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Supplementary appendix

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Supplement to: GBD 2021 Rheumatoid Arthritis Collaborators. Global, regional, and national burden of rheumatoid arthritis, 1990–2020, and projections to 2050: a systematic analysis of the Global Burden of Disease Study 2021. *Lancet Rheumatol* 2023; **5**: e594–610.

The global burden of rheumatoid arthritis: estimates from the Global Burden of Disease 2021 Study

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This appendix provides more detailed methodology and supplemental figures, tables, and results for “**The global burden of rheumatoid arthritis: estimates from the Global Burden of Disease 2021 Study**”. Portions of this appendix have been adapted from Vos et al. References are provided for adapted sections.

Vos T, Lim S, Abbafati C, et al. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet* 2020; **396**(10258): 1204-22.

Section 1. Non-fatal data seeking

For GBD 2010, a systematic review of the prevalence of RA throughout the world was conducted. Ovid MEDLINE, EMBASE, CINAHL, CAB abstracts, WHOLIS, and SIGLE databases were searched using the following search terms: (rheumatoid arthritis OR rheumatic disease* OR rheumatism) AND (prevalen* OR inciden* OR cross-sectional OR cross sectional OR epidemiol* OR survey OR population-based OR population based OR population study OR population sample OR cohort OR follow-up OR follow up OR longitudinal OR regist* OR data collection). Opportunistically encountered scientific literature and population surveys were added for GBD 2015 and GBD 2016.

A further search was conducted for GBD 2017 using the following search terms: ("Arthritis, Rheumatoid"[Mesh] AND ("Prevalence"[Mesh] OR "Incidence"[Mesh])) NOT (Meta-Analysis[ptyp] OR Letter[ptyp] OR Editorial[ptyp] OR Case Reports[ptyp] OR Review[ptyp] OR Controlled Clinical Trial[ptyp]) AND ("2013/01/01"[PDAT] : "2018/1/10"[PDAT]).

For GBD 2021, we conducted a further systematic review of rheumatoid arthritis prevalence using the following search string: ("Arthritis, Rheumatoid"[Mesh] OR arthrit*) AND (prevalen*[Mesh] OR inciden*[Mesh]) AND ("2017/12/18"[PDAT] : "2019/10/18"[PDAT])

The exclusion criteria were:

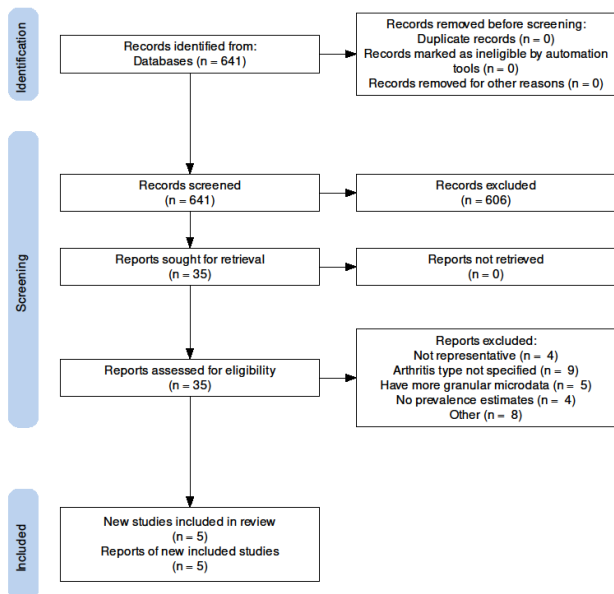
1. Studies clearly not representative of the national population
2. Studies that were not population-based, eg, hospital or clinic-based studies
3. Studies that did not provide primary data on epidemiological parameters, eg, a commentary piece
4. Studies of a specific type of RA, eg, seropositive RA
5. Studies with a sample size of less than 150
6. Reviews

Opportunistically, six additional studies encountered during data review were added for GBD 2021:

1. Cook MJ, Bellou E, Bowes J, Sergeant JC, O'Neill TW, Barton A, Verstappen SMM. The prevalence of comorbidities and their impact on physical activity in people with inflammatory rheumatic diseases compared with the general population: results from the UK Biobank. *Rheumatology (Oxford)*. 2018; 57(12): 2172-2182.
2. Jeong HS, Hong SJ, Choi SJ, Kim JH, Song GG, Jung JH. Effects of oral contraceptives on rheumatoid arthritis in Korean menopausal women: A nationwide cross-sectional study. *Maturitas*. 2018; 112: 24-28.
3. Klinaki E, Katsoulis M, La Vecchia C, Trichopoulou A. Rheumatoid arthritis and cancer risk: results from the Greek European prospective investigation into cancer and nutrition cohort. *Eur J Cancer Prev*. 2018; 27(5): 502506.
4. Kumar P, Alok R, Das SK, Srivastava R, Agarwal GG. Distribution of rheumatological diseases in rural and urban areas: An adapted COPCORD Stage I Phase III survey of Lucknow district in north India. *Int J Rheum Dis*. 2018; 21(11): 1894-1899.
5. Li X, Sjöstedt C, Sundquist J, Zöller B, Sundquist K. Familial association of attention-deficit hyperactivity disorder with autoimmune diseases in the population of Sweden. *Psychiatr Genet*. 2019; 29(2): 37-43.
6. Vega-Hinojosa O, Cardiel MH, Ochoa-Miranda P. Prevalence of musculoskeletal manifestations and related disabilities in a Peruvian urban population living at high altitude. COPCORD Study. Stage I. *Reumatol Clin*. 2018; 14(5): 278-284.

In addition, data from USA claims data for 2000, 2010–2012, and 2014–2016 by state and Taiwan claims for 2016 were included. We decided not to use hospital inpatient data as we considered they would not be representative of true prevalence and that variation between countries in the proportion of true prevalent cases captured in hospital inpatient data systems would likely vary more than can be captured by a single crosswalk. We compared the rates of RA in the outpatient data from Norway, Sweden, Canada, and the USA and found implausibly large differences with the rates from the claims data. The USA outpatient rates were half the value of the claims data, and those for the other countries much lower still. For those reasons we decided not to use outpatient data. The reference ICD-10 codes for rheumatoid arthritis are M05, M06, and M08. The ICD-9 codes for rheumatoid arthritis are 714.0–714.9.

For fatal data, datapoints that were implausibly high or low globally or regionally, conflicted with established age or temporal patterns, conflicted with other data sources from similar locations, or came from verbal autopsy sources were excluded.



Supplemental Figure 1. Identification of new studies via databases and registers

Supplemental Table 1: MR-BRT crosswalk adjustment factors for rheumatoid arthritis

Data input	Reference or alternative case definition	Gamma	Beta coefficient, log (95% CI)	Adjustment factor*
ACR 1987	Ref	0.09	---	---
RA criteria other than RA 1987**	Alt		0.23 (-0.47 to 0.94)	1.26 (0.63 to 1.56)
USA claims data – 2000	Alt		0.69 (-0.46 to 1.84)	1.72 (0.63 to 6.30)

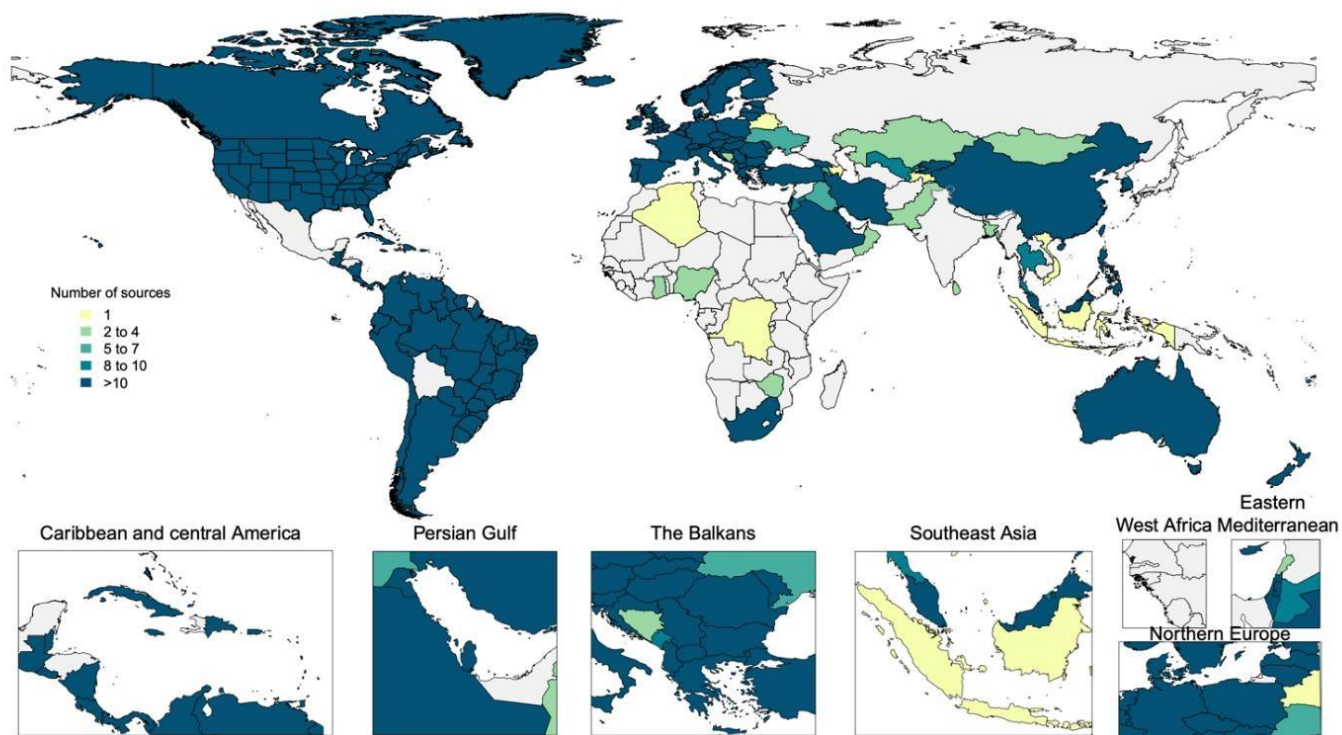
*Adjustment factor is the transformed beta coefficient in normal space and can be interpreted as the factor by which the alternative case definition is adjusted to reflect what it would have been if measured as the reference.

** Other criteria include ACR/EULAR 2010, American Rheumatism Association 1958, Rome 1961, and general physician diagnosis.

Supplemental Table 2: Covariates. Summary of covariates used in the rheumatoid arthritis DisMod-MR meta-regression model

Covariate	Type	Parameter	Exponentiated beta (95% uncertainty interval)
Healthcare Access and Quality Index	Country-level	Excess mortality rate	0.98 (0.98–0.98)
Mean BMI	Country-level	Prevalence	1.16 (1.12–1.18)

Supplemental Figure 2: Distribution of data sources for rheumatoid arthritis



Supplemental Table 3: National and subnational sources in countries with subnational estimation

Location	National source counts	Subnational source counts	Total source counts
Brazil	0	870	870
China	0	832	832
Indonesia	1	0	1
India	0	11	11
Iran	0	436	436
Italy	3	801	804
Japan	0	1788	1788
Mexico	1	1250	1251
New Zealand	0	72	72
Nigeria	0	2	2
Norway	0	365	365
Pakistan	0	3	3
Philippines	1	868	869
Poland	0	592	592
Russia	0	2508	2508
South Africa	0	180	180
Sweden	4	71	75
UK	130	5706	5836
Ukraine	7	0	7
USA	4	4653	4657

Section 2. Excess mortality rate (EMR) modelling

In previous rounds, priors on excess mortality rate (EMR) were estimated in DisMod by matching prevalence datapoints with their corresponding CSMR values within the same age, sex, year, location (by dividing CSMR by prevalence). For short duration conditions (remission >1), the corresponding prevalence was derived by running an initial model and then applying the same CSMR/prevalence method. However, for many causes, DisMod estimated a rather unrealistic pattern of EMR compared to an expected pattern of decreasing EMR with greater access to quality health care. Such unexpected patterns often signal inconsistencies between CSMR estimates and the measures of prevalence and/or incidence. In an effort to provide greater guidance to DisMod on the expected pattern of EMR, EMR data generated in the previous round were modelled using the MR-BRT approach by age and sex with a prior on Healthcare Access and Quality (HAQ) Index having a negative coefficient. Results from MR-BRT were then predicted for each location year, sex, and for ages 0, 10, 20100. We included HAQ Index as a country-level covariate to inform EMR with a mean and standard deviation produced from MR-BRT. However, even without this setting, DisMod would tend to estimate a coefficient that was consistent with the MRBRT analysis.

