

## Additional file 1

### The data sources, estimation and data table of appendicitis in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019

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## Section 1. Data sources

### 1.1 Data adjustment

In order to make the data more consistent and suitable for modelling, IHME corrected the claims and hospital discharges data, used a number of other adjustments to extracted nonfatal sources. In the second step of nonfatal estimation, commonly applied adjustments included age-sex splitting, bias correction, adjustments for underreporting of notification data, and computing expected values of excess mortality. Age-sex splitting was commonly utilized to literature data reported by age or sex but not by age and sex. For GBD 2019, IHME split all data reported in age groups with a width greater than 20 years, using age patterns from available survey microdata or regional patterns derived from an initial run of main modelling tool, DisMod-MR 2.1. For most of the bias correction of data for variations in study attributes, the meta-regression component of DisMod-MR 2.1 was applied, such as case definitions and measurement method. DisMod-MR 2.1 calculates a single adjustment that is applied regardless of age, sex, or location. IHME applied bias corrections to the data before entry into DisMod-MR 2.1, if enough data were available to differentiate these adjustments by age, sex, or location, or if detailed survey data were available to make more precise adjustments between different thresholds on a biochemical measure. Age-specific correction factors were derived, due to the relationship varied with age. The correction of notification data for underreporting relied on studies that had examined the gap between true incidence and notified cases.

In GBD 2019, IHME estimated expected values of excess mortality from prevalence or incidence and cause-specific mortality rate (CSMR) data for every cause for which deaths were estimated apart from deaths due to maternal causes and deaths due to non-maternal causes for women of reproductive age, live births and all-cause mortality estimates can be used to calculate deaths. IHME matched every prevalence data point (or incidence data for short-duration conditions) with the CSMR value corresponding to the age range, sex, year, and location of the data point. IHME restricted this to data points reporting age-groups spanning 20 years or less. The ratio of CSMR to prevalence (or incidence times a short duration) is conceptually equivalent to an excess mortality rate. To reflect a gradient in excess mortality, we added in all relevant models the log of lag distributed income (LDI) or the Healthcare Access and Quality (HAQ) index as a covariate, with a strong prior that as LDI or HAQ Index increases, excess mortality declines [1].

## **1.2 Data processing**

Hospital discharge data provide observations about encounters, generally with only the primary diagnostic code for the encounter. Claims data, on the other hand, link claims for all inpatient and outpatient encounters for a single individual, and provide primary and secondary diagnoses for all encounters. In GBD 2017, if an individual has one or more inpatients who have encountered the appropriate ICD code for any diagnosis, the individual is extracted from the claim data as an event case. Readmission within 28 days was considered to be due to the same onset of illness.

GBD 2019 improved data processing methods to capture cases that were diagnosed and/or treated in an outpatient setting. Specifically, incident cases were extracted from claim data if an individual had at least one inpatient or outpatient encounter with an appropriate ICD code as any diagnosis within one year. Data from hospital discharges were, then, adjusted using correction factors from claims, converting encounters to estimates of cases, accounting for most locations providing only primary diagnostic codes, and estimating outpatient cases from inpatient cases. The USA claims data from the year 2000 and from the years 2010-2016 were each adjusted to data from hospital discharges outside DisMod using MR-BRT analysis to adjust for selection bias due to commercial insurance. The table S2 below shows bias correction factors estimated using MR-BRT. Data points with an age-standardised incidence rate greater than three median absolute deviations from the median of the age-standardised incidence rate for all inpatient and non-USA claims data were marked as outliers and excluded from analysis [1].

## **Section 2. DisMod-MR 2.1 estimation**

### **2.1. DisMod-MR 2.1 analytical process**

Figure S1 shows the DisMod-MR 2.1 analytical process. IHME divided the sequence of estimation into five levels: global, super-region, region, country and, where applicable, subnational location. The super-region priors are generated at the global level with mixed-effects, nonlinear

regression using all available data; the super-region fit, in turn, informs the region fit, and so on down the cascade. The wrapper gives analysts the choice to branch the cascade in terms of time and sex at different levels depending on data density. The default used in most models is to branch by sex after the global fit but to retain all years of data until the lowest level in the cascade.

## 2.2. DisMod-MR 2.1 likelihood estimation

The Gaussian, log-Gaussian, Laplace or Log-Laplace likelihood function in DisMod-MR 2.1 was used to analyzed. The default log-Gaussian equation for the data likelihood is:

$$-\log[p(y_j|\Phi)] = \log(\sqrt{2\pi}) + \log(\delta_j + s_j) + \frac{1}{2 \left( \frac{\log(a_j + \eta_j) - \log(m_j + \eta_j)}{\delta_j + s_j} \right)^2}$$

where,  $y_j$  is a ‘measurement value’ (i.e., data point);  $\Phi$  denotes all model random variables;  $\theta_k$  is the offset value, eta, for particular ‘integrand’ (prevalence, incidence, remission, excess mortality rate, with-condition mortality rate, cause-specific mortality rate, relative risk or standardized mortality ratio) and  $b_k$  is the adjusted measurement for data point  $j$ , defined by:

$$a_j = e^{(-u_j - c_j)} y_j$$

where  $u_j$  is the total ‘area effect’ (i.e., the sum of the random effects at three levels of the cascade: super-region, region and country) and  $c_j$  is the total covariate effect (i.e., the mean combined fixed effects for sex, study covariates, and country level covariates), defined by:

$$c_j = \sum_{k=0}^{K[I(j)]-1} \beta_{I(j),k} X_{k,j}$$

with standard deviation

$$s_j = \sum_{l=0}^{L[I(j)]-1} \zeta_{I(j),l} Z_{k,j}$$

where  $k$  denotes the mean value of each data point in relation to a covariate (also called x-covariate);  $I(j)$  denotes a data point for a particular integrand,  $j$ ;  $\beta_{I(j),k}$  is the multiplier of the  $k^{\text{th}}$  x-covariate for the  $i^{\text{th}}$  integrand;  $X_{k,j}$  is the covariate value corresponding to the data point  $j$  for covariate  $k$ ;  $l$  denotes the standard deviation of each data point in relation to a covariate (also called z-covariate);  $\zeta_{I(j),l}$  is the multiplier of the  $l^{\text{th}}$  z-covariate for the  $i^{\text{th}}$  integrand; and  $\delta_j$  is the standard deviation for adjusted measurement  $j$ , defined by:

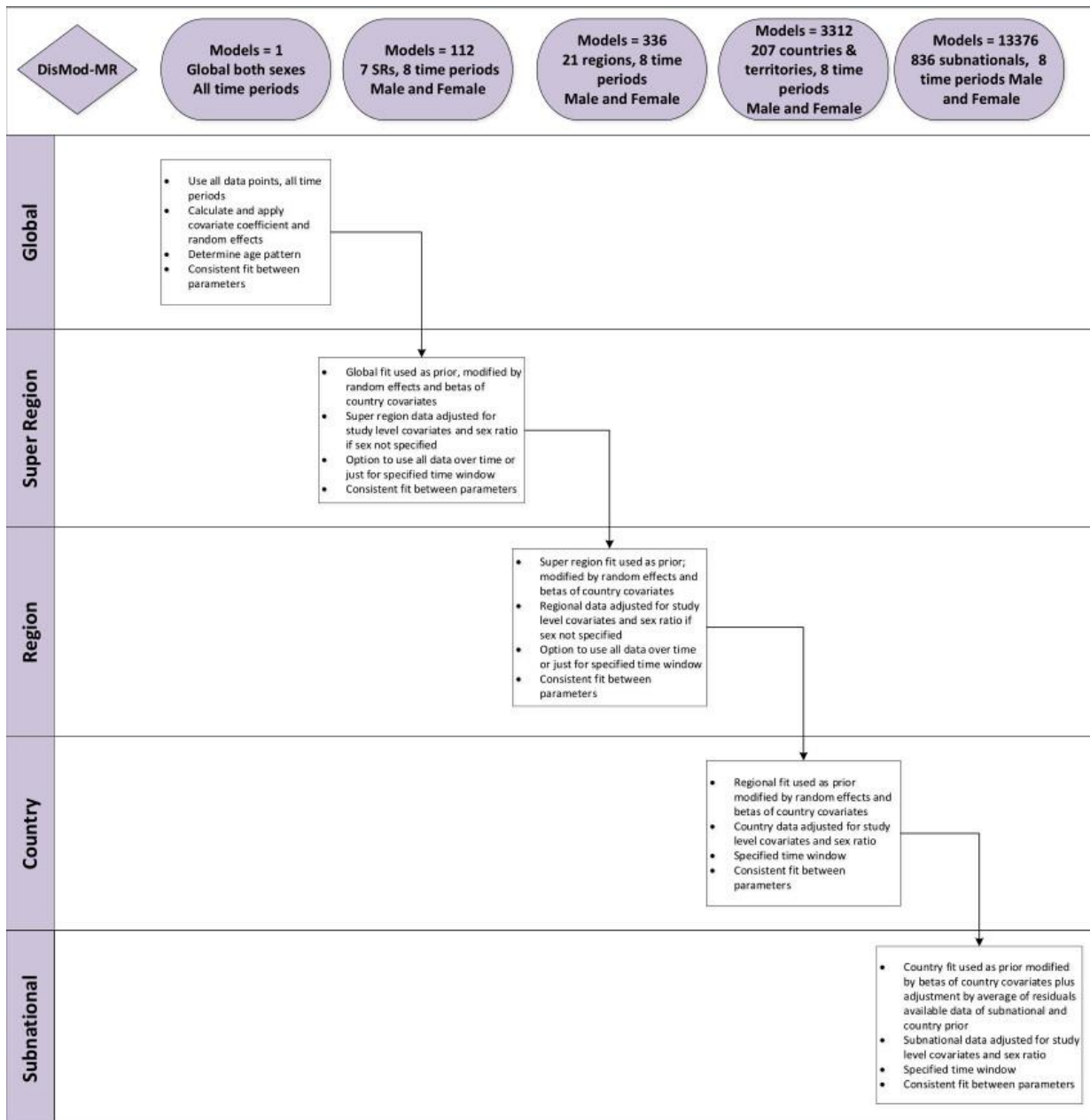
$$\delta_j = \log[y_j + e^{(-u_j - c_j)} \eta_j + c_j] - \log[y_j + e^{(-u_j - c_j)} \eta_j]$$

