6	316	4.9	0.63	0.71	0.36	0.35	-
165	Liberia	0.93	4.2	332	2.2	0.78	0.7	0.32	0.32	-
166	Mali	0.9	5.2	307	2.6	0.75	0.73	0.32	0.32	-
167	Niger	0.92	5.5	305	2.7	0.77	0.52	0.32	0.32	-
168	South Sudan	0.9	4.7	336	2.5	0.68	0.69	0.31	0.31	-
169	Chad	0.88	5.3	333	2.8	0.65	0.6	0.3	0.3	0.29
170	Central African Republic	0.88	4.6	369	2.7	0.59	0.59	0.29	-	-

Source: World Bank calculations based on the 2020 update of the Human Capital Index (HCI).

Notes: This table reports the components and overall index scores for the HCI 2020, the back-calculated HCI 2018 and the HCI 2010. The HCI ranges between 0 and 1. The index is measured in terms of the productivity of the next generation of workers relative to the benchmark of complete education and full health. An economy in which a child born today can expect to achieve complete education and full health will score a value of 1 on the index. - indicates missing data.

NOTES

1. United Nations Statistics Division web page, "Coverage of Birth and Death Registration,"
2. For more information, see <http://www.childmortality.org/>.
3. This section borrows heavily from the technical appendix of Kraay (2018).
4. The main source for enrollment data from UIS is administrative data. Data are collected by UIS on an annual basis from official national statistical authorities. The data are released in September of every year and include national data for the school or reference year ending in the previous year. The national data are then updated in February, which completes the UIS publication of educational data for the data collection effort of the previous reference year.
5. An important agenda concerns the frequent and substantial discrepancies between household survey-based measures of school enrollment and administrative records. D'Souza, Gatti, and Kraay (2019) briefly discuss these discrepancies.
6. $Y_i = 2$ for preprimary, $Y_i = 6$ for primary, $Y_i = 3$ for lower-secondary, and $Y_i = 3$ for upper-secondary.
7. For the 2020 update, this process was conducted between January 29 and April 29, resulting in revised enrollment rates for all levels, which are available in individual economy files at <https://www.worldbank.org/en/publication/human-capital>.
8. See <http://data.uis.unesco.org/>.
9. The exceptions to this rule are Fiji, Kenya, and Kiribati, for which the most recent data available are from before 2010.
- 10: Note that one level of schooling may use TNER whereas another may use NER. For a given level of education, however, the same enrollment type is used over time.
11. This effort is made for all economies for which the same test is available in or close to the specified year.
12. Exceptions are Qatar preprimary and primary, for which the same value of 2010 is used.
13. World Bank staff working in each economy obtain these data from local government sources, for example, the Ministry of Education or National Statistics Office.
14. The flip side is that for 15 economies at least one of the enrollment rates used comes from an older year than was available in 2018's EYS, mostly because UIS revises the series and in some instances may remove years from the series.
15. For the latest updates on the harmonized test scores, see Angrist et al. (2019).
16. The one exception to this is the 2007 and 2014 PASEC rounds, which were not designed to be intertemporally comparable and in which different overlapping countries were used to construct the exchange rate in the two periods.
17. For the 2020 HCI, 13 economies have an HTS that comes from a nonrepresentative EGRA: Bangladesh, Central African Republic, the Democratic Republic of Congo, Ethiopia, Iraq, Jamaica, Lao PDR, Liberia, Mali, Myanmar, Nigeria, Pakistan, and South Sudan.
18. See Patrinos and Angrist (2018) for further details.
19. See JME (UNICEF-WHO-World Bank Joint Child Malnutrition Estimates) (database), 2020 edition, UNICEF, New York, <https://data.unicef.org/resources/jme/>.
20. The DHS program has fielded over 400 surveys across 90 economies, and over 300 MICS have been carried out in more than 100 economies.

21. See <https://www.who.int/publications-detail/jme-2020-edition>.

22. See Global Burden of Disease (GBD), database, Institute for Health Metrics and Evaluation (IHME), Seattle, <http://www.healthdata.org/gbd>.

23. See <https://population.un.org/wpp/>.

24. See <http://www.healthdata.org/results/data-visualizations>.

25. See <https://data.un.org/>.