Supplemental Table 4: Covariates used in rheumatoid arthritis mortality modelling

Level	Covariate	Direction
1	Cumulative cigarettes (10 years)	+
	Cumulative cigarettes (5 years)	+
	Smoking prevalence	+
	Milk (g), unadjusted	+
	Healthcare Access and Quality Index	-
2	Mean BMI	+
	Mean cholesterol	+
3	Education (years per capita)	+
	Log-transformed LDI: lag-distributed income (\$ per capita)	+

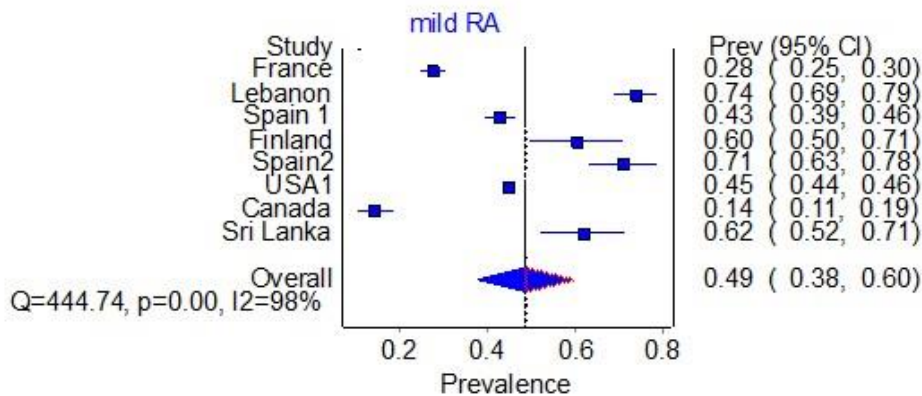
Section 3. Severity distribution meta-analysis

To determine the proportion of people with RA within each of the severity levels, seven studies from three regions provided information on the severity of RA. Severity was classified according to Health Assessment Questionnaire scores, with the cutoff for each severity level: <1 mild; 1–1.99 moderate; and ≥ 2 severe. Estimates were across studies. We used a random effects meta-analysis model. The pooled percentages were mild 48.8% (37.9–59.6), moderate 37.6% (29.3–46.2), and severe 12.2% (7.8–17.4).

Supplemental Table 5: Severity distribution, details on the severity levels for rheumatoid arthritis in GBD 2021 and the associated disability weight (DW) with that severity

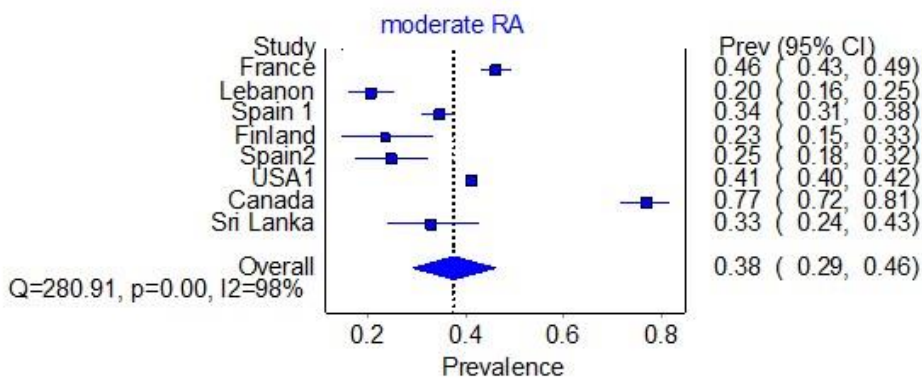
Severity level	Lay description	DW (95% CI)
Mild	This person has moderate pain and stiffness in the arms and hands which causes difficulty lifting, carrying, and holding things, and trouble sleeping because of the pain.	0.117 (0.080–0.163)
Moderate	This person has pain and deformity in most joints, causing difficulty moving around, getting up and down, and using the hands for lifting and carrying. The person often feels fatigue.	0.317 (0.216–0.440)
Severe	This person has severe, constant pain, and deformity in most joints, causing difficulty moving around, getting up and down, eating, dressing, lifting, carrying, and using the hands. The person often feels sadness, anxiety, and extreme fatigue.	0.581 (0.403–0.739)

Supplemental Figure 3a. Severity distribution meta-analysis of mild rheumatoid arthritis



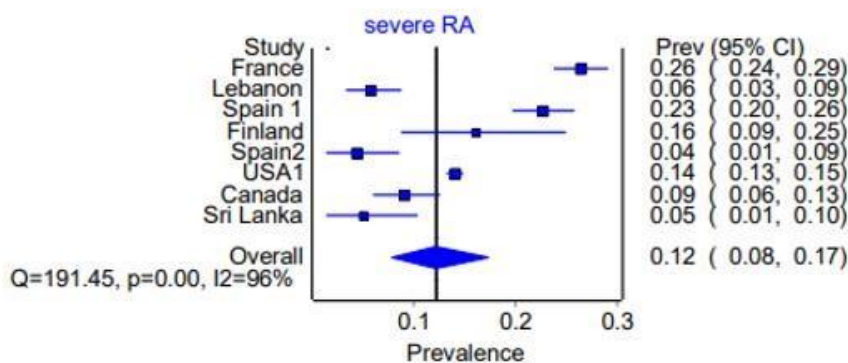
Details of the studies/locations included in the meta-analysis calculating the proportion of mild RA.

Supplemental Figure 3b. Severity distribution meta-analysis of moderate rheumatoid arthritis



Details of the studies/locations included in the meta-analysis calculating the proportion of moderate RA.

Supplemental Figure 3c. Severity distribution meta-analysis of severe rheumatoid arthritis



Details of the studies/locations included in the meta-analysis calculating the proportion of severe RA.

Supplemental Table 6: Rheumatoid arthritis prevalence and age-standardised DALY rate by super-region, region, and country

Location	Number of prevalent cases (95% UI)	Age-standardised prevalence rate per 100 000 (95% UI)	% change in age-standardised prevalence rate from 1990 to 2020 (95% UI)	Age-standardised rate of YLDs per 100 000 in 2020 (95% UI)	% change in age-standardised rate of YLDs per 100 000 from 1990 to 2020 (95% UI)	Age-standardised rate of YLLs per 100 000 (95% UI)	Age-standardised rate of DALYs per 100 000 (95% UI)	% change in age-standardised rate of DALYs per 100 000 from 1990 to 2020 (95% UI)
Global	17 600 000 (15 800 000–20 300 000)	208.8 (186.8–241.1)	14.1 (12.7–15.4)	27.8 (18.9–37.1)	13.8 (12.3–15.6)	8.6 (7.7–9.9)	36.4 (27.6–45.9)	-1.0 (-5.5–2.2)
CENTRAL EUROPE, EASTERN EUROPE, AND CENTRAL ASIA	1 030 000 (914 000–1 180 000)	186.9 (162.8–215.7)	24.2 (21.7–26.7)	25.2 (17.1–33.9)	24.5 (20.4–29.0)	7.3 (6.7–7.8)	32.4 (24.2–40.9)	8.1 (2.7–12.5)
Central Asia	171 000 (149 000–197 000)	182.7 (160.0–208.0)	41.7 (36.9–47.6)	24.9 (17.0–33.3)	41.5 (32.1–50.9)	4.1 (3.7–4.6)	28.9 (21.1–37.3)	59.0 (48.4–71.5)
Armenia	4370 (3730–5270)	114.9 (96.1–139.3)	51.5 (42.4–70.1)	15.7 (10.4–22.0)	50.7 (25.8–79.2)	1.9 (1.7–2.1)	17.6 (12.4–23.8)	67.0 (40.8–95.0)
Azerbaijan	10 000 (8370–12 200)	85.2 (71.5–103.3)	27.4 (19.9–35.1)	11.8 (7.6–16.3)	26.2 (11.9–40.9)	0.3 (0.1–0.4)	12.0 (7.9–16.5)	28.5 (14.5–45.2)
Georgia	4630 (3900–5520)	97.7 (81.1–117.3)	18.5 (11.3–24.7)	13.2 (8.7–18.7)	16.8 (0.5–36.8)	1.0 (0.9–1.1)	14.2 (9.6–19.5)	24.6 (7.3–46.3)
Kazakhstan	20 500 (17 300–25 200)	104.7 (88.2–127.5)	37.9 (28.8–48.3)	14.2 (9.4–20.0)	37.0 (17.7–59.1)	4.1 (2.9–5.2)	18.3 (13.5–24.2)	73.6 (50.0–118.3)
Kyrgyzstan	18 500 (16 300–20 700)	330.7 (295.8–368.0)	45.9 (36.4–54.4)	44.4 (30.0–62.9)	45.6 (28.8–61.9)	9.2 (7.3–11.7)	53.5 (39.0–71.7)	50.3 (36.1–69.0)
Mongolia	4790 (4090–5710)	144.8 (125.3–168.3)	49.9 (41.5–62.6)	19.6 (13.2–27.4)	49.2 (29.2–74.5)	7.3 (4.5–11.7)	27.0 (19.4–34.9)	56.3 (4.2–94.6)
Tajikistan	11 400 (9630–13 000)	148.1 (128.3–166.7)	27.7 (19.4–36.5)	20.2 (13.1–28.4)	28.4 (14.5–44.5)	2.8 (1.1–4.4)	23.0 (15.7–31.1)	41.0 (20.1–61.5)
Turkmenistan	4380 (3690–5290)	88.0 (74.8–105.3)	34.5 (26.4–44.4)	12.2 (8.1–16.4)	33.9 (16.7–62.3)	1.6 (1.2–2.2)	13.8 (9.7–18.0)	51.4 (34.9–80.5)
Uzbekistan	92 800 (81 000–105 000)	295.0 (260.8–329.1)	23.0 (15.5–31.4)	40.1 (27.3–54.5)	22.9 (9.2–35.5)	7.7 (6.7–9.0)	47.8 (34.7–62.1)	45.2 (28.9–61.3)
Central Europe	349 000 (313 000–397 000)	202.1 (177.6–232.9)	20.0 (17.7–22.7)	27.2 (18.3–37.2)	20.6 (16.0–24.1)	4.5 (3.9–5.0)	31.7 (22.8–42.1)	-8.5 (-16.6–2.4)
Albania	5780 (5030–6740)	156.0 (134.2–183.0)	64.6 (54.6–76.8)	21.0 (14.7–28.6)	63.1 (42.5–85.9)	3.4 (2.1–5.3)	24.5 (17.0–32.0)	19.5 (-1.1–40.5)