Where  $m_j$  denotes the model for the  $j^{\text{th}}$  measurement, not counting effects or measurement noise and defined by:

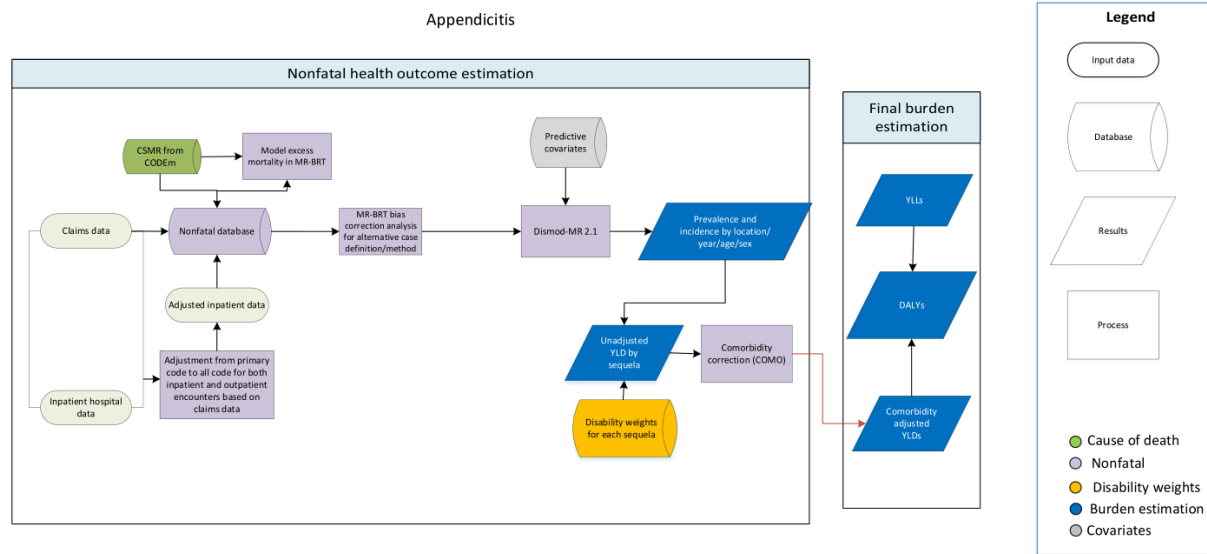
$$m_j = \frac{1}{B(j) - A(j)} \int_{A(j)}^{B(j)} I_j(a) da$$

where  $A(j)$  is the lower bound of the age range for a data point;  $B(j)$  is the upper bound of the age range for a data point; and  $I_j$  denotes the function of age corresponding to the integrand for data point  $j$  [1].





**Figure S1: GBD 2019 DisMod-MR 2.1 analytical cascade[1].**



**Figure S2: The flowcharts of estimation for appendicitis [1].**

**Table S1. Data Inputs for appendicitis morbidity modelling by parameter [1].**

Measure	Total sources	Countries with data
Incidence	297	46

**Table S2. MR-BRT Crosswalk Adjustment Factors for Appendicitis[1].**

Data input	Reference or alternative data collection	Gamma	Beta Coefficient, Log (95% CI)	Adjustment factor*
Hospital + non-USA claims	Ref	0.06	---	---
USA claims from year 2000	Alt		-0.57 (-0.30, -0.85)	0.56 (0.43, 0.74)
USA claims from year 2010-2016	Alt		-0.06 (-0.20, 0.08)	0.94 (0.82, 1.09)

\*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.

**Table S3: Summary of covariates used in the appendicitis DisMod-MR meta-regression model [1].**

Covariate	Type	Parameter	Exponentiated beta (95% Uncertainty Interval)
Fibre unadjusted (g)	Country-level	Incidence	1.00 (0.99, 1.00)
Healthcare access and quality index	Country-level	Excess mortality rate	0.94 (0.94, 0.94)

**Table S4. Covariates used in appendicitis mortality modelling [1].**

<b>Level</b>	<b>Covariate</b>	<b>Direction</b>
2	Age-sex-specific scaled exposure variable for low fruit consumption	+
	Age-sex-specific scaled exposure variable for low vegetable consumption	+
	Healthcare Access and Quality Index	-
3	Socio-demographic Index	-
	Education (years per capita)	-
	Log LDI (\$I per capita)	-

**Reference:**

1. **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.** *Lancet (London, England)* 2020, **396**(10258):1204-1222.

Table S5: Prevalent cases of appendicitis in 1990 and 2019 for both sexes and percentage change of age-standardised rates(ASR) by location

	1990		2019		Percentage change in ASR from 1990 and 2019
	Counts (95% UI)	Rate (95% UI)	Counts (95% UI)	Rate (95% UI)	
Global	409125(318852 to 520824)	7.2(5.7 to 9.1)	672203(536225 to 847977)	8.7(6.9 to 11)	20.8(18.9 to 23)
High-income North America	19400(15577 to 24258)	6.9(5.5 to 8.7)	21877(19671 to 24295)	6.2(5.5 to 6.9)	-10.4(-21.8 to 4)
Canada	1878(1455 to 2408)	6.7(5.1 to 8.7)	2412(1910 to 2983)	6.8(5.2 to 8.6)	0.8(-3.6 to 4.9)
Greenland	4(3 to 5)	6.3(4.8 to 8.2)	4(3 to 5)	6.8(5.3 to 8.7)	9.1(3.2 to 14.8)
United States of America	17518(14125 to 21827)	6.9(5.5 to 8.7)	19461(17635 to 21474)	6.1(5.5 to 6.8)	-11.6(-24.1 to 4.3)
Australasia	2173(1665 to 2899)	10.6(8.1 to 14.1)	2850(2247 to 3629)	10.8(8.4 to 14)	2.4(-2.1 to 6.4)
Australia	1772(1348 to 2385)	10.4(7.8 to 13.9)	2395(1859 to 3102)	10.7(8.2 to 14.1)	3.6(-1.2 to 7.9)
New Zealand	402(314 to 520)	11.6(9 to 14.8)	455(388 to 539)	11.4(9.6 to 13.7)	-1.9(-12.3 to 9.4)
High-income Asia Pacific	29564(21988 to 39011)	17.6(13.1 to 23.3)	22677(17978 to 28337)	17.2(13.1 to 22.1)	-2.6(-7.2 to 2.3)
Brunei Darussalam	46(34 to 61)	15.5(11.5 to 20.4)	74(56 to 96)	16.6(12.3 to 21.7)	7.1(1.8 to 13.2)
Japan	21116(15835 to 27687)	18.4(13.7 to 24.2)	14750(11843 to 18238)	17.3(13.4 to 21.9)	-6.2(-12.2 to 2.2)
Singapore	529(398 to 700)	16.3(12.2 to 21.3)	750(579 to 958)	16.7(12.4 to 22)	2(-3.4 to 7.1)
Republic of Korea	7873(5798 to 10502)	16(11.9 to 21)	7103(5457 to 9049)	17(12.6 to 22.4)	6.4(0 to 12.3)
Western Europe	34930(27014 to 45439)	9.5(7.3 to 12.4)	38356(31229 to 47142)	10.6(8.5 to 13.6)	12.1(6.6 to 18.3)
Andorra	6(4 to 7)	9.6(7.2 to 12.8)	7(6 to 9)	10(7.5 to 13.3)	4.3(-0.3 to 9.2)
Austria	1008(858 to 1171)	14.6(12.3 to 17.1)	1153(1067 to 1248)	16.7(15.3 to 18.2)	14.6(2.1 to 29.4)
Belgium	1008(778 to 1326)	10.7(8.2 to 14.3)	1235(1034 to 1463)	12.9(10.6 to 15.6)	20.3(4.9 to 37.2)
Cyprus	57(42 to 77)	8.2(6.2 to 10.7)	880(719 to 1050)	10.7(8.3 to 13.1)	29.9(12.6 to 52.1)
Denmark	496(384 to 646)	9.9(7.6 to 13.1)	541(417 to 696)	10.5(7.9 to 13.9)	5.6(1.2 to 9.9)

Finland	521(441 to 617)	10.9(9.2 to 13.1)	498(429 to 582)	10.3(8.7 to 12.3)	-5.7(-10.7 to -0.6)
France	5278(4011 to 6980)	9.5(7.2 to 12.6)	5654(4374 to 7300)	10(7.6 to 13.2)	5.6(0.8 to 10.2)
Germany	8419(6473 to 11013)	11.3(8.5 to 15)	9985(8081 to 12091)	14.8(11.6 to 18.4)	30.6(16 to 46.5)
Greece	923(693 to 1231)	9.3(6.9 to 12.4)	809(623 to 1036)	9.8(7.4 to 13.2)	5.6(0.8 to 10.6)
Iceland	27(20 to 35)	10.4(7.9 to 13.6)	37(29 to 48)	11.8(9 to 15.4)	13.4(6.7 to 20.8)
Ireland	344(259 to 468)	9.4(7.1 to 12.7)	437(334 to 566)	9.9(7.4 to 13.2)	5.4(0.3 to 9.8)
Israel	460(345 to 615)	9.1(6.8 to 12)	852(644 to 1136)	9.7(7.3 to 13)	6.6(1.3 to 11.5)
Italy	4356(3281 to 5758)	7.8(5.9 to 10.4)	3594(2974 to 4406)	8.4(6.7 to 10.6)	7.6(-4.1 to 23.9)
Luxembourg	44(35 to 55)	12.6(9.9 to 16.1)	66(57 to 75)	12.4(10.5 to 14.3)	-1.9(-14 to 14.2)
Malta	29(22 to 38)	8(5.9 to 10.6)	33(27 to 40)	9.3(7.5 to 11.4)	17(3.6 to 34.9)
Monaco	2(2 to 3)	9.3(7 to 12.5)	3(2 to 4)	9.7(7.3 to 12.9)	3.9(-0.1 to 8.9)
Netherlands	1459(1123 to 1925)	9.8(7.4 to 13.1)	1502(1170 to 1955)	10.1(7.7 to 13.4)	2.9(-1.7 to 8.2)
Norway	441(339 to 582)	10.8(8.2 to 14.2)	568(447 to 722)	11.8(9.1 to 15.2)	9.6(5.4 to 14)
San Marino	2(2 to 3)	9.5(7.1 to 12.5)	3(2 to 4)	10(7.5 to 13.4)	4.9(0.1 to 9.2)
Portugal	571(421 to 763)	5.7(4.2 to 7.6)	569(467 to 701)	6.8(5.4 to 8.6)	19.4(6.2 to 35.4)
Spain	3661(2769 to 4831)	9.4(7.1 to 12.5)	3839(2976 to 4866)	10.1(7.6 to 13.3)	7.2(2.7 to 11.8)
Sweden	967(744 to 1249)	12.5(9.4 to 16.4)	1187(925 to 1523)	13.8(10.3 to 18.1)	10.4(5.8 to 15.7)
Switzerland	786(660 to 925)	12.2(10.2 to 14.5)	934(810 to 1073)	12.5(10.6 to 14.6)	2.3(-1.7 to 7)
United Kingdom	4039(3185 to 5195)	7.6(5.8 to 9.8)	4730(3918 to 5828)	8(6.4 to 10)	5.8(0.8 to 11.5)
Southern Latin America	3914(2994 to 5125)	7.8(6 to 10.1)	7736(6046 to 9784)	11.7(9 to 14.9)	49.8(42 to 57.6)
Argentina	2538(1948 to 3295)	7.7(5.9 to 9.9)	5020(3872 to 6520)	11.1(8.5 to 14.5)	45.2(36.5 to 54.7)
Chile	1132(862 to 1499)	8.1(6.2 to 10.5)	2346(1896 to 2872)	13.2(10.5 to 16.2)	63.3(50.3 to 78.9)
Uruguay	244(189 to 319)	7.9(6.1 to 10.4)	370(284 to 471)	11.2(8.5 to 14.5)	40.8(33.5 to 48.3)
Eastern Europe	18490(14050 to 24211)	8.7(6.6 to 11.4)	18435(14229 to 23497)	10.4(7.8 to 13.6)	19.9(17.3 to 22.8)
Belarus	1186(920 to 1547)	11.8(9.1 to 15.5)	991(772 to 1242)	12.1(9.2 to 15.8)	2.4(-2.4 to 8.4)

Estonia	176(135 to 225)	11.8(9 to 15.3)	133(103 to 169)	12.1(9.2 to 16)	1.9(-3.3 to 7.1)
Latvia	311(243 to 395)	12.3(9.5 to 16.1)	203(165 to 248)	13.2(10.3 to 16.6)	6.6(-1 to 15.1)
Lithuania	444(347 to 570)	12.4(9.6 to 15.9)	304(244 to 369)	13.1(10.2 to 16.4)	5.4(-0.1 to 11.7)
Republic of Moldova	528(406 to 684)	12(9.2 to 15.6)	387(303 to 496)	11.8(9 to 15.5)	-1.7(-6.6 to 3.7)
Russian Federation	11097(8339 to 14504)	7.8(5.8 to 10.3)	12538(9621 to 16028)	10.2(7.6 to 13.3)	29.9(26.7 to 34.4)
Ukraine	4749(3634 to 6139)	9.8(7.4 to 12.8)	3878(2998 to 4932)	10.5(8 to 13.7)	7.8(2.1 to 14.1)
Central Europe	9298(7043 to 12032)	7.8(5.9 to 10.2)	7814(6451 to 9388)	8.4(6.7 to 10.4)	7.6(0.6 to 15.8)
Albania	284(210 to 382)	7.8(5.9 to 10.3)	203(151 to 262)	8.3(6.1 to 10.8)	5.9(-0.5 to 12.4)
Bosnia and Herzegovina	365(275 to 479)	7.9(5.9 to 10.4)	221(168 to 280)	7.9(5.8 to 10.5)	0.8(-4.4 to 6.5)
Bulgaria	664(504 to 859)	8.3(6.2 to 10.9)	481(377 to 595)	8.6(6.4 to 11.2)	3.9(-1 to 9)
Croatia	484(412 to 559)	9.4(7.3 to 12)	1234(972 to 1557)	12.2(9.3 to 15.7)	30.3(22.9 to 37.2)
Czechia	818(622 to 1064)	4.1(3.1 to 5.3)	1514(1094 to 2036)	5.2(3.9 to 7)	28.8(21.1 to 39)
Hungary	817(630 to 1052)	8.3(6.2 to 10.8)	689(537 to 876)	8.6(6.4 to 11.4)	3.7(-2.2 to 9.1)
North Macedonia	159(116 to 212)	7.8(5.6 to 10.3)	153(115 to 198)	8.1(6 to 10.7)	4.7(-1 to 10.3)
Montenegro	51(38 to 67)	8(5.9 to 10.6)	45(34 to 58)	8.2(6 to 10.7)	2(-2.6 to 8.6)
Poland	2550(1887 to 3382)	7(5.1 to 9.3)	2206(1893 to 2584)	7.1(5.9 to 8.5)	2.5(-11.1 to 20.3)
Romania	1839(1387 to 2390)	8(6 to 10.5)	1296(999 to 1646)	8.2(6.1 to 10.8)	2.7(-2.2 to 8.3)
Serbia	661(504 to 858)	7.4(5.5 to 9.6)	671(547 to 805)	9.1(7.2 to 11.3)	24.5(11.6 to 40.2)
Slovakia	438(324 to 578)	8.4(6.2 to 11)	443(352 to 550)	10(7.7 to 12.8)	19.2(9 to 29)
Slovenia	167(125 to 217)	8.8(6.5 to 11.5)	168(150 to 188)	10.6(9.2 to 12.1)	20.2(-1.6 to 50.7)
Central Asia	6897(5161 to 9046)	9.2(7 to 11.9)	8907(6690 to 11734)	9.4(7 to 12.3)	1.5(-2 to 5.4)
Armenia	307(228 to 404)	8.7(6.5 to 11.5)	261(200 to 339)	9.7(7.2 to 12.8)	11.2(5.7 to 17)
Azerbaijan	709(529 to 943)	8.8(6.7 to 11.6)	929(699 to 1240)	9.2(6.8 to 12.4)	3.8(-2.4 to 10.8)
Georgia	443(331 to 577)	8.2(6.2 to 10.8)	288(217 to 371)	9.3(6.8 to 12.3)	13(7.3 to 19.8)
Kazakhstan	1630(1221 to 2109)	9.5(7.2 to 12.3)	1679(1279 to 2193)	9.5(7.1 to 12.5)	0(-6.3 to 6.7)