Bosnia and Herzegovina	12 500 (11 000–13 800)	247.7 (218.2–275.5)	46.5 (36.9–54.4)	33.2 (22.4–45.6)	46.2 (27.6–65.9)	4.9 (3.5–6.9)	38.1 (27.1–49.7)	26.6 (9.4–44.0)
Bulgaria	12 900 (11 300–15 200)	122.6 (104.7–145.3)	24.8 (17.1–34.4)	16.7 (10.8–23.1)	24.9 (10.6–44.7)	1.5 (1.2–1.8)	18.2 (12.3–24.8)	12.1 (0.3–27.9)
Croatia	19 000 (16 900–21 100)	271.3 (237.6–309.8)	55.1 (42.9–69.0)	36.2 (24.0–49.6)	54.8 (37.9–73.7)	5.4 (4.3–6.2)	41.6 (29.5–54.7)	27.2 (14.4–39.4)
Czechia	29 400 (26 100–34 200)	187.5 (161.3–219.2)	38.7 (32.0–46.1)	25.3 (16.6–35.4)	38.7 (20.6–58.1)	2.7 (2.2–3.2)	27.9 (19.2–38.0)	18.7 (1.6–31.6)
Hungary	35 200 (32 100–38 600)	227.4 (203.8–255.0)	24.1 (15.9–31.0)	30.5 (20.7–41.9)	25.6 (12.6–38.3)	6.3 (4.9–7.7)	36.8 (27.4–48.4)	-4.9 (-17.0–6.8)
Montenegro	1 390 (1 220–1 640)	162.1 (140.3–192.2)	24.2 (18.9–30.8)	21.9 (14.0–29.4)	23.8 (7.6–41.0)	3.6 (2.7–4.8)	25.4 (17.5–33.1)	17.3 (2.2–32.7)
North Macedonia	3 730 (3 250–4 480)	125.3 (107.4–151.2)	39.6 (31.6–48.7)	17.0 (11.1–23.5)	38.2 (21.8–57.5)	0.9 (0.6–1.2)	17.8 (12.0–24.7)	27.4 (9.6–43.5)
Poland	148 000 (131 000–170 000)	256.7 (224.1–296.4)	-6.6 (-10.6–-3.5)	34.5 (23.1–47.0)	-5.8 (-11.2–-1.5)	7.9 (6.6–8.8)	42.4 (31.1–55.3)	-34.0 (-40.8–-28.0)
Romania	37 300 (32 400–44 700)	130.8 (110.9–158.6)	49.7 (41.5–58.8)	17.8 (12.3–24.7)	49.3 (34.3–69.7)	0.0 (0.0–0.1)	17.8 (12.3–24.8)	48.9 (34.1–69.1)
Serbia	22 000 (19 800–25 200)	167.6 (145.9–193.4)	52.2 (40.6–67.1)	22.4 (15.3–30.5)	50.3 (31.0–69.7)	4.2 (3.2–5.6)	26.6 (18.9–34.9)	25.3 (9.9–45.7)
Slovakia	11 000 (9 730–12 700)	138.9 (120.1–162.5)	39.3 (29.2–50.3)	18.9 (12.3–25.6)	38.8 (21.4–59.2)	3.0 (2.2–4.0)	21.9 (15.0–28.6)	13.1 (-1.0–26.1)
Slovenia	11 200 (10 200–12 600)	314.2 (281.0–356.6)	40.6 (30.9–52.8)	41.7 (28.3–56.8)	40.6 (27.1–59.6)	6.9 (5.1–8.7)	48.6 (34.9–62.7)	1.1 (-11.3–10.5)
Eastern Europe	514 000 (450 000–588 000)	176.6 (152.3–204.0)	22.0 (19.1–25.3)	23.7 (15.9–31.8)	22.1 (18.3–26.4)	9.7 (8.9–10.5)	33.4 (25.5–41.3)	12.7 (8.1–17.1)
Belarus	17 400 (15 300–20 800)	127.2 (109.7–154.3)	53.2 (39.6–64.9)	17.1 (11.3–23.2)	53.0 (32.7–74.5)	0.6 (0.4–0.7)	17.7 (11.9–23.8)	51.3 (31.6–71.4)
Estonia	7 110 (6 520–7 710)	360.3 (323.2–396.8)	28.7 (19.3–38.6)	48.3 (33.7–64.2)	29.2 (18.2–43.8)	17.4 (14.3–20.9)	65.7 (50.6–80.9)	10.7 (0.3–23.0)
Latvia	7 720 (6 990–8 520)	266.5 (236.6–302.2)	24.7 (16.7–36.0)	35.8 (24.1–48.1)	25.1 (10.3–42.4)	15.3 (12.5–18.3)	51.1 (40.1–63.8)	12.6 (0.4–25.8)
Lithuania	13 300 (12 200–14 500)	315.0 (284.3–347.3)	20.0 (10.8–28.8)	42.1 (28.3–57.5)	19.7 (7.6–35.2)	21.9 (18.0–25.3)	64.0 (50.7–79.5)	15.7 (4.2–29.5)
Republic of Moldova	6 420 (5 580–7 460)	124.7 (106.4–144.7)	43.6 (33.1–57.4)	16.9 (11.5–23.9)	43.0 (22.6–63.3)	5.5 (4.8–6.4)	22.4 (16.7–29.9)	41.8 (26.2–57.5)
Russia	403 000 (352 000–458 000)	200.5 (172.7–229.9)	17.5 (14.5–20.9)	26.9 (18.0–35.9)	17.6 (13.9–21.3)	11.2 (10.1–12.3)	38.1 (29.1–47.2)	8.2 (2.7–12.3)

Ukraine	59 500 (51 400–71 900)	95.3 (79.8–116.5)	27.4 (20.5–34.3)	12.9 (8.7–18.1)	27.8 (10.6–47.9)	6.2 (4.6–7.6)	19.1 (14.7–24.1)	20.3 (3.4–39.5)
HIGH INCOME	4 920 000 (4 520 000–5 450 000)	288.1 (262.6–324.0)	11.3 (9.6–12.8)	38.3 (26.3–50.2)	10.8 (9.3–12.6)	7.1 (6.4–7.5)	45.4 (33.5–57.6)	-5.7 (-10.5–-2.6)
Australasia	158 000 (143 000–178 000)	355.6 (318.1–406.9)	13.0 (7.2–18.4)	47.1 (32.1–63.3)	13.3 (4.2–20.7)	8.8 (7.8–9.5)	55.9 (41.1–72.6)	-5.7 (-13.9–-0.7)
Australia	129 000 (117 000–145 000)	347.2 (309.7–396.4)	17.0 (9.8–24.3)	46.0 (31.2–62.1)	17.1 (6.2–26.3)	8.7 (7.7–9.5)	54.6 (40.1–71.1)	-3.1 (-12.7–3.2)
New Zealand	29 000 (26 000–33 300)	397.9 (352.9–460.3)	-1.8 (-6.5–4.0)	52.8 (36.0–70.9)	-1.0 (-8.0–5.0)	9.6 (8.3–10.6)	62.3 (45.5–80.8)	-15.9 (-24.2–-11.2)
High income Asia Pacific	910 000 (810 000–1 040 000)	266.9 (236.7–312.9)	-8.1 (-11.1–-5.1)	36.1 (24.1–48.9)	-7.5 (-11.0–-3.5)	7.1 (6.1–7.8)	43.3 (31.4–56.4)	-23.8 (-29.3–-19.6)
Brunei	962 (841–1130)	230.6 (205.6–264.8)	29.0 (22.9–36.6)	30.8 (21.3–41.7)	27.9 (16.3–41.1)	20.5 (14.9–26.5)	51.3 (38.5–63.6)	-3.8 (-19.4–12.9)
Japan	696 000 (621 000–799 000)	281.8 (245.9–335.7)	-10.4 (-13.2–-7.0)	38.2 (25.1–51.9)	-9.7 (-12.5–-6.2)	8.2 (7.1–8.8)	46.3 (33.6–60.3)	-23.6 (-28.0–-19.5)
South Korea	202 000 (183 000–227 000)	236.0 (213.5–267.0)	40.7 (35.1–47.1)	31.9 (21.9–43.0)	39.7 (25.3–54.5)	3.8 (2.9–5.2)	35.7 (25.4–47.9)	-5.0 (-21.5–7.2)
Singapore	12 000 (10 100–14 300)	147.8 (123.6–175.2)	33.1 (26.4–40.9)	20.4 (13.6–28.0)	34.6 (18.4–54.2)	0.9 (0.8–1.1)	21.3 (14.7–29.0)	15.1 (1.7–30.2)
High income North America	1 620 000 (1 490 000–1 750 000)	300.5 (278.5–322.3)	18.2 (16.7–19.6)	39.3 (27.5–51.8)	16.7 (14.3–20.1)	7.0 (6.3–7.4)	46.3 (34.4–58.9)	4.3 (0.8–7.4)
Canada	193 000 (187 000–198 000)	332.5 (324.1–341.1)	34.6 (31.2–37.2)	44.4 (29.8–58.6)	33.9 (23.9–44.9)	7.5 (6.7–8.2)	51.9 (37.0–66.1)	14.4 (5.1–22.4)
Greenland	157 (140–178)	217.8 (194.3–247.6)	57.1 (47.3–65.8)	29.1 (19.4–38.3)	57.4 (38.9–80.1)	8.8 (6.0–14.6)	37.9 (26.8–49.8)	37.9 (23.4–54.7)
USA	1 440 000 (1 310 000–1 560 000)	296.8 (272.0–321.0)	16.4 (14.6–17.7)	38.7 (27.1–51.1)	14.8 (12.3–18.2)	6.9 (6.2–7.3)	45.6 (34.0–57.9)	3.0 (-0.2–5.7)
Southern Latin America	210 000 (187 000–237 000)	266.1 (235.3–302.1)	62.0 (54.5–72.3)	35.5 (23.5–48.1)	61.5 (49.7–73.6)	10.0 (9.2–10.7)	45.5 (33.5–58.0)	32.9 (22.5–41.9)
Argentina	112 000 (97 800–128 000)	219.4 (190.8–251.3)	48.5 (39.8–61.2)	29.4 (19.5–39.9)	48.7 (34.4–64.9)	8.7 (8.0–9.4)	38.2 (28.3–49.0)	31.0 (20.0–42.6)
Chile	88 200 (79 300–97 800)	377.5 (336.2–420.4)	73.8 (62.3–87.0)	50.0 (33.3–67.3)	72.6 (57.7–89.1)	11.7 (10.2–12.7)	61.7 (45.2–78.9)	23.5 (10.6–34.8)
Uruguay	9890 (8700–11 200)	218.3 (189.9–252.8)	40.7 (32.4–47.5)	29.2 (19.3–39.8)	40.4 (26.9–55.4)	15.4 (14.2–16.6)	44.5 (34.4–54.9)	28.9 (19.4–38.8)
Western Europe	2 020 000 (1 840 000–2 290 000)	284.9 (252.4–328.7)	11.0 (9.3–12.5)	38.0 (25.7–50.5)	10.9 (8.4–13.3)	6.5 (5.9–7.0)	44.5 (32.4–57.2)	-7.1 (-12.8–-2.9)