Kyrgyzstan	403(293 to 540)	8.4(6.3 to 11)	632(468 to 841)	9.3(6.9 to 12.4)	10.6(4.7 to 16.5)
Mongolia	550(444 to 664)	21.1(17.4 to 25.3)	421(338 to 526)	12.7(10.1 to 16)	-39.7(-46.1 to -30.6)
Tajikistan	511(371 to 683)	8.6(6.5 to 11.2)	928(686 to 1228)	8.9(6.7 to 11.8)	4(-1.4 to 9.4)
Turkmenistan	356(262 to 470)	8.6(6.5 to 11.2)	481(364 to 632)	9.3(7 to 12.2)	7.9(2.1 to 13.4)
Uzbekistan	1988(1434 to 2663)	8.6(6.4 to 11.3)	3288(2454 to 4374)	9.2(6.9 to 12.1)	6.9(1.3 to 13.3)
Central Latin America	22753(17070 to 29064)	11.7(9.1 to 14.8)	34366(26234 to 44412)	13.6(10.3 to 17.6)	16.1(12.3 to 20.1)
Colombia	5086(3716 to 6648)	14(10.5 to 18)	7640(5835 to 9809)	16.5(12.5 to 21.2)	18.4(13 to 24.4)
Costa Rica	521(381 to 705)	15.6(11.8 to 20.5)	733(555 to 948)	16.1(12 to 21.1)	3.3(-2.8 to 9.9)
El Salvador	1208(959 to 1525)	18.9(15.4 to 23.4)	958(717 to 1249)	14.9(11.1 to 19.5)	-21.3(-31 to -11.5)
Guatemala	2265(1898 to 2688)	24.5(20.9 to 28.6)	3264(2546 to 4181)	16.3(12.9 to 20.4)	-33.6(-42.8 to -22.8)
Honduras	961(763 to 1205)	17.5(14.4 to 21.6)	1905(1473 to 2421)	17.5(13.8 to 21.8)	-0.2(-9.3 to 10.6)
Mexico	8310(5965 to 11185)	7.8(5.7 to 10.3)	13717(10193 to 17852)	10.9(8.1 to 14.3)	39.8(36 to 44.2)
Nicaragua	650(480 to 850)	14.1(10.9 to 17.8)	1107(827 to 1449)	15.8(11.9 to 20.4)	12(4.5 to 20.9)
Panama	437(324 to 571)	16.2(12.4 to 20.9)	672(503 to 885)	16.1(12 to 21.3)	-0.8(-6.7 to 6)
Venezuela (Bolivarian Republic of)	3314(2494 to 4254)	15.5(12 to 19.6)	4368(3313 to 5655)	15.9(12 to 20.8)	2.4(-3.6 to 10.4)
Andean Latin America	20735(17479 to 24588)	46.9(40.3 to 55.1)	21347(17402 to 26573)	32.5(26.6 to 40.2)	-30.7(-36.6 to -22.2)
Bolivia (Plurinational State of)	2466(2065 to 2954)	33.7(28.8 to 39.8)	3745(3008 to 4739)	30(24.3 to 37.6)	-11.2(-19 to -0.1)
Ecuador	2958(2467 to 3592)	26.4(22.4 to 31.6)	5955(5139 to 7008)	32.4(28.1 to 37.9)	22.4(14 to 33.1)
Peru	15311(12872 to 18119)	60.3(51.6 to 70.8)	11647(9147 to 15007)	33.6(26.4 to 43.2)	-44.3(-51.5 to -33.8)
Caribbean	3210(2481 to 4146)	8.4(6.6 to 10.7)	5046(3913 to 6473)	10.8(8.3 to 13.9)	28.8(25.3 to 32)
Antigua and Barbuda	6(4 to 8)	8.7(6.6 to 11.4)	10(8 to 13)	11.8(9 to 15.4)	35.2(27.8 to 42.6)
Bahamas	24(18 to 32)	8.3(6.3 to 10.8)	43(33 to 55)	11.3(8.6 to 14.6)	36(29.8 to 42.1)
Barbados	23(17 to 30)	8.6(6.5 to 11.2)	31(24 to 39)	11.7(8.9 to 15.3)	36.6(29.8 to 43.9)



Belize	16(12 to 22)	7.7(5.9 to 10.1)	49(36 to 64)	10.6(8 to 13.8)	36.9(30.4 to 44.7)
Bermuda	5(4 to 7)	8.7(6.6 to 11.2)	6(5 to 8)	12.4(9.3 to 16.3)	42.8(35.8 to 49.9)
Cuba	1093(842 to 1429)	7.2(5.3 to 9.8)	89(74 to 110)	7.8(6.3 to 9.7)	8.2(-3.9 to 24.6)
Dominica	7(5 to 9)	8.3(6.3 to 10.9)	7(5 to 9)	10.4(7.9 to 13.4)	26.5(19.9 to 32.5)
Dominican Republic	711(542 to 923)	8.5(6.6 to 10.8)	1313(1004 to 1719)	11.6(8.9 to 15)	36.4(27.8 to 44.7)
Grenada	7(5 to 10)	7.8(5.9 to 10.2)	11(9 to 15)	11(8.4 to 14.4)	41.2(35 to 49)
Guyana	74(58 to 94)	8.4(6.7 to 10.5)	93(74 to 120)	11.3(9 to 14.4)	34.5(27.4 to 42)
Haiti	416(331 to 516)	6(4.9 to 7.4)	1138(895 to 1456)	8.3(6.6 to 10.5)	38.4(28.6 to 48.7)
Jamaica	224(166 to 299)	8.5(6.5 to 11.1)	328(248 to 425)	11.2(8.5 to 14.5)	31.9(25.6 to 38.5)
Puerto Rico	323(242 to 431)	8.7(6.5 to 11.6)	360(276 to 468)	11.9(8.9 to 15.7)	37(30.5 to 43.8)
Saint Kitts and Nevis	4(3 to 5)	9.3(7.3 to 12.2)	7(6 to 9)	12.4(9.5 to 16.1)	32.8(25.3 to 40.2)
Saint Lucia	12(9 to 17)	8.1(6.2 to 10.6)	19(15 to 25)	11.4(8.8 to 15)	41.4(34.7 to 49.4)
Saint Vincent and the Grenadines	10(7 to 13)	8(6.1 to 10.5)	12(9 to 15)	10.7(8.2 to 13.9)	33.9(28.1 to 40.5)
Suriname	33(25 to 43)	7.7(5.9 to 9.9)	61(46 to 79)	10.6(8 to 13.8)	38.5(31 to 45.7)
Trinidad and Tobago	104(77 to 138)	8(6 to 10.4)	141(109 to 184)	11(8.3 to 14.5)	38.2(31.7 to 46)
United States Virgin Islands	11(8 to 14)	9.7(7.6 to 12.5)	11(9 to 14)	12.5(9.7 to 16.2)	27.8(21.7 to 34.3)
Tropical Latin America	6758(5191 to 8625)	4(3.1 to 5)	11326(9235 to 14000)	5.1(4.1 to 6.3)	28.9(23.6 to 35.5)
Brazil	6250(4799 to 8002)	3.8(2.9 to 4.8)	10682(8725 to 13165)	5(4 to 6.2)	33.6(27.3 to 41.1)
Paraguay	508(392 to 650)	12.8(10.4 to 15.7)	644(510 to 828)	9(7.2 to 11.3)	-29.6(-33 to -25.7)
East Asia	82768(62231 to 108086)	6.2(4.8 to 8)	98212(77893 to 120704)	6.7(5.3 to 8.3)	8.4(2.7 to 14.7)
China	80491(60502 to 105413)	6.2(4.8 to 8)	95204(75486 to 117012)	6.7(5.3 to 8.4)	8.6(2.7 to 15)
Democratic People's Republic of Korea	1335(1041 to 1689)	6.5(5 to 8)	1682(1321 to 2096)	6.2(4.8 to 7.9)	-3.6(-8.8 to 1.9)

Taiwan (Province of China)	942(721 to 1208)	4.5(3.5 to 5.7)	1326(1124 to 1550)	5.3(4.5 to 6.4)	17.6(7.6 to 31.3)
Southeast Asia	24060(18239 to 31680)	4.7(3.6 to 6)	43365(33776 to 56231)	6.3(4.9 to 8.1)	34.2(30.6 to 37.7)
Cambodia	964(745 to 1224)	8.7(6.9 to 10.9)	1762(1355 to 2310)	10.1(7.9 to 13.2)	16.3(8.5 to 24.4)
Indonesia	3629(2613 to 4884)	1.7(1.3 to 2.3)	9114(6762 to 12161)	3.4(2.5 to 4.5)	97.8(92.1 to 105.2)
Lao People's Democratic Republic	417(328 to 527)	9.1(7.4 to 11.2)	798(613 to 1040)	10.3(8 to 13.2)	12.4(3.9 to 22.7)
Malaysia	1321(1003 to 1737)	7.1(5.5 to 9.2)	3032(2337 to 3955)	9.3(7.1 to 11.9)	29.9(23.5 to 37.2)
Maldives	14(10 to 19)	6(4.5 to 8)	44(33 to 57)	8.4(6.3 to 10.9)	39.4(32.6 to 47.8)
Mauritius	76(57 to 103)	6.3(4.8 to 8.4)	104(80 to 134)	8.3(6.3 to 10.8)	30.6(24.1 to 38.9)
Myanmar	3760(2942 to 4780)	8.3(6.6 to 10.4)	5300(4089 to 6867)	9.3(7.2 to 12)	12.4(4.4 to 19.6)
Philippines	1562(1141 to 2113)	2.2(1.6 to 2.9)	4705(3475 to 6357)	3.9(2.9 to 5.2)	79.7(75.7 to 83.9)
Sri Lanka	1181(872 to 1570)	6.3(4.8 to 8.3)	1832(1395 to 2363)	8.4(6.4 to 11)	32.5(25.7 to 39.6)
Seychelles	6(4 to 7)	7.5(5.8 to 9.5)	10(8 to 12)	9.8(7.6 to 12.4)	30.9(23.2 to 40.6)
Thailand	5556(4231 to 7233)	8.7(6.8 to 11.1)	6274(4912 to 7968)	9.4(7.2 to 12.2)	8.4(1.8 to 14.5)
Timor-Leste	65(50 to 83)	7.8(6.2 to 9.9)	147(112 to 195)	10(7.9 to 12.8)	27.2(20 to 34.9)
Viet Nam	5480(4185 to 7217)	7.6(5.9 to 9.7)	10186(8126 to 12756)	10.6(8.3 to 13.4)	40.4(31.5 to 51.7)
Oceania	242(183 to 317)	3.6(2.8 to 4.6)	577(444 to 755)	4.1(3.2 to 5.4)	16.2(12.2 to 21.1)
American Samoa	2(1 to 3)	3.9(3 to 5)	3(2 to 3)	4.5(3.5 to 5.8)	15.9(9.9 to 22.6)
Cook Islands	1(1 to 1)	3.8(2.8 to 4.9)	1(1 to 1)	4.4(3.4 to 5.7)	17.4(10.6 to 24.9)
Micronesia (Federated States of)	4(3 to 5)	3.9(3.1 to 4.9)	5(4 to 6)	4.6(3.6 to 5.8)	16.6(10 to 23.2)
Fiji	32(24 to 41)	3.9(3 to 5)	43(33 to 55)	4.6(3.6 to 5.9)	19.1(12.5 to 25.5)
Guam	6(4 to 7)	3.8(2.9 to 4.8)	7(6 to 10)	4.4(3.4 to 5.7)	17.1(10.4 to 23.8)
Kiribati	3(2 to 4)	4(3.2 to 5)	5(4 to 7)	4.1(3.2 to 5.2)	3.4(-2 to 8.7)

Nauru	0(0 to 1)	4.1(3.2 to 5.2)	1(0 to 1)	4.8(3.8 to 6.2)	18(12.4 to 24.4)
Niue	0(0 to 0)	3.9(3 to 5.1)	0(0 to 0)	4.7(3.6 to 6)	20.9(14.7 to 28.8)
Marshall Islands	2(1 to 2)	4(3.2 to 5.1)	3(2 to 3)	4.3(3.4 to 5.7)	8.9(2.5 to 15.1)
Northern Mariana Islands	2(1 to 3)	3.8(2.9 to 4.9)	2(1 to 2)	4.5(3.5 to 5.8)	18.7(11.3 to 25.4)
Palau	1(0 to 1)	3.9(3 to 5.1)	1(1 to 1)	4.8(3.7 to 6.1)	21.1(14.7 to 28)
Papua New Guinea	146(110 to 193)	3.4(2.6 to 4.4)	420(321 to 552)	4(3.1 to 5.2)	18.9(13 to 25.7)
Samoa	6(5 to 8)	3.7(2.9 to 4.8)	10(7 to 13)	4.4(3.4 to 5.7)	18.4(11.7 to 24.8)
Solomon Islands	14(10 to 18)	4(3.2 to 5.1)	31(24 to 40)	4.5(3.6 to 5.8)	12.5(5.8 to 17.9)
Tokelau	0(0 to 0)	3.6(2.7 to 4.7)	0(0 to 0)	4.4(3.4 to 5.8)	24.6(17.3 to 32.5)
Tonga	4(3 to 5)	3.8(3 to 4.9)	5(3 to 6)	4.5(3.4 to 5.8)	16.5(9.8 to 22.8)
Tuvalu	0(0 to 0)	3.7(2.8 to 4.7)	1(0 to 1)	4.5(3.5 to 5.8)	22.7(15.2 to 30.6)
Vanuatu	7(5 to 8)	4.4(3.6 to 5.5)	14(11 to 18)	4.5(3.5 to 5.8)	1.8(-4.4 to 7.4)
North Africa and Middle East	26268(19514 to 34649)	7(5.4 to 9.1)	66665(50979 to 87066)	10.4(8 to 13.5)	48.2(44.1 to 52.5)
Afghanistan	983(781 to 1229)	8.3(6.9 to 10)	3940(3053 to 5107)	9.3(7.4 to 11.7)	12.3(4.5 to 21.2)
Algeria	2211(1619 to 2931)	7.9(6.1 to 10.2)	4623(3512 to 6055)	10.9(8.2 to 14.2)	37.1(29.7 to 45.6)
Bahrain	42(31 to 56)	7.5(5.7 to 9.8)	161(125 to 206)	11(8.4 to 14.4)	46.7(38.7 to 54.9)
Egypt	4107(3006 to 5468)	6.9(5.1 to 9)	10727(8061 to 14137)	10.2(7.7 to 13.3)	48.3(40.9 to 57.2)
Iran (Islamic Republic of)	3676(2684 to 4851)	5.6(4.3 to 7.3)	8140(6272 to 10623)	9.5(7.2 to 12.3)	67.8(62.3 to 74.1)
Iraq	1318(956 to 1761)	7(5.3 to 9.1)	5020(3754 to 6710)	10.8(8.1 to 14.1)	53.6(45.1 to 61.7)
Jordan	311(225 to 431)	7.3(5.5 to 9.8)	1399(1053 to 1868)	11(8.5 to 14.4)	50.9(41.9 to 61.4)
Kuwait	152(113 to 203)	7.7(5.8 to 10.1)	525(401 to 678)	11.2(8.4 to 14.7)	45.6(37.3 to 54.7)
Lebanon	248(184 to 329)	7.4(5.6 to 9.7)	575(442 to 739)	11.3(8.6 to 14.5)	52.5(44 to 60.2)
Libya	344(249 to 455)	7.5(5.7 to 9.7)	784(597 to 1035)	10.7(8.1 to 14.2)	43.5(36.8 to 51.8)
Morocco	2097(1574 to 2778)	7.5(5.8 to 9.6)	3848(2955 to 4959)	10.3(7.9 to 13.3)	38.2(30.1 to 45.5)

Palestine	174(128 to 229)	8(6.1 to 10.3)	597(445 to 794)	11(8.5 to 14.4)	38.1(30.6 to 46.3)
Oman	152(111 to 205)	7.3(5.4 to 9.7)	568(431 to 758)	11(8.4 to 14.4)	51(41.8 to 60)
Qatar	36(27 to 48)	7.1(5.3 to 9.4)	362(272 to 483)	10.8(8.3 to 14)	52(44 to 61.2)
Saudi Arabia	1262(936 to 1686)	7.1(5.4 to 9.5)	4387(3391 to 5689)	10.9(8.4 to 14.1)	53.9(45.9 to 63.6)
Sudan	1538(1128 to 2064)	7.1(5.4 to 9.3)	4564(3363 to 6059)	10.1(7.8 to 13.1)	42.7(35.1 to 51.4)
Syrian Arab Republic	1150(848 to 1532)	8(6.1 to 10.3)	1734(1290 to 2297)	11.1(8.3 to 14.4)	38.3(29.9 to 46.7)
Tunisia	690(514 to 922)	7.5(5.7 to 9.9)	1240(950 to 1590)	10.8(8.3 to 14)	44(36.8 to 51.6)
Turkey	4517(3362 to 5970)	6.9(5.2 to 9)	8991(6872 to 11705)	10.7(8.2 to 13.8)	55.2(46.7 to 65.1)
United Arab Emirates	149(111 to 198)	7.2(5.4 to 9.4)	997(764 to 1300)	10.5(8 to 13.5)	46.1(37.4 to 54.4)
Yemen	1093(819 to 1442)	7.7(6 to 9.9)	3413(2532 to 4444)	9.9(7.6 to 12.7)	28.8(21.4 to 37.5)
South Asia	76654(61590 to 96931)	6.5(5.3 to 8.1)	196227(154672 to 249562)	10(8 to 12.6)	53.5(45.9 to 61)
Bangladesh	41110(33288 to 51852)	36(29.8 to 44.2)	87677(69429 to 109728)	51.5(41.3 to 64.1)	43(32.3 to 53.6)
Bhutan	230(190 to 286)	34.1(28.8 to 40.8)	373(295 to 469)	44.8(35.8 to 56)	31.5(19.8 to 44.6)
India	24903(19239 to 31790)	2.7(2.1 to 3.4)	84044(63988 to 110006)	5.5(4.2 to 7.1)	105.6(98.5 to 113.5)
Nepal	6925(5760 to 8379)	35.6(29.8 to 42.1)	9907(8157 to 12175)	30.3(25.4 to 36.5)	-14.9(-20.4 to -9.5)
Pakistan	3486(2706 to 4452)	2.8(2.3 to 3.5)	14227(10897 to 18497)	5.4(4.2 to 6.9)	89.4(79.6 to 100.4)
Southern Sub-Saharan Africa	3330(2449 to 4470)	5.5(4.2 to 7.2)	5855(4394 to 7749)	6.9(5.2 to 9.1)	26.2(22.4 to 30.6)
Botswana	156(118 to 204)	10.8(8.6 to 13.7)	306(237 to 394)	12(9.4 to 15.2)	10.9(4.9 to 17.4)
Lesotho	205(157 to 267)	10.3(8.2 to 12.9)	239(184 to 311)	10.1(7.9 to 13)	-1.6(-6.9 to 4.1)
Namibia	149(114 to 198)	9.5(7.5 to 12.3)	284(213 to 381)	10.8(8.3 to 14.2)	14.2(5.4 to 22.1)
South Africa	1688(1222 to 2266)	3.9(2.9 to 5.2)	3300(2472 to 4356)	5.6(4.2 to 7.4)	43.5(38.9 to 48.7)
Eswatini	87(64 to 117)	9.6(7.6 to 12.4)	135(102 to 180)	10.4(8.1 to 13.7)	8.6(1.3 to 15.1)
Zimbabwe	1045(763 to 1419)	9(7 to 11.8)	1591(1189 to 2145)	9.4(7.2 to 12.5)	4.6(-0.4 to 10)