Andorra	210 (179-249)	168.5 (142.6-197.8)	13.5 (7.5-19.2)	22.8 (14.9-31.5)	12.0 (-0.8-26.8)	0.8 (0.6-1.1)	23.6 (15.7-32.3)	8.2 (-3.5-21.2)
Austria	37 700 (33 600-43 000)	270.7 (234.2-311.2)	4.8 (-0.5-10.7)	36.3 (23.9-49.8)	5.1 (-6.6-15.6)	4.5 (4.0-5.0)	40.9 (28.4-54.0)	-11.0 (-20.5-3.6)
Belgium	46 400 (41 000-53 200)	263.3 (226.3-308.2)	13.1 (7.7-18.6)	35.1 (23.7-46.9)	12.7 (1.8-22.2)	5.2 (4.4-5.9)	40.3 (29.0-52.0)	0.1 (-7.7-7.8)
Cyprus	7170 (6440-8100)	379.4 (336.4-433.1)	27.1 (20.1-34.5)	50.3 (33.6-67.3)	26.4 (17.9-37.3)	12.3 (9.5-15.5)	62.7 (44.9-80.2)	-8.1 (-26.4-3.6)
Denmark	35 800 (32 800-39 500)	356.8 (319.3-402.7)	34.2 (26.5-42.1)	47.4 (32.3-62.3)	35.3 (23.3-48.8)	9.3 (8.1-10.5)	56.7 (41.7-71.9)	18.8 (8.7-30.9)
Finland	45 000 (40 600-49 500)	457.8 (412.4-513.6)	25.5 (20.0-34.1)	60.8 (41.2-83.3)	25.5 (14.4-37.4)	14.8 (13.3-16.0)	75.6 (56.0-98.7)	-8.2 (-17.6-3.3)
France	235 000 (212 000-268 000)	218.0 (192.1-253.2)	21.5 (14.0-27.4)	28.9 (19.8-38.5)	21.6 (11.9-31.8)	4.7 (4.1-5.3)	33.6 (24.4-43.3)	-1.1 (-10.4-9.3)
Germany	327 000 (281 000-381 000)	237.4 (197.5-279.0)	17.0 (9.8-23.7)	31.9 (20.9-42.5)	16.4 (4.7-26.0)	4.7 (4.1-5.3)	36.6 (25.8-47.6)	1.8 (-7.5-10.8)
Greece	35 800 (31 100-40 900)	226.0 (194.5-256.2)	17.2 (12.2-23.7)	30.6 (20.0-40.8)	17.2 (6.4-29.1)	3.0 (2.7-3.3)	33.6 (23.1-44.0)	15.4 (5.7-25.6)
Iceland	1300 (1140-1470)	274.5 (235.3-315.4)	16.6 (11.0-23.2)	37.1 (24.7-50.0)	16.8 (4.8-31.6)	4.6 (4.0-5.2)	41.7 (29.2-54.6)	1.4 (-7.1-11.4)
Ireland	37 800 (34 700-41 900)	538.7 (485.3-601.1)	21.5 (14.5-28.3)	71.4 (47.6-95.7)	20.9 (12.3-29.8)	13.9 (11.8-15.3)	85.3 (61.7-109.2)	-2.8 (-13.7-4.0)
Israel	22 200 (19 300-26 300)	212.5 (183.1-253.7)	28.1 (19.8-36.9)	28.6 (18.7-38.5)	26.0 (10.3-44.7)	3.2 (2.8-3.5)	31.7 (22.1-41.8)	17.2 (4.5-31.8)
Italy	263 000 (230 000-304 000)	241.2 (209.4-288.3)	-1.8 (-4.1-0.2)	32.2 (21.4-43.6)	-1.3 (-4.2-1.4)	6.3 (5.7-6.7)	38.5 (28.0-50.0)	-6.6 (-10.0-4.2)
Luxembourg	2130 (1890-2450)	238.2 (209.4-276.8)	16.4 (10.5-21.9)	31.8 (20.7-42.6)	15.8 (5.0-26.5)	4.0 (3.5-4.5)	35.7 (24.5-46.3)	-0.9 (-9.6-7.1)
Malta	1590 (1400-1840)	226.1 (193.8-266.1)	18.3 (11.9-27.3)	30.5 (19.6-41.0)	17.6 (5.6-31.3)	4.2 (3.5-4.8)	34.7 (24.0-45.0)	1.1 (-10.1-11.2)
Monaco	101 (87.1-118)	170.5 (144.2-202.2)	10.0 (5.4-16.5)	23.2 (15.5-31.1)	9.6 (-2.6-20.3)	0.4 (0.3-0.6)	23.6 (15.9-31.5)	8.9 (-2.9-19.3)
Netherlands	109 000 (97 900-122 000)	375.2 (332.1-425.9)	2.9 (-2.3-8.5)	49.7 (33.8-67.0)	2.3 (-6.5-13.2)	10.3 (8.9-11.2)	60.0 (44.5-77.7)	-16.7 (-24.6-8.7)
Norway	32 200 (28 200-36 800)	382.5 (336.3-445.6)	-11.5 (-15.5-6.9)	50.8 (33.8-66.1)	-10.8 (-14.7-5.9)	8.0 (7.0-8.8)	58.8 (42.0-74.4)	-29.7 (-35.9-24.2)
Portugal	46 900 (42 300-53 500)	270.4 (239.7-313.9)	45.0 (34.3-54.3)	36.2 (24.0-48.0)	44.7 (26.7-60.2)	5.9 (4.9-6.6)	42.2 (30.2-54.3)	17.6 (4.4-29.2)

San Marino	74.8 (62.8–88.2)	162.3 (132.7–193.3)	9.9 (5.2–14.3)	22.1 (14.2–30.2)	11.2 (-0.0–23.0)	2.1 (1.5–3.0)	24.3 (16.5–32.4)	7.9 (-2.5–19.2)
Spain	177 000 (165 000–188 000)	233.5 (216.5–248.5)	20.5 (13.8–25.9)	31.2 (21.2–40.4)	20.0 (9.4–29.4)	4.1 (3.4–4.7)	35.3 (25.3–44.8)	1.9 (-7.8–10.3)
Sweden	55 600 (50 000–62 200)	327.8 (294.8–371.6)	-10.3 (-13.3–7.1)	43.9 (29.2–58.2)	-10.1 (-15.7–5.9)	7.4 (6.7–8.2)	51.3 (37.0–66.0)	-20.9 (-26.0–16.1)
Switzerland	43 600 (38 900–50 100)	300.2 (262.1–353.7)	9.8 (4.5–15.1)	39.9 (26.2–53.5)	9.4 (1.8–19.4)	4.9 (4.1–5.5)	44.8 (31.4–58.8)	-6.3 (-14.1–1.2)
UK	458 000 (414 000–512 000)	446.7 (405.1–509.7)	7.7 (6.4–8.9)	59.5 (40.4–78.2)	7.4 (6.0–8.9)	12.3 (11.2–13.0)	71.8 (53.1–90.8)	-16.2 (-22.4–11.8)
LATIN AMERICA AND CARIBBEAN	1 690 000 (1 500 000–1 930 000)	269.7 (238.8–306.6)	24.2 (21.2–26.5)	36.1 (24.5–48.7)	24.0 (20.7–27.8)	12.7 (11.5–13.7)	48.7 (37.0–61.4)	8.2 (3.6–12.6)
Andean Latin America	268 000 (241 000–301 000)	427.8 (385.9–479.2)	63.1 (54.8–70.6)	57.5 (38.3–77.5)	61.6 (50.5–73.6)	10.7 (8.8–12.2)	68.2 (48.5–87.9)	34.5 (20.9–45.0)
Bolivia	31 700 (27 500–36 100)	305.9 (267.9–345.4)	59.2 (48.0–69.3)	40.7 (27.7–55.3)	57.6 (41.6–75.3)	16.8 (13.0–22.2)	57.4 (44.1–71.8)	22.7 (4.1–40.9)
Ecuador	54 100 (47 100–60 900)	326.9 (286.7–366.1)	63.2 (53.3–75.0)	43.5 (28.5–59.0)	61.6 (47.8–79.0)	13.0 (9.6–15.3)	56.5 (41.3–72.0)	21.9 (7.2–33.4)
Peru	182 000 (160 000–207 000)	517.8 (456.6–586.6)	66.7 (54.7–78.0)	69.9 (46.7–94.4)	65.3 (52.1–83.6)	8.4 (6.6–10.7)	78.3 (54.0–102.4)	45.1 (27.7–58.8)
Caribbean	79 800 (70 300–93 800)	153.4 (134.9–180.5)	32.3 (27.4–36.7)	20.5 (14.0–27.5)	30.8 (23.4–40.6)	8.6 (7.4–10.6)	29.1 (22.0–37.3)	14.2 (5.8–21.9)
Antigua and Barbuda	154 (133–182)	146.9 (127.0–172.2)	38.7 (28.4–47.3)	19.6 (12.7–26.9)	36.2 (20.0–57.3)	8.3 (7.2–9.1)	27.9 (20.8–34.9)	33.8 (20.6–50.7)
Bahamas	647 (553–775)	151.7 (130.6–180.8)	27.9 (19.7–36.7)	20.3 (14.0–28.3)	27.1 (12.2–47.8)	8.4 (7.0–9.7)	28.7 (22.2–37.1)	9.8 (-0.0–24.2)
Barbados	977 (875–1110)	224.6 (196.7–259.4)	36.6 (28.5–44.3)	30.1 (19.7–41.5)	36.2 (20.2–54.1)	13.8 (11.5–16.9)	43.9 (33.6–55.4)	29.3 (16.6–46.0)
Belize	558 (466–651)	155.0 (132.5–178.5)	39.7 (31.8–49.5)	20.9 (12.8–28.1)	38.7 (21.6–57.9)	8.4 (6.6–9.8)	29.3 (21.5–36.3)	33.0 (15.8–49.9)
Bermuda	191 (169–224)	180.2 (154.7–217.2)	36.5 (28.5–43.3)	24.1 (16.1–32.2)	35.3 (22.3–50.6)	4.8 (3.9–5.7)	28.9 (20.6–37.1)	16.5 (4.6–28.2)
Cuba	33 500 (29 800–39 100)	204.3 (177.8–242.2)	41.9 (29.9–52.2)	27.5 (19.0–37.6)	41.4 (27.0–61.0)	8.7 (7.5–10.2)	36.2 (27.5–47.1)	28.1 (14.9–41.1)
Dominica	110 (94.9–126)	133.1 (113.7–153.0)	24.2 (16.6–31.9)	17.9 (11.9–25.0)	23.4 (8.9–40.0)	8.6 (6.7–10.8)	26.5 (19.9–33.4)	18.8 (7.1–31.4)
Dominican Republic	10 000 (8490–12 000)	97.6 (83.6–115.8)	29.8 (25.0–34.5)	13.0 (8.7–17.0)	28.0 (11.2–48.5)	7.3 (5.3–9.3)	20.3 (15.5–25.3)	-2.4 (-22.2–13.8)

Grenada	121 (102–143)	105.8 (89.3–124.7)	50.4 (41.0–59.3)	14.2 (9.5–18.9)	47.9 (31.7–74.7)	3.7 (3.2–4.2)	18.0 (13.2–22.9)	31.1 (18.9–49.8)
Guyana	631 (529–749)	85.9 (72.7–101.3)	35.3 (28.5–43.9)	11.5 (7.7–15.7)	33.2 (15.8–54.9)	3.8 (3.0–4.8)	15.3 (11.5–19.6)	69.6 (45.9–103.8)
Haiti	9610 (7940–11 400)	98.9 (84.2–114.3)	24.9 (17.7–31.0)	13.1 (8.9–18.3)	22.7 (7.9–37.9)	12.5 (7.1–21.0)	25.7 (18.2–36.6)	-4.0 (-17.6–15.3)
Jamaica	3950 (3380–4560)	129.2 (110.6–149.1)	40.3 (33.0–50.9)	17.5 (11.4–24.2)	38.8 (24.5–58.2)	6.3 (5.0–8.1)	23.8 (17.7–29.8)	35.3 (20.5–50.2)
Puerto Rico	11 600 (10 100–13 400)	216.6 (185.8–256.7)	56.5 (47.0–68.7)	29.0 (18.9–40.0)	54.4 (36.9–73.4)	6.0 (5.1–6.9)	35.0 (25.0–46.0)	27.9 (13.4–40.3)
Saint Kitts and Nevis	122 (107–141)	171.2 (150.9–196.0)	41.1 (31.5–50.7)	22.9 (14.8–30.4)	40.8 (21.6–58.7)	12.9 (10.4–15.0)	35.7 (27.5–43.7)	15.2 (0.6–31.9)
Saint Lucia	333 (290–385)	154.2 (134.7–178.4)	36.8 (29.9–44.7)	20.5 (13.6–27.4)	35.6 (19.3–57.9)	9.4 (7.7–11.1)	29.9 (22.7–37.6)	13.7 (2.8–27.1)
Saint Vincent and the Grenadines	127 (108–153)	96.7 (81.7–116.5)	28.4 (21.2–36.3)	13.0 (8.8–18.7)	28.0 (7.5–43.9)	3.8 (3.3–4.3)	16.8 (12.3–22.8)	8.5 (-5.8–21.8)
Suriname	530 (452–641)	84.9 (72.3–102.5)	28.0 (19.8–35.7)	11.5 (7.6–16.3)	26.4 (12.2–43.4)	2.5 (1.9–3.1)	14.0 (9.9–18.7)	16.2 (4.0–32.0)
Trinidad and Tobago	3690 (3270–4100)	208.1 (183.2–232.2)	33.8 (27.2–42.5)	27.7 (18.8–38.1)	33.1 (18.8–48.7)	14.4 (11.5–18.1)	42.2 (33.4–51.8)	4.6 (-7.0–17.0)
Virgin Islands	190 (164–222)	132.8 (112.1–157.9)	33.3 (26.8–40.9)	17.9 (11.6–24.1)	33.1 (18.2–51.1)	3.7 (2.9–5.2)	21.6 (15.5–28.5)	19.7 (2.0–37.0)
Central Latin America	915 000 (809 000–1 020 000)	357.2 (316.8–398.0)	23.8 (20.6–26.9)	47.5 (32.9–64.1)	24.0 (19.8–28.6)	20.6 (18.2–23.2)	68.2 (53.1–84.8)	3.5 (-2.2–9.1)
Colombia	129 000 (116 000–145 000)	241.3 (216.0–270.8)	51.2 (39.9–64.8)	32.6 (22.5–45.0)	51.1 (35.1–69.2)	10.1 (8.6–12.0)	42.8 (32.3–55.2)	10.7 (-2.6–23.0)
Costa Rica	19 300 (17 200–21 700)	359.8 (319.2–404.9)	63.6 (51.4–78.6)	47.9 (32.3–64.4)	61.4 (46.2–80.5)	13.8 (11.2–16.4)	61.6 (46.6–78.5)	39.7 (28.8–51.5)
El Salvador	9190 (7820–10 900)	150.8 (128.3–179.4)	57.3 (47.2–66.7)	20.2 (13.5–26.6)	55.9 (37.8–73.0)	4.5 (3.4–5.8)	24.7 (17.8–31.8)	35.1 (17.7–52.6)
Guatemala	27 000 (23 200–30 300)	197.2 (171.4–221.0)	79.4 (68.1–91.7)	26.2 (17.1–35.0)	77.4 (59.0–105.0)	12.9 (11.1–14.6)	39.0 (30.0–48.0)	35.1 (18.1–48.1)
Honduras	27 000 (24 200–29 900)	362.6 (329.6–399.5)	55.8 (47.4–67.1)	48.1 (32.2–63.8)	53.4 (39.4–73.6)	32.5 (24.3–46.3)	80.6 (60.3–100.7)	35.4 (10.0–58.5)
Mexico	584 000 (506 000–662 000)	453.0 (393.8–512.7)	13.2 (9.4–17.1)	60.0 (40.9–81.4)	13.4 (9.6–18.5)	28.0 (24.0–32.7)	88.0 (67.3–109.2)	-2.9 (-9.7–2.9)
Nicaragua	12 900 (11 400–15 000)	240.0 (214.3–274.3)	45.2 (38.4–52.3)	31.8 (21.3–41.9)	43.5 (30.1–57.1)	13.0 (10.6–16.0)	44.8 (33.5–54.8)	24.2 (12.3–37.4)