Western Sub-Saharan Africa	6246(4676 to 8260)	3(2.3 to 4)	22773(16551 to 30697)	4.5(3.4 to 6)	48.7(43.6 to 54)
Benin	205(152 to 273)	4.1(3.1 to 5.4)	746(541 to 1013)	5.4(4.1 to 7.1)	31.2(23 to 38.9)
Burkina Faso	406(302 to 536)	4.1(3.1 to 5.3)	1315(974 to 1786)	5.4(4.1 to 7.2)	31.4(22 to 39.7)
Cameroon	456(341 to 605)	4.1(3.2 to 5.4)	1826(1308 to 2468)	5.5(4.1 to 7.3)	33.9(25.6 to 42.3)
Cabo Verde	16(11 to 22)	4.3(3.2 to 5.7)	37(28 to 50)	6.1(4.5 to 8.2)	42.7(35 to 51.4)
Chad	270(207 to 354)	4.3(3.4 to 5.6)	909(662 to 1234)	5.2(3.9 to 6.8)	18.7(10.7 to 27.2)
Cote d'Ivoire	540(399 to 715)	10.8(9.1 to 12.6)	358(327 to 387)	10.8(9.7 to 11.9)	0.1(-9.7 to 11.3)
Gambia	47(36 to 63)	4.4(3.5 to 5.7)	144(104 to 195)	5.6(4.2 to 7.4)	26.2(17.4 to 34.7)
Ghana	750(564 to 984)	4.7(3.6 to 6.1)	2091(1562 to 2797)	5.9(4.5 to 7.8)	27.2(19.2 to 34.6)
Guinea	258(196 to 339)	4.1(3.1 to 5.3)	743(535 to 998)	5.4(4 to 7.1)	31.3(21.9 to 41.4)
Guinea-Bissau	47(36 to 61)	4.3(3.4 to 5.5)	116(86 to 154)	5.3(4.1 to 7)	23.5(13.1 to 33.4)
Liberia	81(60 to 106)	4(3 to 5.3)	311(228 to 423)	5.7(4.3 to 7.6)	42.4(33 to 52.3)
Mali	372(282 to 487)	4.2(3.2 to 5.4)	1319(952 to 1776)	5.5(4.1 to 7.1)	31.8(22.5 to 40.5)
Mauritania	91(67 to 120)	4.1(3.1 to 5.4)	264(192 to 362)	5.9(4.4 to 7.8)	41.5(33.1 to 50.4)
Niger	368(282 to 476)	4.4(3.4 to 5.6)	1352(973 to 1812)	5.4(4.1 to 7.1)	24.3(14.4 to 35.3)
Nigeria	1651(1204 to 2237)	1.7(1.3 to 2.3)	8132(5869 to 10981)	3.4(2.5 to 4.5)	101.4(94.7 to 109.7)
Sao Tome and Principe	5(4 to 7)	4.2(3.2 to 5.5)	13(10 to 18)	5.6(4.2 to 7.5)	35.1(26.8 to 43.1)
Senegal	353(263 to 464)	4.3(3.3 to 5.6)	931(675 to 1272)	5.5(4.1 to 7.3)	26.4(17.4 to 35.7)
Sierra Leone	158(116 to 210)	4.1(3.1 to 5.4)	536(389 to 731)	5.7(4.3 to 7.6)	37.5(30.3 to 47.2)
Togo	169(124 to 223)	4.2(3.3 to 5.5)	473(346 to 629)	5.4(4.1 to 7.1)	28.2(19.9 to 36.5)
Eastern Sub-Saharan Africa	6672(4955 to 8948)	3.2(2.5 to 4.3)	22041(16104 to 29956)	4.7(3.6 to 6.3)	46.5(42.9 to 49.9)
Burundi	249(186 to 334)	4.3(3.3 to 5.6)	797(591 to 1072)	6.2(4.8 to 8.1)	45.5(38.8 to 54)
Comoros	26(20 to 34)	5.1(4.1 to 6.6)	53(40 to 70)	6.8(5.3 to 8.9)	32.7(24.5 to 42.4)

Djibouti	28(21 to 38)	5.1(3.9 to 6.7)	85(64 to 113)	6.7(5.1 to 8.8)	33.1(25.2 to 39.4)
Eritrea	139(104 to 186)	4.2(3.3 to 5.5)	484(361 to 653)	6.4(4.9 to 8.4)	49.7(41.2 to 57.7)
Ethiopia	329(236 to 450)	0.6(0.5 to 0.8)	2420(1660 to 3411)	1.9(1.3 to 2.6)	207.6(178.6 to 243.7)
Kenya	412(284 to 577)	1.5(1 to 2)	1423(991 to 1979)	2.3(1.7 to 3.2)	58.5(53.9 to 63.8)
Madagascar	651(481 to 885)	4.9(3.7 to 6.6)	1849(1374 to 2521)	6.2(4.7 to 8.2)	25.7(17.5 to 33.9)
Malawi	491(366 to 657)	4.8(3.7 to 6.3)	1370(1009 to 1819)	6.5(5.1 to 8.5)	36.4(29.9 to 43.7)
Mozambique	697(530 to 918)	5.1(4 to 6.5)	2370(1793 to 3109)	7.5(6 to 9.5)	48.9(41.1 to 57.1)
Rwanda	391(299 to 511)	5.1(4 to 6.5)	977(735 to 1328)	6.9(5.4 to 9.2)	35.7(25.9 to 47.4)
Somalia	368(278 to 495)	4.8(3.8 to 6.3)	1359(1029 to 1811)	6(4.7 to 7.8)	24.3(18.6 to 30.6)
South Sudan	283(205 to 386)	4.3(3.2 to 5.7)	577(419 to 773)	5.6(4.2 to 7.3)	30.4(23.7 to 36.9)
United Republic of Tanzania	1309(965 to 1753)	4.7(3.6 to 6.2)	3971(2897 to 5378)	6.5(4.9 to 8.6)	38.6(32.3 to 45.7)
Uganda	867(637 to 1175)	4.7(3.7 to 6.2)	2943(2153 to 3915)	6.5(5 to 8.4)	36.6(29.3 to 44.4)
Zambia	425(311 to 573)	4.8(3.7 to 6.2)	1346(1000 to 1852)	6.6(5.1 to 8.8)	37.5(29.2 to 46.8)
Central Sub-Saharan Africa	4762(3652 to 6076)	7.9(6.3 to 10)	15752(11998 to 20404)	10.8(8.5 to 13.8)	36.1(30.6 to 42.4)
Angola	835(631 to 1074)	7.4(5.8 to 9.3)	3459(2588 to 4542)	10.5(8.2 to 13.5)	42.5(34.4 to 51.1)
Central African Republic	254(202 to 320)	8.8(7.3 to 10.8)	544(422 to 685)	9.3(7.5 to 11.5)	5.2(-0.4 to 10.6)
Congo	195(146 to 256)	7.2(5.7 to 9.1)	572(430 to 755)	10(7.8 to 13.2)	39.9(30.1 to 49.3)
Democratic Republic of the Congo	3372(2578 to 4320)	8.1(6.4 to 10.3)	10803(8221 to 13950)	11.1(8.8 to 14.1)	36.3(28.8 to 44.3)
Equatorial Guinea	31(24 to 39)	7(5.6 to 8.7)	176(129 to 240)	10.4(7.9 to 13.7)	48(34.2 to 61.7)
Gabon	75(55 to 100)	7(5.3 to 9.2)	198(148 to 263)	10.3(7.8 to 13.4)	46.4(39.3 to 53.3)

Table S6: Incidence cases of appendicitis in 1990 and 2019 for both sexes and percentage change of age-standardised rates(ASR) by location

	1990		2019		Percentage change in ASR from 1990 and 2019
	Counts (95% UI)	Rate (95% UI)	Counts (95% UI)	Rate (95% UI)	
Global	10821656(8420122 to 13838792)	190.7(149.6 to 240.6)	17698765(14101114 to 22324572)	229.9(180.9 to 291)	20.5(18.7 to 22.8)
High-income North America	506556(404849 to 635595)	181.3(143.1 to 229.8)	571783(514543 to 636513)	162.6(144.9 to 182.1)	-10.3(-21.7 to 4.1)
Canada	49026(37996 to 63111)	176(134 to 228.1)	62889(49808 to 77949)	177.3(136.3 to 224.9)	0.8(-3.6 to 4.9)
Greenland	98(75 to 129)	164.3(125.1 to 213.6)	102(80 to 128)	179.2(139.4 to 229.9)	9(3.2 to 14.7)
United States of America	457420(366769 to 572772)	181.8(143.9 to 229.9)	508783(460698 to 560899)	160.9(144.8 to 179.3)	-11.5(-23.8 to 4.2)
Australasia	56661(43379 to 76361)	277.2(210 to 369.6)	74147(58363 to 94560)	283.9(220.1 to 369.3)	2.4(-2.1 to 6.4)
Australia	46185(35096 to 62310)	271.7(203.8 to 364.2)	62291(48197 to 80789)	281.4(213.8 to 370.7)	3.5(-1.2 to 7.9)
New Zealand	10476(8160 to 13514)	303.3(236 to 387.9)	11856(10078 to 14033)	297.8(250.2 to 358.7)	-1.8(-12.2 to 9.5)
High-income Asia Pacific	766628(570846 to 1001787)	460(340.5 to 602.5)	586290(463318 to 730184)	448.1(339.7 to 572.3)	-2.6(-7.2 to 2.5)
Brunei Darussalam	1201(886 to 1590)	405.2(300.8 to 532.6)	1926(1442 to 2504)	433.8(321.3 to 565.9)	7.1(1.8 to 13.2)
Japan	547094(407298 to 716839)	480.7(356 to 628.4)	381574(305924 to 471666)	451.2(348 to 567.3)	-6.1(-12.1 to 2.3)
Singapore	13689(10317 to 18077)	426.2(316.7 to 556.2)	19344(14928 to 24709)	434.3(322 to 573.4)	1.9(-3.5 to 7)
Republic of Korea	204644(151348 to 270223)	417.2(311.1 to 545.9)	183447(140794 to 233088)	443.3(327.6 to 582.6)	6.2(-0.1 to 12.1)
Western Europe	909256(701607 to 1187303)	248.6(190.5 to 327.3)	997135(806633 to 1229567)	278.5(220.2 to 352.8)	12.1(6.6 to 18.3)
Andorra	143(108 to 193)	250.9(189.6 to 335.8)	187(145 to 239)	261.5(196.7 to 346.8)	4.2(-0.3 to 9.1)
Austria	26139(22246 to 30149)	382.1(323.6 to 447.1)	29878(27649 to 32085)	438.1(398.4 to 475.7)	14.6(2.1 to 29.5)
Belgium	26217(20263 to 34549)	281.7(215.9 to 372.2)	32131(26824 to 37833)	338.9(276.1 to 410.6)	20.3(4.9 to 37.2)

Cyprus	21383(16237 to 27587)	215(160.4 to 281)	22934(18717 to 27297)	279.2(216.1 to 343.4)	29.8(12.6 to 52.1)
Denmark	12911(9961 to 16804)	260.3(199 to 343.7)	14097(10787 to 18066)	274.7(204.7 to 364.8)	5.5(1.2 to 9.7)
Finland	13581(11513 to 16085)	286.4(240.3 to 342.6)	12949(11167 to 15159)	269.9(228 to 324.2)	-5.8(-10.8 to -0.7)
France	137645(104375 to 182090)	248.8(187.9 to 328.4)	147348(113334 to 190942)	262.5(198.2 to 348.7)	5.5(0.7 to 10.1)
Germany	218704(167853 to 287626)	296.7(222.3 to 393.7)	259082(209604 to 313378)	387.3(304 to 482.2)	30.5(16.1 to 46.4)
Greece	24065(18067 to 32077)	242.5(180.9 to 323.6)	20999(16128 to 27067)	256.1(192.3 to 344.6)	5.6(0.9 to 10.5)
Iceland	701(529 to 926)	271.8(205.6 to 356.3)	962(752 to 1245)	308(236.1 to 404.5)	13.3(6.8 to 20.7)
Ireland	9016(6784 to 12308)	245.3(185 to 332.2)	11388(8688 to 14738)	258.5(193.5 to 345)	5.4(0.2 to 9.7)
Israel	12077(9046 to 16217)	238(179.5 to 317.2)	22332(16768 to 29608)	253.6(189.7 to 336.6)	6.5(1.2 to 11.4)
Italy	113265(85082 to 149475)	205.5(152.5 to 272.8)	93251(76839 to 114002)	221(175.2 to 277.1)	7.5(-4.2 to 23.8)
Luxembourg	1134(898 to 1437)	330.7(258.6 to 420.5)	1709(1489 to 1952)	324.1(276.5 to 376.7)	-2(-13.9 to 14.2)
Malta	750(564 to 993)	208.5(155 to 277.5)	859(711 to 1039)	243.7(197.3 to 298.3)	16.9(3.5 to 34.9)
Monaco	60(47 to 79)	244.6(182.9 to 327.6)	72(56 to 91)	254.2(191.7 to 337)	3.9(-0.1 to 8.8)
Netherlands	37941(28946 to 50409)	257.9(193.8 to 343.9)	39048(30089 to 50742)	265.3(200.7 to 352)	2.9(-1.8 to 8.1)
Norway	11475(8793 to 15132)	282.1(211.9 to 374)	14786(11625 to 18701)	309(236 to 399.3)	9.5(5.3 to 13.9)
San Marino	58(44 to 77)	249.4(187 to 329.1)	75(57 to 98)	261.5(196.4 to 349.6)	4.8(0.1 to 9.2)
Portugal	14903(10950 to 19935)	149(109.2 to 199.6)	14763(12081 to 18156)	177.7(140.6 to 225)	19.3(6.1 to 35.3)
Spain	95529(72371 to 126183)	246.4(185.2 to 325.1)	99780(77035 to 126469)	264.2(198.7 to 352.3)	7.2(2.6 to 11.8)
Sweden	25141(19400 to 32640)	326.2(246 to 427.1)	30881(23991 to 39798)	360.2(271 to 472.2)	10.4(5.7 to 15.8)
Switzerland	20396(17192 to 23975)	321.1(267.5 to 378)	24236(21072 to 27801)	328.5(279.6 to 380.9)	2.3(-1.7 to 7)
United Kingdom	105167(82977 to 135990)	198(152.9 to 257.5)	123137(101989 to 151609)	209.5(168.7 to 263.6)	5.8(0.9 to 11.5)
Southern Latin America	102773(78424 to 133813)	204.2(157.2 to 264.3)	201955(157808 to 254876)	305.5(236.3 to 389.3)	49.6(41.8 to 57.5)
Argentina	66689(50937 to 86597)	200.9(154.7 to 261.2)	131161(101100 to 170436)	291.3(221.6 to 378.9)	45(36.3 to 54.5)
Chile	29680(22510 to 39419)	211.7(162.7 to 276.5)	61126(49308 to 74679)	345.3(274 to 426.2)	63.1(50.2 to 78.4)



Uruguay	6399(4964 to 8413)	208.2(160.6 to 274.7)	9658(7415 to 12353)	292.8(221.8 to 382.4)	40.6(33.3 to 48.2)
Eastern Europe	483941(364145 to 628994)	228.3(171.9 to 298.9)	480413(370619 to 612175)	273.2(202.6 to 354.6)	19.7(17.1 to 22.5)
Belarus	30976(23936 to 40215)	308.8(236.9 to 404.7)	25809(20097 to 32340)	315.9(238.8 to 410.6)	2.3(-2.4 to 8.4)
Estonia	4582(3506 to 5832)	309.9(234.4 to 399.4)	3453(2672 to 4393)	315.6(241.3 to 414.6)	1.8(-3.3 to 7.3)
Latvia	8122(6297 to 10324)	323.3(245.7 to 418.5)	5286(4304 to 6424)	344.5(269.7 to 434.8)	6.6(-1.1 to 14.9)
Lithuania	11599(9065 to 14868)	324.7(249.8 to 416.8)	7898(6359 to 9610)	342.3(267.6 to 430.8)	5.4(-0.1 to 11.7)
Republic of Moldova	13837(10667 to 17975)	314.7(240.2 to 409.8)	10070(7844 to 12946)	309.3(234.3 to 405.6)	-1.7(-6.6 to 3.6)
Russian Federation	290799(216936 to 377292)	205.6(152.4 to 269.2)	327060(250995 to 418478)	266.3(197.1 to 347.6)	29.5(26.4 to 33.9)
Ukraine	124027(94964 to 160832)	255.9(194 to 335.9)	100837(77684 to 127872)	275.8(207.3 to 355.8)	7.8(2 to 14)
Central Europe	243394(184520 to 315082)	205(154.2 to 267.3)	203543(167437 to 245338)	220.3(175.2 to 271.3)	7.5(0.6 to 15.7)
Albania	7461(5508 to 10076)	204.9(154.4 to 271.8)	5263(3898 to 6789)	216.6(158.3 to 282.8)	5.7(-0.6 to 12.2)
Bosnia and Herzegovina	9548(7175 to 12560)	207(154.8 to 271.8)	5753(4372 to 7306)	208.3(152.8 to 274.2)	0.6(-4.6 to 6.3)
Bulgaria	17336(13135 to 22340)	216.5(161 to 283.2)	12531(9842 to 15510)	225(168 to 292.4)	3.9(-1.1 to 8.9)
Croatia	28507(21997 to 37134)	245.7(190.7 to 315.4)	32135(25309 to 40529)	319.8(244.6 to 411.6)	30.1(22.8 to 37.1)
Czechia	14342(10607 to 19047)	107.5(82.2 to 140.3)	40062(28940 to 53808)	138.1(102.8 to 183.7)	28.5(20.8 to 38.5)
Hungary	21350(16459 to 27585)	217.5(164.2 to 284.6)	17933(13965 to 22756)	225.3(167.7 to 297.1)	3.6(-2.4 to 9)
North Macedonia	4170(3036 to 5556)	203.2(148.3 to 270.4)	3966(2986 to 5110)	212.6(155.6 to 279.8)	4.6(-1.3 to 10.3)
Montenegro	1328(991 to 1734)	210.6(155.8 to 275.3)	1175(887 to 1509)	214.8(157.5 to 280)	2(-2.6 to 8.6)
Poland	66977(49694 to 88257)	182.8(134.7 to 242.6)	57580(49440 to 67184)	187(155.5 to 224)	2.3(-11.1 to 20.1)
Romania	48093(36143 to 62339)	210.1(157.2 to 271.9)	33758(26014 to 43027)	215.4(158.5 to 282.2)	2.5(-2.3 to 8.2)
Serbia	17301(13078 to 22404)	192.8(144 to 252.4)	17466(14275 to 20951)	239.6(187.8 to 293)	24.3(11.4 to 39.9)
Slovakia	11472(8464 to 15120)	219.8(161.8 to 288.5)	11513(9145 to 14293)	261.9(199.6 to 336.6)	19.1(9 to 29)
Slovenia	4356(3258 to 5671)	231(171.6 to 301.3)	4373(3894 to 4874)	277.5(241.3 to 316.5)	20.1(-1.6 to 50.7)