Panama	8060 (6980–9500)	186.6 (161.8–220.0)	36.5 (29.0–44.3)	24.9 (16.7–34.0)	34.6 (18.7–56.4)	7.9 (6.7–9.4)	32.8 (24.1–41.9)	20.7 (7.9–34.4)
Venezuela	98 100 (88 100–110 000)	315.9 (284.4–354.1)	43.3 (33.2–54.3)	42.3 (28.9–59.3)	42.3 (26.9–62.8)	18.4 (14.9–22.9)	60.7 (47.4–75.6)	19.4 (4.6–31.6)
Tropical Latin America	430 000 (370 000–505 000)	169.0 (144.8–197.8)	0.8 (-2.0–3.9)	22.8 (15.0–32.3)	0.7 (-3.9–6.6)	6.2 (5.6–6.6)	28.9 (21.4–38.5)	-1.3 (-4.9–4.1)
Brazil	410 000 (350 000–481 000)	165.6 (141.2–193.9)	-1.0 (-3.7–1.9)	22.3 (14.7–31.7)	-1.1 (-5.8–4.8)	5.9 (5.4–6.3)	28.2 (20.8–37.8)	-3.4 (-7.3–1.8)
Paraguay	20 100 (17 600–23 500)	306.9 (270.6–354.7)	68.9 (56.8–83.7)	41.2 (28.2–57.3)	67.2 (49.9–87.7)	16.0 (11.8–20.8)	57.2 (43.5–72.1)	72.0 (46.3–97.7)
NORTH AFRICA AND MIDDLE EAST	683 000 (599 000–797 000)	116.8 (104.2–134.6)	50.1 (46.3–54.6)	15.7 (10.7–21.5)	48.2 (41.1–57.4)	3.0 (2.6–3.9)	18.8 (13.6–24.8)	27.8 (18.3–36.9)
North Africa and Middle East	683 000 (599 000–797 000)	116.8 (104.2–134.6)	50.1 (46.3–54.6)	15.7 (10.7–21.5)	48.2 (41.1–57.4)	3.0 (2.6–3.9)	18.8 (13.6–24.8)	27.8 (18.3–36.9)
Afghanistan	16 700 (13 600–19 700)	67.9 (57.3–78.6)	25.4 (18.7–33.4)	9.1 (6.0–12.6)	23.1 (5.5–43.4)	8.7 (4.4–14.9)	17.8 (13.1–24.0)	34.3 (7.9–66.7)
Algeria	33 800 (28 300–40 600)	79.2 (66.7–94.6)	55.0 (45.7–66.4)	10.8 (7.0–14.5)	53.8 (25.6–78.4)	1.9 (1.4–2.5)	12.6 (8.8–16.4)	50.8 (30.0–74.3)
Bahrain	3620 (3030–4310)	203.2 (177.9–231.2)	67.2 (53.3–83.5)	27.0 (18.2–37.0)	64.3 (45.8–84.8)	4.2 (3.2–5.3)	31.3 (22.5–40.5)	81.0 (62.8–110.1)
Egypt	97 600 (80 600–116 000)	108.5 (90.8–128.2)	60.4 (50.8–72.2)	14.6 (9.8–19.8)	57.9 (34.2–84.2)	1.5 (1.2–1.9)	16.1 (11.3–21.3)	43.8 (25.1–65.8)
Iran	82 700 (69 100–100 000)	89.0 (75.5–107.0)	39.8 (35.6–44.5)	12.0 (8.0–16.5)	39.1 (31.2–46.7)	1.4 (1.2–1.8)	13.4 (9.5–18.0)	34.8 (26.2–43.2)
Iraq	37 500 (31 100–45 500)	104.5 (89.3–125.0)	39.7 (29.7–50.9)	14.0 (9.5–19.6)	38.5 (18.0–61.7)	0.7 (0.5–1.0)	14.8 (10.2–20.2)	29.4 (10.5–52.6)
Jordan	11 600 (9550–14 000)	108.5 (91.6–129.0)	52.3 (42.0–64.1)	14.6 (9.7–20.6)	50.5 (28.3–75.1)	1.0 (0.8–1.3)	15.6 (10.6–21.5)	43.3 (22.5–68.4)
Kuwait	13 200 (11 000–15 700)	233.7 (200.6–271.9)	63.0 (48.4–76.6)	31.4 (21.5–43.0)	60.8 (44.5–81.2)	4.2 (3.5–5.2)	35.7 (25.7–47.1)	74.5 (57.9–97.4)
Lebanon	9020 (7630–10 600)	163.8 (139.0–191.3)	46.5 (38.9–56.3)	21.7 (14.7–29.8)	44.4 (25.1–64.8)	1.1 (0.8–1.3)	22.8 (15.7–30.8)	29.0 (10.7–50.9)
Libya	7290 (6050–8760)	98.1 (82.5–116.3)	48.7 (40.9–59.4)	13.3 (8.7–18.8)	46.6 (27.7–67.5)	3.4 (2.3–4.8)	16.7 (12.1–22.7)	59.4 (40.9–84.5)
Morocco	33 600 (28 800–40 300)	88.9 (76.6–106.5)	50.2 (39.7–61.8)	11.9 (8.2–16.6)	46.0 (25.4–68.5)	3.7 (1.6–7.0)	15.6 (10.6–21.9)	48.5 (24.8–70.3)
Oman	3660 (2980–4570)	84.2 (71.8–101.8)	78.1 (69.6–88.5)	11.4 (7.5–16.0)	75.9 (54.4–103.3)	1.4 (0.8–3.0)	12.8 (8.7–17.8)	62.6 (40.2–90.9)

Palestine	3940 (3300–4750)	104.0 (87.8–124.7)	37.4 (28.0–45.2)	14.0 (9.3–20.3)	36.4 (16.4–58.6)	1.4 (1.1–1.8)	15.4 (10.6–21.7)	22.1 (5.6–39.2)
Qatar	3330 (2680–4240)	108.7 (91.1–132.7)	60.7 (52.1–73.6)	14.6 (9.7–20.0)	57.5 (43.3–74.6)	0.7 (0.5–1.1)	15.4 (10.3–21.0)	48.5 (35.3–63.2)
Saudi Arabia	37 800 (31 100–46 500)	94.7 (80.2–113.9)	73.5 (62.9–85.5)	12.7 (8.3–17.7)	69.2 (49.2–95.4)	1.7 (1.2–2.6)	14.4 (9.9–19.6)	61.5 (38.9–86.6)
Sudan	23 800 (19 500–28 700)	75.7 (64.0–91.0)	52.2 (43.3–62.6)	10.3 (6.8–14.0)	49.9 (27.0–76.4)	3.1 (2.1–5.1)	13.3 (9.5–18.4)	44.8 (22.7–75.2)
Syria	14 700 (12 300–18 000)	103.6 (86.5–126.5)	56.4 (45.0–69.0)	14.0 (8.9–20.5)	53.3 (32.4–80.2)	2.3 (1.7–3.1)	16.3 (11.3–23.0)	47.0 (27.8–70.6)
Tunisia	13 100 (11 000–15 800)	98.1 (82.0–118.5)	50.5 (40.6–61.9)	13.2 (8.7–18.4)	47.1 (27.6–68.8)	1.6 (0.8–2.3)	14.8 (10.2–19.5)	46.7 (26.5–68.5)
Türkiye	210 000 (189 000–231 000)	218.9 (197.5–240.5)	58.8 (50.3–71.6)	29.5 (20.1–40.7)	57.6 (40.7–76.0)	6.3 (4.8–8.5)	35.8 (26.7–46.3)	15.5 (-0.4–31.9)
United Arab Emirates	11 700 (9510–14 400)	100.1 (85.3–120.5)	49.4 (43.0–58.3)	13.7 (9.2–18.3)	49.3 (34.3–68.5)	2.5 (1.9–3.4)	16.2 (11.5–21.2)	15.9 (-1.1–36.1)
Yemen	13 700 (11 300–16 400)	59.9 (50.5–70.8)	29.5 (20.6–39.0)	8.2 (5.3–11.5)	29.4 (10.0–52.5)	3.1 (2.1–4.8)	11.3 (7.9–15.2)	35.5 (17.1–62.6)
SOUTH ASIA	3 250 000 (2 850 000–3 820 000)	204.8 (181.7–238.1)	41.3 (37.8–44.5)	26.7 (18.2–35.5)	40.9 (37.2–44.7)	13.9 (10.4–19.9)	40.6 (31.2–49.6)	10.2 (0.4–20.1)
South Asia	3 250 000 (2 850 000–3 820 000)	204.8 (181.7–238.1)	41.3 (37.8–44.5)	26.7 (18.2–35.5)	40.9 (37.2–44.7)	13.9 (10.4–19.9)	40.6 (31.2–49.6)	10.2 (0.4–20.1)
Bangladesh	212 000 (179 000–248 000)	138.0 (117.1–160.5)	57.5 (48.0–65.6)	18.5 (12.3–25.0)	55.4 (35.4–77.1)	10.1 (6.8–16.4)	28.5 (20.8–37.5)	2.5 (-17.2–23.2)
Bhutan	1400 (1200–1650)	208.5 (180.5–241.2)	54.4 (46.2–62.7)	27.7 (18.7–38.2)	54.3 (39.4–74.8)	14.3 (9.0–20.2)	42.0 (30.8–54.7)	14.7 (-2.5–36.0)
India	2 670 000 (2 350 000–3 140 000)	212.2 (186.9–246.8)	42.3 (38.5–45.6)	27.5 (18.8–36.7)	42.4 (38.4–45.8)	13.8 (10.4–19.7)	41.4 (31.7–50.8)	9.7 (-2.4–20.2)
Nepal	48 600 (41 000–57 100)	187.4 (161.3–217.9)	62.3 (55.8–71.5)	24.6 (16.5–33.1)	61.1 (41.1–80.8)	13.7 (8.9–21.6)	38.3 (28.6–48.6)	27.6 (3.8–55.8)
Pakistan	319 000 (273 000–380 000)	190.2 (165.6–225.5)	3.5 (0.0–7.8)	25.5 (16.8–34.3)	3.0 (-4.7–10.4)	19.6 (12.2–28.0)	45.1 (32.7–56.9)	8.4 (-7.0–24.6)
SOUTHEAST ASIA, EAST ASIA, AND OCEANIA	5 360 000 (4 750 000–6 280 000)	195.2 (171.4–228.9)	15.4 (12.5–18.0)	26.4 (17.7–35.9)	15.7 (12.4–19.0)	8.8 (7.2–10.7)	35.2 (26.7–44.7)	1.1 (-8.3–9.1)
East Asia	4 830 000 (4 290 000–5 630 000)	238.4 (208.8–279.4)	16.6 (13.2–19.5)	32.3 (21.6–44.1)	17.1 (13.7–20.9)	10.3 (8.5–12.6)	42.6 (32.4–54.4)	1.5 (-9.3–9.8)
China	4 700 000 (4 170 000–5 490 000)	240.3 (210.0–282.1)	16.6 (13.1–19.5)	32.6 (21.8–44.5)	17.2 (13.5–21.1)	10.3 (8.5–12.7)	42.9 (32.5–54.8)	1.5 (-9.6–10.2)

North Korea	68 900 (61 800–78 600)	207.9 (187.4–237.4)	30.7 (23.1–40.7)	28.2 (19.4–39.0)	30.0 (15.5–45.3)	15.7 (12.3–20.5)	44.0 (34.6–57.1)	18.5 (-2.7–38.3)
Taiwan (province of China)	63 300 (61 900–64 900)	166.7 (163.1–170.9)	3.1 (-8.3–18.6)	22.5 (15.7–29.6)	2.1 (-12.9–23.1)	6.9 (5.7–8.2)	29.4 (23.0–35.8)	-15.4 (-24.8–3.7)
Oceania	5460 (4470–6710)	50.5 (42.1–60.7)	18.0 (13.8–22.4)	7.0 (4.7–10.0)	16.3 (7.6–27.7)	0.0 (0.0–0.1)	7.1 (4.8–10.1)	16.2 (7.4–27.6)
American Samoa	45.7 (38.1–55)	85.9 (72.0–103.7)	25.4 (18.9–34.5)	11.8 (7.7–16.3)	23.7 (7.8–45.7)	0.0 (0.0–0.1)	11.8 (7.8–16.4)	23.0 (7.3–44.2)
Cook Islands	15.5 (12.7–19.2)	73.2 (60.0–90.8)	41.8 (34.2–49.4)	10.0 (6.7–14.0)	38.2 (21.8–59.5)	0.0 (0.0–0.0)	10.0 (6.7–14.0)	38.2 (21.8–59.6)
Fiji	467 (376–573)	51.4 (41.6–62.9)	23.5 (17.9–30.1)	7.3 (4.6–10.0)	22.3 (7.1–38.4)	0.0 (0.0–0.0)	7.3 (4.6–10.0)	22.2 (7.0–38.2)
Guam	144 (120–178)	78.1 (65.0–97.0)	34.5 (25.5–42.8)	10.8 (7.1–15.7)	32.4 (14.8–52.9)	0.0 (0.0–0.0)	10.8 (7.1–15.7)	32.2 (14.6–52.6)
Kiribati	50 (41–61.2)	49.1 (41.2–59.2)	18.1 (12.7–24.7)	6.9 (4.5–9.7)	17.0 (3.7–31.6)	0.0 (0.0–0.0)	6.9 (4.5–9.7)	16.9 (3.6–31.5)
Marshall Islands	33.2 (27.4–39.7)	66.1 (55.8–78.3)	30.0 (22.9–37.3)	9.1 (6.0–12.7)	28.9 (11.1–46.4)	0.0 (0.0–0.1)	9.1 (6.1–12.7)	28.8 (11.3–46.5)
Micronesia (Federated States of)	73.8 (61.3–88.9)	79.9 (67.0–96.3)	41.2 (33.0–50.3)	11.0 (7.1–15.0)	39.8 (18.9–63.7)	0.1 (0.0–0.1)	11.1 (7.2–15.1)	39.5 (18.5–63.2)
Nauru	6.32 (5.13–7.71)	81.8 (69.4–97.7)	29.9 (22.9–35.5)	11.1 (7.3–15.5)	28.7 (10.5–49.6)	0.1 (0.0–0.1)	11.2 (7.3–15.6)	29.0 (10.9–49.6)
Niue	1.55 (1.33–1.85)	79.9 (68.2–95.3)	36.8 (29.0–43.3)	10.9 (6.8–15.5)	33.4 (16.1–52.5)	0.0 (0.0–0.0)	10.9 (6.8–15.5)	33.3 (16.1–52.2)
Northern Mariana Islands	47.9 (40.7–58.5)	85.9 (71.6–104.5)	17.7 (12.1–23.9)	11.8 (7.8–16.9)	17.2 (2.7–34.6)	0.3 (0.2–0.7)	12.3 (8.1–17.5)	18.2 (3.3–36.3)
Palau	20.6 (17.5–24.6)	87.5 (73.6–103.8)	31.5 (25.4–40.1)	11.9 (7.4–17.0)	29.2 (12.7–48.2)	0.1 (0.0–0.1)	12.0 (7.5–17.1)	28.5 (12.2–46.8)
Papua New Guinea	3620 (2940–4460)	46.1 (38.4–55.6)	17.6 (12.1–23.3)	6.4 (4.3–9.3)	15.8 (4.3–31.1)	0.0 (0.0–0.1)	6.5 (4.3–9.3)	15.7 (4.2–30.9)
Samoa	137 (112–165)	76.5 (63.5–91.8)	24.3 (18.0–32.1)	10.6 (6.9–14.5)	23.7 (8.7–41.5)	0.0 (0.0–0.1)	10.6 (6.9–14.5)	23.6 (8.8–41.3)
Solomon Islands	332 (265–398)	66.9 (55.6–79.7)	34.3 (28.4–42.2)	9.3 (5.9–13.0)	32.9 (17.2–54.9)	0.1 (0.0–0.1)	9.3 (5.9–13.0)	32.7 (17.4–54.3)
Tokelau	0.994 (0.826–1.2)	70.7 (58.6–86.2)	37.7 (28.6–45.5)	9.7 (6.4–13.3)	36.2 (16.9–52.8)	0.0 (0.0–0.0)	9.8 (6.5–13.4)	36.9 (17.4–53.4)
Tonga	64.7 (53.1–78.4)	74.0 (61.2–89.4)	28.4 (21.7–37.0)	10.3 (6.6–14.2)	26.9 (6.6–46.5)	0.0 (0.0–0.1)	10.3 (6.6–14.2)	26.7 (6.3–46.3)

Tuvalu	7.63 (6.45–9.19)	66.7 (56.5–80.2)	35.5 (28.6–45.5)	9.2 (6.1–12.9)	34.1 (17.6–55.7)	0.0 (0.0–0.1)	9.2 (6.1–12.9)	33.7 (17.2–55.3)
Vanuatu	140 (115–167)	59.5 (49.9–71.1)	25.2 (17.2–32.6)	8.3 (5.4–11.5)	25.4 (13.2–40.5)	0.0 (0.0–0.1)	8.4 (5.4–11.6)	25.4 (13.1–40.4)
Southeast Asia	525 000 (446 000–638 000)	74.9 (64.2–90.2)	34.8 (31.1–39.0)	10.3 (6.8–13.9)	33.6 (27.8–40.2)	3.6 (2.6–4.1)	13.8 (10.1–17.3)	17.1 (7.2–24.7)
Cambodia	10 700 (9 050–12 900)	73.6 (63.7–87.5)	53.8 (45.3–65.8)	10.0 (6.7–14.0)	52.4 (31.4–73.4)	6.2 (3.4–7.9)	16.3 (11.8–20.2)	19.9 (1.3–41.8)
Indonesia	121 000 (101 000–151 000)	45.7 (38.1–55.9)	26.1 (22.4–30.2)	6.4 (4.2–8.8)	24.3 (18.4–30.5)	2.6 (1.0–3.6)	9.0 (6.5–11.5)	21.3 (9.3–34.4)
Laos	4140 (3500–4960)	70.8 (61.1–83.6)	46.8 (39.2–55.9)	9.7 (6.4–13.2)	46.4 (28.3–69.1)	5.3 (2.8–7.5)	15.0 (10.9–19.9)	9.0 (-8.5–32.8)
Malaysia	15 900 (13 400–19 500)	50.4 (42.5–61.1)	35.0 (27.7–42.2)	6.9 (4.5–9.7)	32.5 (17.1–49.6)	1.0 (0.8–1.6)	8.0 (5.5–10.9)	15.0 (-1.3–31.3)
Maldives	485 (395–595)	104.5 (89.6–122.8)	38.4 (28.0–47.8)	14.2 (9.4–19.3)	38.2 (20.5–55.0)	4.1 (3.2–5.1)	18.4 (13.4–23.9)	1.5 (-20.3–22.8)
Mauritius	1630 (1390–1940)	94.8 (80.8–113.1)	50.5 (39.2–61.0)	12.6 (8.3–17.9)	46.4 (26.3–68.0)	6.1 (5.2–6.9)	18.7 (14.3–23.9)	108.8 (79.5–154.7)
Myanmar	40 400 (34 700–48 700)	75.4 (65.4–89.8)	53.4 (44.7–63.5)	10.2 (6.8–14.6)	49.8 (33.5–70.1)	4.7 (2.7–6.0)	14.9 (10.8–19.6)	14.7 (-1.3–34.1)
Philippines	86 000 (71 800–104 000)	89.5 (76.4–108.2)	-10.2 (-11.5–9.0)	12.1 (8.1–16.4)	-9.9 (-12.8–6.8)	6.0 (4.5–7.0)	18.1 (13.8–22.5)	-10.1 (-15.7–3.2)
Seychelles	77.8 (65.3–93.8)	64.2 (53.8–76.9)	33.8 (25.5–42.8)	8.9 (5.7–12.5)	32.3 (13.6–51.7)	0.6 (0.5–0.8)	9.6 (6.3–13.1)	27.4 (10.4–43.7)
Sri Lanka	14 100 (11 700–17 300)	55.2 (45.8–67.7)	36.2 (28.8–42.5)	7.6 (4.8–10.4)	32.8 (13.1–51.1)	0.6 (0.5–0.8)	8.2 (5.4–11.1)	26.4 (10.6–42.4)
Thailand	101 000 (84 300–118 000)	100.6 (83.1–119.2)	49.6 (41.8–57.3)	13.7 (9.0–18.7)	49.8 (28.8–66.9)	3.9 (3.0–5.0)	17.6 (12.8–22.8)	14.4 (-5.0–33.7)
Timor-Leste	622 (521–748)	64.1 (54.7–76.4)	41.4 (34.9–50.1)	8.7 (5.9–11.8)	39.7 (23.5–62.9)	4.6 (2.4–6.2)	13.3 (9.7–17.5)	21.5 (4.1–41.8)
Viet Nam	128 000 (108 000–153 000)	120.5 (103.0–142.1)	63.5 (54.2–73.6)	16.3 (10.3–21.8)	61.7 (42.2–85.7)	4.1 (2.3–5.5)	20.4 (14.6–26.1)	39.7 (18.1–59.4)
SUB-SAHARAN AFRICA	641 000 (538 000–765 000)	96.3 (83.8–113.2)	3.8 (2.0–5.4)	12.9 (8.7–17.4)	3.3 (1.0–6.1)	2.3 (1.9–4.7)	15.2 (10.9–19.5)	-5.8 (-10.8–0.5)
Central sub-Saharan Africa	78 900 (66 300–93 100)	103.5 (89.9–118.3)	19.4 (15.3–23.4)	13.7 (9.5–18.4)	19.4 (10.9–33.5)	0.9 (0.3–9.5)	14.6 (10.0–23.2)	13.5 (0.6–26.8)
Angola	18 200 (15 300–21 400)	109.6 (95.4–124.9)	28.9 (23.6–34.3)	14.6 (9.8–19.5)	27.7 (11.6–41.5)	0.9 (0.2–9.7)	15.5 (10.3–24.1)	20.9 (2.6–35.6)

Central African Republic	3080 (2630–3590)	96.4 (85.6–109.5)	3.3 (-3.0–8.8)	12.7 (8.6–17.2)	3.0 (-9.4–16.5)	1.2 (0.4–13.8)	13.9 (9.2–25.8)	-1.1 (-13.8–11.4)
Congo	5380 (4650–6210)	144.3 (128.7–159.8)	24.8 (17.6–32.0)	19.1 (13.3–26.1)	24.0 (9.4–35.2)	0.9 (0.3–10.4)	20.0 (13.7–29.3)	17.2 (-2.8–29.6)
Democratic Republic of the Congo	48 900 (40 900–57 700)	96.4 (83.4–110.8)	15.2 (9.7–22.0)	12.7 (8.7–17.0)	15.5 (4.5–37.0)	0.9 (0.3–9.1)	13.6 (9.2–21.9)	10.2 (-3.8–29.3)
Equatorial Guinea	1130 (942–1340)	153.8 (133.6–174.4)	76.9 (67.2–88.4)	20.2 (13.1–27.0)	77.1 (53.3–100.3)	0.7 (0.2–8.6)	20.9 (13.4–29.5)	59.6 (2.2–91.0)
Gabon	2220 (1900–2590)	164.9 (145.5–188.3)	41.9 (34.7–50.8)	21.8 (14.9–30.4)	41.2 (27.5–56.1)	0.8 (0.3–9.2)	22.6 (15.4–32.2)	33.5 (6.8–50.5)
Eastern sub-Saharan Africa	197 000 (164 000–236 000)	85.5 (74.6–98.9)	11.7 (9.6–13.3)	11.5 (7.6–15.3)	11.7 (8.5–14.8)	0.5 (0.2–5.5)	12.0 (8.0–17.0)	7.6 (-0.6–12.4)
Burundi	5090 (4280–6060)	77.6 (67.9–89.6)	7.6 (3.4–12.9)	10.6 (7.2–14.4)	8.5 (-3.5–26.9)	0.5 (0.1–5.3)	11.1 (7.5–15.8)	3.7 (-11.4–20.7)
Comoros	530 (453–629)	92.2 (80.0–107.1)	18.4 (12.9–24.8)	12.4 (8.4–16.8)	17.6 (2.9–38.8)	0.5 (0.2–5.7)	12.9 (8.7–19.2)	13.8 (-0.3–33.1)
Djibouti	777 (641–921)	89.5 (76.6–103.3)	24.3 (18.1–32.5)	11.9 (7.7–15.7)	22.9 (8.7–40.2)	0.5 (0.1–4.6)	12.4 (8.0–17.5)	19.2 (4.0–37.2)
Eritrea	3290 (2800–3880)	85.4 (76.3–98.2)	18.1 (13.0–24.3)	11.3 (7.2–15.5)	16.9 (3.3–34.0)	0.6 (0.2–6.1)	11.9 (7.5–17.5)	12.4 (-3.9–27.3)
Ethiopia	45 800 (37 800–55 700)	76.6 (66.7–90.2)	-6.3 (-9.5–3.4)	10.3 (6.8–14.1)	-5.2 (-10.6–0.8)	0.4 (0.1–4.8)	10.8 (7.1–15.2)	-9.6 (-16.9–2.2)
Kenya	27 600 (23 000–33 500)	88.2 (76.6–104.0)	10.3 (8.3–12.3)	11.8 (7.9–16.0)	10.2 (6.9–14.1)	0.5 (0.2–5.0)	12.3 (8.2–17.7)	8.5 (4.4–12.5)
Madagascar	11 800 (9780–14 100)	74.2 (63.3–85.3)	17.1 (11.3–23.4)	10.0 (6.5–13.1)	16.5 (1.7–32.2)	0.4 (0.1–3.8)	10.4 (6.7–14.3)	12.9 (-1.9–29.2)
Malawi	9420 (7780–11 200)	93.3 (80.3–107.3)	21.7 (16.8–27.4)	12.4 (8.2–16.4)	21.4 (5.9–37.1)	0.6 (0.2–7.3)	13.1 (8.4–20.3)	17.2 (1.1–31.9)
Mozambique	13 100 (10 900–15 600)	86.5 (74.9–100.8)	21.0 (15.5–27.0)	11.4 (7.5–15.8)	19.9 (3.5–36.5)	0.7 (0.2–6.7)	12.2 (7.8–17.9)	16.0 (-0.0–32.0)
Rwanda	8280 (6970–9760)	102.2 (88.4–117.1)	29.5 (23.0–37.3)	13.7 (9.1–18.7)	28.1 (13.2–48.4)	0.5 (0.2–5.4)	14.2 (9.3–19.7)	20.0 (-0.6–42.8)
Somalia	8080 (6760–9520)	80.5 (70.8–91.7)	2.3 (-2.3–7.5)	10.8 (6.9–14.5)	1.8 (-10.8–15.7)	1.0 (0.3–9.0)	11.7 (7.5–20.2)	-1.8 (-13.2–11.7)
South Sudan	4280 (3560–5080)	80.3 (69.6–93.1)	16.7 (10.9–22.4)	10.7 (7.2–14.5)	17.0 (2.3–35.5)	0.6 (0.2–5.7)	11.3 (7.5–16.6)	13.7 (-0.4–31.1)
Uganda	18 400 (15 400–21 800)	90.7 (79.1–104.1)	25.0 (18.1–32.0)	12.1 (8.1–16.6)	23.8 (9.5–39.3)	0.5 (0.2–4.9)	12.6 (8.4–17.5)	20.5 (5.9–36.0)

Tanzania	31 000 (25 700–36 400)	94.2 (81.2–108.3)	21.9 (16.0–28.4)	12.7 (8.2–16.6)	22.0 (9.4–38.3)	0.4 (0.1–4.6)	13.1 (8.5–18.4)	17.3 (4.0–34.2)
Zambia	9690 (7810–11 600)	94.8 (80.7–110.0)	27.1 (19.6–33.2)	12.7 (8.3–17.1)	26.5 (13.5–43.6)	0.5 (0.2–4.9)	13.2 (8.7–17.7)	20.8 (2.7–37.4)
Southern sub-Saharan Africa	188 000 (163 000–215 000)	260.5 (227.9–296.1)	-10.0 (-12.2–8.2)	34.6 (23.4–46.8)	-11.0 (-14.5–7.4)	15.9 (13.8–18.2)	50.5 (39.0–61.9)	-18.8 (-24.5–9.9)
Botswana	3720 (3140–4340)	184.2 (160.4–210.6)	33.2 (27.1–40.8)	24.4 (16.4–32.7)	31.1 (17.4–45.5)	9.0 (2.5–12.5)	33.4 (24.8–42.6)	-0.0 (-20.1–19.6)
Eswatini	1640 (1400–1890)	198.4 (173.6–224.0)	13.0 (6.3–18.9)	26.2 (17.7–35.4)	10.8 (-2.1–25.4)	17.1 (4.4–31.0)	43.3 (29.8–59.6)	-1.0 (-16.0–22.8)
Lesotho	2810 (2380–3250)	167.2 (144.7–188.6)	19.1 (12.7–26.6)	22.0 (14.4–30.6)	16.7 (5.6–30.1)	16.5 (5.4–24.3)	38.5 (27.7–49.6)	21.3 (-0.7–52.2)
Namibia	2990 (2480–3490)	163.2 (137.2–187.6)	26.9 (21.2–33.6)	21.7 (13.7–29.4)	25.1 (10.7–41.6)	10.6 (3.2–16.3)	32.3 (22.9–42.4)	2.6 (-15.2–16.6)
South Africa	166 000 (144 000–189 000)	299.5 (262.3–340.7)	-13.6 (-16.0–11.6)	39.8 (27.0–54.1)	-14.5 (-18.4–11.0)	16.8 (14.5–19.7)	56.6 (43.0–69.9)	-23.2 (-28.6–14.3)
Zimbabwe	10 800 (9030–12 600)	102.4 (87.5–118.1)	1.2 (-4.0–7.3)	13.8 (9.4–19.5)	0.9 (-12.2–17.0)	12.4 (6.4–17.3)	26.2 (19.2–33.5)	12.1 (-3.4–35.7)
Western sub-Saharan Africa	177 000 (144 000–220 000)	61.3 (51.6–75.1)	25.9 (22.5–29.4)	8.4 (5.5–11.7)	24.7 (19.9–30.2)	0.1 (0.1–0.2)	8.5 (5.7–11.9)	24.3 (19.9–29.8)
Benin	4800 (3890–5900)	63.7 (52.9–77.5)	25.3 (18.6–32.9)	8.6 (5.8–12.1)	23.1 (7.8–44.8)	0.1 (0.0–0.1)	8.7 (5.9–12.2)	22.0 (7.4–43.8)
Burkina Faso	8130 (6510–10 100)	59.3 (49.6–72.0)	22.6 (15.1–33.1)	8.1 (5.4–11.3)	21.8 (4.5–39.3)	0.1 (0.0–0.2)	8.2 (5.5–11.4)	19.8 (2.2–37.7)
Cabo Verde	369 (298–452)	71.6 (58.7–86.6)	34.7 (28.6–42.0)	9.7 (6.4–13.4)	31.8 (13.5–54.3)	0.0 (0.0–0.1)	9.7 (6.4–13.4)	30.6 (12.8–53.4)
Cameroon	13 600 (10 900–16 800)	71.9 (60.1–87.8)	20.1 (14.2–26.2)	9.7 (6.1–12.7)	19.7 (2.5–39.6)	0.1 (0.0–0.2)	9.8 (6.2–12.8)	18.3 (1.7–37.3)
Chad	4210 (3360–5240)	48.6 (40.5–58.8)	11.3 (6.0–18.0)	6.6 (4.4–8.8)	10.3 (-0.7–25.0)	0.1 (0.0–0.2)	6.7 (4.5–9.0)	9.5 (-1.4–24.1)
Côte d'Ivoire	11 100 (8820–13 700)	64.8 (54.5–78.2)	25.8 (18.4–32.5)	8.8 (5.9–12.5)	26.8 (10.2–45.4)	0.1 (0.0–0.1)	8.9 (5.9–12.6)	25.7 (9.4–43.9)
Gambia	899 (709–1110)	63.6 (52.2–78.1)	27.7 (19.9–36.9)	8.5 (5.7–11.5)	24.6 (9.3–44.6)	0.1 (0.0–0.2)	8.6 (5.8–11.6)	23.4 (8.4–42.9)
Ghana	15 800 (12 800–19 800)	67.2 (55.8–82.3)	42.9 (34.8–53.4)	9.1 (6.1–12.7)	40.2 (20.5–67.2)	0.7 (0.3–1.4)	9.9 (6.9–13.5)	49.2 (28.5–75.2)
Guinea	4340 (3590–5300)	56.1 (47.4–67.4)	16.9 (10.7–23.5)	7.6 (4.8–10.6)	14.5 (-2.0–30.6)	0.1 (0.0–0.1)	7.7 (4.9–10.7)	13.7 (-2.5–29.3)

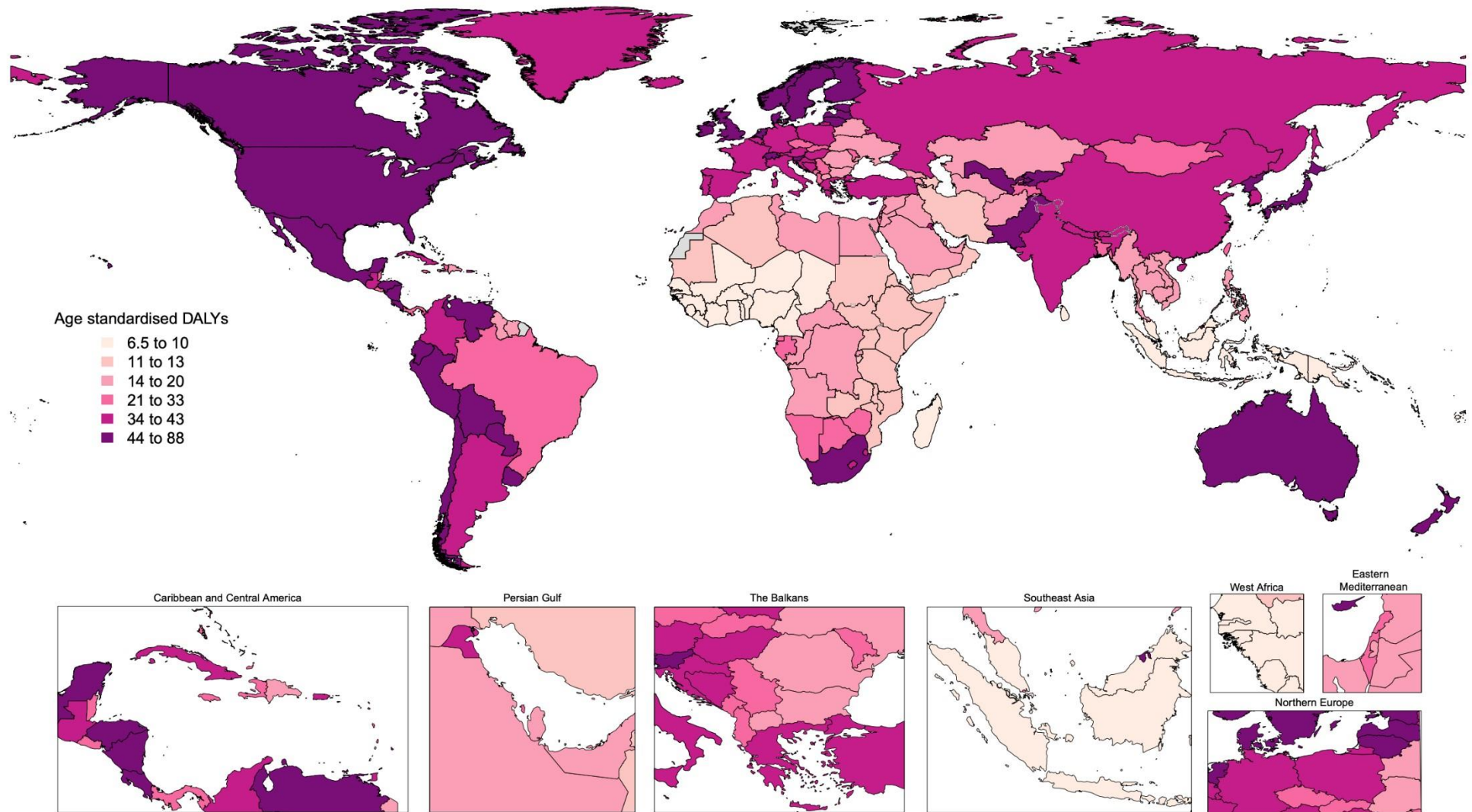
Guinea-Bissau	669 (536–827)	57.3 (48.8–68.8)	19.4 (12.8–27.4)	7.8 (5.1–10.8)	17.8 (3.3–36.0)	0.1 (0.0–0.2)	7.9 (5.2–10.9)	16.3 (1.3–33.5)
Liberia	2190 (1750–2660)	66.1 (54.7–79.4)	26.3 (19.4–34.6)	8.8 (5.8–12.5)	24.1 (8.7–42.6)	0.1 (0.0–0.2)	8.9 (5.9–12.6)	22.8 (6.7–41.2)
Mali	6800 (5400–8380)	53.5 (44.2–65.2)	20.7 (15.1–28.3)	7.3 (4.9–10.4)	20.6 (5.4–40.2)	0.1 (0.0–0.2)	7.4 (4.9–10.6)	18.8 (4.6–36.7)
Mauritania	2160 (1760–2640)	78.4 (65.1–95.1)	40.2 (31.8–48.2)	10.6 (6.7–14.9)	37.5 (21.8–53.9)	0.1 (0.0–0.1)	10.7 (6.8–15.0)	35.5 (20.1–51.2)
Niger	6020 (4830–7510)	50.3 (42.0–61.2)	17.7 (11.8–25.5)	6.9 (4.5–9.7)	15.8 (0.2–34.0)	0.1 (0.0–0.2)	7.0 (4.6–9.8)	14.3 (-1.2–32.7)
Nigeria	83 100 (67 800–104 000)	60.6 (51.4–74.9)	25.9 (22.0–30.5)	8.3 (5.5–11.6)	24.7 (19.3–30.2)	0.1 (0.0–0.1)	8.4 (5.6–11.7)	23.7 (18.5–28.9)
São Tomé and Príncipe	110 (89–137)	73.0 (61.4–89.0)	30.5 (21.4–36.4)	9.9 (6.3–13.8)	28.6 (16.2–49.6)	0.1 (0.0–0.1)	10.0 (6.3–13.9)	27.7 (15.5–48.1)
Senegal	6540 (5260–8180)	64.3 (53.0–79.4)	24.1 (18.7–33.2)	8.6 (5.7–12.2)	22.4 (7.9–39.5)	0.1 (0.0–0.1)	8.7 (5.8–12.3)	21.2 (7.1–39.2)
Sierra Leone	3030 (2460–3770)	56.2 (46.9–67.1)	16.5 (10.3–23.6)	7.7 (5.0–11.0)	17.7 (2.9–37.3)	0.1 (0.0–0.1)	7.8 (5.1–11.1)	16.8 (2.3–35.5)
Togo	3400 (2740–4090)	62.2 (51.6–73.8)	23.2 (17.0–30.7)	8.5 (5.5–11.7)	22.8 (6.0–37.7)	0.1 (0.0–0.1)	8.6 (5.6–11.8)	21.9 (5.4–36.5)

YLD = Years lived with disability; DALY = Disability Adjusted Life Years

Capitalised = GBD Super-regions; Bold = GBD Regions

Note: Super-region and region numbers do not sum to the global prevalence due to rounding and modelling adjustments for nations with populations below 50,000

Supplemental Figure 4: Age-standardised disability-adjusted life-years (DALYs) for rheumatoid arthritis per 100,000 population by location, 2020



Supplemental Table 7: Forecast of rheumatoid arthritis age-standardised prevalence and total cases globally and by region, both sexes, from 2020 to 2050

Region	Age-standardised prevalence (%)			Cases (millions)		
	2030	2040	2050	2030	2040	2050
Global	0.212 (0.186–0.247)	0.220 (0.188–0.265)	0.230 (0.189–0.289)	21.9 (19.5–25.1)	26.7 (22.9–31.6)	31.7 (25.8–39.0)
Andean Latin America	0.427 (0.382–0.484)	0.435 (0.382–0.506)	0.445 (0.387–0.533)	0.324 (0.291–0.362)	0.388 (0.343–0.449)	0.453 (0.383–0.544)
Australasia	0.346 (0.295–0.412)	0.346 (0.286–0.442)	0.353 (0.272–0.481)	0.178 (0.151–0.209)	0.202 (0.164–0.253)	0.229 (0.172–0.304)
Caribbean	0.152 (0.125–0.188)	0.152 (0.115–0.207)	0.153 (0.105–0.222)	0.0931 (0.0778–0.113)	0.106 (0.0834–0.140)	0.117 (0.0849–0.166)
Central Asia	0.192 (0.152–0.238)	0.199 (0.138–0.276)	0.206 (0.128–0.312)	0.234 (0.192–0.282)	0.294 (0.214–0.394)	0.349 (0.236–0.508)
Central Europe	0.199 (0.161–0.251)	0.199 (0.135–0.285)	0.199 (0.113–0.319)	0.355 (0.280–0.435)	0.359 (0.252–0.497)	0.346 (0.205–0.546)
Central Latin America	0.372 (0.317–0.441)	0.386 (0.313–0.492)	0.396 (0.301–0.535)	1.20 (1.05–1.40)	1.50 (1.25–1.86)	1.77 (1.39–2.26)
Central sub-Saharan Africa	0.127 (0.112–0.148)	0.151 (0.131–0.180)	0.174 (0.145–0.211)	0.149 (0.126–0.169)	0.266 (0.219–0.308)	0.439 (0.351–0.538)
East Asia	0.236 (0.199–0.281)	0.241 (0.196–0.293)	0.250 (0.198–0.327)	5.62 (4.85–6.60)	6.18 (5.10–7.51)	6.40 (5.20–8.24)
Eastern Europe	0.180 (0.151–0.227)	0.181 (0.140–0.248)	0.182 (0.116–0.265)	0.524 (0.445–0.645)	0.517 (0.412–0.684)	0.508 (0.353–0.722)
Eastern sub-Saharan Africa	0.123 (0.107–0.144)	0.163 (0.136–0.198)	0.207 (0.164–0.269)	0.473 (0.398–0.540)	0.991 (0.806–1.22)	1.87 (1.46–2.43)
High income Asia Pacific	0.256 (0.214–0.307)	0.255 (0.211–0.322)	0.258 (0.189–0.343)	0.909 (0.786–1.06)	0.909 (0.753–1.11)	0.877 (0.670–1.13)
High income North America	0.305 (0.262–0.355)	0.305 (0.238–0.395)	0.302 (0.209–0.431)	1.88 (1.62–2.19)	2.03 (1.62–2.68)	2.13 (1.53–3.16)
North Africa and Middle East	0.116 (0.102–0.138)	0.117 (0.101–0.144)	0.119 (0.0963–0.156)	0.881 (0.772–1.03)	1.10 (0.939–1.33)	1.31 (1.05–1.70)
Oceania	0.0506 (0.0410–0.0658)	0.0504 (0.0385–0.0688)	0.0503 (0.0338–0.0766)	0.00714 (0.00577–0.00911)	0.00917 (0.00684–0.0125)	0.0116 (0.00764–0.0171)
South Asia	0.231 (0.206–0.269)	0.255 (0.227–0.299)	0.277 (0.243–0.324)	4.88 (4.40–5.54)	6.98 (6.26–7.89)	9.43 (8.17–10.8)

Southeast Asia	0.0758 (0.0622–0.0936)	0.0764 (0.0615–0.0977)	0.0774 (0.0574–0.105)	0.680 (0.569–0.826)	0.817 (0.658–1.02)	0.922 (0.698–1.23)
Southern Latin America	0.262 (0.226–0.307)	0.261 (0.203–0.334)	0.260 (0.190–0.348)	0.241 (0.208–0.278)	0.272 (0.214–0.346)	0.295 (0.212–0.406)
Southern sub-Saharan Africa	0.277 (0.247–0.319)	0.290 (0.247–0.354)	0.302 (0.240–0.387)	0.256 (0.225–0.294)	0.335 (0.286–0.400)	0.416 (0.332–0.503)
Tropical Latin America	0.173 (0.136–0.225)	0.176 (0.118–0.268)	0.175 (0.101–0.308)	0.527 (0.422–0.682)	0.604 (0.405–0.888)	0.646 (0.370–1.07)
Western Europe	0.276 (0.239–0.326)	0.276 (0.219–0.346)	0.279 (0.199–0.378)	2.13 (1.86–2.49)	2.23 (1.81–2.77)	2.29 (1.71–3.10)
Western sub-Saharan Africa	0.0639 (0.0531–0.0776)	0.0664 (0.0542–0.0808)	0.0693 (0.0577–0.0848)	0.264 (0.221–0.318)	0.392 (0.331–0.476)	0.568 (0.465–0.704)

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Developing methods or computational machinery

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