Central Asia	181231(134467 to 237141)	241.7(182.9 to 312.3)	233029(175238 to 306969)	245.3(184.6 to 323.5)	1.5(-2.1 to 5.4)
Armenia	8042(6001 to 10631)	227.7(170.3 to 299.9)	6797(5190 to 8797)	252.9(187.6 to 335.4)	11.1(5.6 to 16.9)
Azerbaijan	18580(13819 to 24574)	231.7(174 to 303.4)	24200(18097 to 32279)	240.3(178 to 323.6)	3.7(-2.7 to 10.8)
Georgia	11557(8630 to 14951)	215.8(160.2 to 280.1)	7516(5615 to 9662)	244(179.5 to 322.4)	13.1(7.4 to 19.9)
Kazakhstan	42727(32082 to 55509)	248.6(187.7 to 319.5)	43912(33483 to 57276)	248.4(186.2 to 327)	-0.1(-6.4 to 6.6)
Kyrgyzstan	10605(7723 to 14159)	219.5(163.5 to 289.3)	16573(12333 to 22206)	242.7(180.9 to 322.1)	10.6(4.6 to 16.5)
Mongolia	14480(11695 to 17600)	554.1(457.8 to 661.5)	11037(8753 to 13865)	333.8(262.2 to 419.8)	-39.8(-46.1 to -30.7)
Tajikistan	13499(9761 to 17870)	225.5(170.1 to 293.5)	24345(18051 to 32162)	234.5(175.7 to 308)	4(-1.3 to 9.4)
Turkmenistan	9384(6813 to 12369)	225.4(170 to 292)	12603(9530 to 16512)	243(182.3 to 321)	7.8(2 to 13.3)
Uzbekistan	52358(37936 to 70260)	224.7(168 to 296.4)	86048(64191 to 114727)	240.1(179.1 to 316.2)	6.8(1.2 to 13.3)
Central Latin America	603007(451133 to 772387)	310.4(239.5 to 389.7)	900312(686867 to 1159909)	358.2(271.1 to 460.1)	15.4(11.8 to 19.4)
Colombia	133573(97406 to 173850)	366.2(276 to 468.7)	199207(152593 to 254849)	433(329.5 to 555.6)	18.2(13 to 24.3)
Costa Rica	13708(10019 to 18481)	409.3(308.8 to 536.3)	19118(14466 to 24647)	422.7(313.6 to 554.7)	3.3(-2.9 to 9.9)
El Salvador	31783(25249 to 40058)	496.1(403.3 to 609.6)	25046(18822 to 32444)	390.1(291.6 to 507.7)	-21.4(-31.1 to -11.6)
Guatemala	60112(50325 to 71567)	643.1(550.8 to 755.3)	85531(66684 to 108889)	426.8(337.6 to 534.6)	-33.6(-42.9 to -22.9)
Honduras	25517(20211 to 32040)	460(378 to 562.4)	49980(38626 to 63459)	458.3(362.7 to 573.2)	-0.4(-9.5 to 10.2)
Mexico	222486(158837 to 298916)	209.8(153.3 to 275.9)	360798(267739 to 466826)	289.1(214.4 to 378)	37.8(34.2 to 42.2)
Nicaragua	17228(12709 to 22392)	369.7(286.1 to 465.8)	28985(21612 to 37665)	413.4(312.2 to 531.8)	11.8(4.4 to 20.5)
Panama	11466(8525 to 15000)	425.5(325.8 to 546)	17581(13198 to 22978)	421.9(315.1 to 550.9)	-0.8(-6.8 to 6.2)

Venezuela (Bolivarian Republic of)	87135(65269 to 111368)	407.5(314.8 to 512)	114066(86923 to 147136)	416.6(313.9 to 543.2)	2.2(-3.6 to 10.3)
Andean Latin America	544791(458565 to 648440)	1227.1(1050.4 to 1440.3)	558662(456610 to 696711)	852.4(697.7 to 1059.4)	-30.5(-36.6 to -22)
Bolivia (Plurinational State of)	65145(54475 to 78615)	884.7(751.2 to 1046.7)	98270(79037 to 123814)	785.6(636.9 to 986.5)	-11.2(-19.1 to -0.3)
Ecuador	77754(64672 to 93944)	692.1(587.9 to 822.8)	156015(134818 to 182723)	848.5(736.5 to 989.5)	22.6(14.2 to 33.5)
Peru	401892(338053 to 477893)	1575.4(1345.1 to 1856.4)	304376(238232 to 395095)	879.7(688 to 1137.6)	-44.2(-51.5 to - 33.6)
Caribbean	84394(65093 to 109139)	220(172.9 to 281.1)	132078(102639 to 169890)	282.9(219.4 to 361.9)	28.6(25.1 to 31.8)
Antigua and Barbuda	149(110 to 196)	229.5(172.2 to 299.8)	269(206 to 346)	309.9(236.2 to 400.6)	35.1(27.8 to 42.4)
Bahamas	639(475 to 850)	217.7(164.7 to 284.5)	1127(859 to 1452)	295.7(223.2 to 384.8)	35.8(29.6 to 41.9)
Barbados	589(445 to 773)	224.5(170.5 to 293.7)	799(620 to 1026)	306.3(234 to 402.4)	36.4(29.7 to 43.8)
Belize	433(315 to 579)	203.5(154.5 to 266.8)	1283(951 to 1690)	278.3(211.8 to 361.1)	36.7(30.2 to 44.5)
Bermuda	133(101 to 171)	227.4(171.1 to 294.7)	166(130 to 210)	324.4(244 to 427)	42.6(35.8 to 49.8)
Cuba	1483(1090 to 2012)	189(139.2 to 256.6)	2314(1922 to 2820)	204.2(166.3 to 252.3)	8(-3.9 to 24.6)
Dominica	171(127 to 230)	216.7(165 to 287.3)	181(137 to 235)	273.8(205.7 to 354.4)	26.4(19.8 to 32.4)
Dominican Republic	18739(14314 to 24373)	222.9(174.1 to 284.5)	34351(26280 to 44785)	303.4(232.4 to 395.3)	36.1(27.5 to 44.4)
Grenada	191(139 to 252)	205.3(154.8 to 265.8)	300(227 to 393)	289.5(219 to 378)	41(34.6 to 48.7)
Guyana	1959(1539 to 2479)	222(178.1 to 276.1)	2443(1925 to 3125)	297.3(235 to 375)	34(26.8 to 41.6)
Haiti	11128(8828 to 13821)	160.3(130.2 to 196)	30099(23624 to 38195)	220.3(175.5 to 276.3)	37.4(27.7 to 47.6)
Jamaica	5886(4362 to 7863)	222.6(169.5 to 290.6)	8539(6440 to 11145)	293.5(220.5 to 383.3)	31.8(25.5 to 38.4)
Puerto Rico	8469(6322 to 11268)	227.4(170.3 to 302.5)	9353(7159 to 12183)	311.3(230.9 to 413)	36.9(30.4 to 43.7)

Saint Kitts and Nevis	108(81 to 143)	245.6(191.8 to 317.1)	188(146 to 244)	325.6(249.2 to 425.6)	32.5(25.1 to 39.8)
Saint Lucia	328(241 to 435)	212.8(161.4 to 277.9)	507(391 to 661)	300.1(229.4 to 394.9)	41(34.4 to 49)
Saint Vincent and the Grenadines	266(193 to 354)	210.4(158.6 to 275)	308(237 to 397)	281.5(214.3 to 360.9)	33.8(28.1 to 40.5)
Suriname	872(652 to 1145)	202.1(155.4 to 259.6)	1592(1199 to 2061)	279.4(209.7 to 361.7)	38.2(30.7 to 45.4)
Trinidad and Tobago	2736(2031 to 3598)	209.3(157.6 to 273.4)	3677(2818 to 4778)	288.7(220.1 to 379.5)	37.9(31.4 to 45.7)
United States Virgin Islands	280(217 to 358)	255.7(199.5 to 328.8)	286(228 to 364)	326.6(254.8 to 423.3)	27.7(21.5 to 34.2)
Tropical Latin America	180230(138395 to 229170)	106.1(82.6 to 133.2)	298011(243250 to 366750)	135.6(109.7 to 167.8)	27.8(22.6 to 34.3)
Brazil	166814(128376 to 212438)	100.2(78.1 to 125.9)	281107(229556 to 344854)	132.6(107 to 164)	32.4(26.1 to 39.7)
Paraguay	13416(10364 to 17153)	334.7(272.2 to 412.4)	16904(13424 to 21862)	235.8(189.5 to 297.2)	-29.6(-32.9 to -25.7)
East Asia	2187023(1639403 to 2842758)	164(125.7 to 210.7)	2565267(2034140 to 3149307)	176.2(138.5 to 220)	7.4(1.8 to 13.6)
China	2127289(1593409 to 2767510)	164.6(126.1 to 212)	2486787(1970764 to 3055446)	177(139 to 221)	7.6(1.9 to 13.9)
Democratic People's Republic of Korea	35025(27079 to 43977)	169.4(132.4 to 211.5)	43909(34293 to 54661)	163.1(126.5 to 207.2)	-3.7(-8.9 to 1.9)
Taiwan (Province of China)	24709(18900 to 31823)	119.1(92.3 to 149.9)	34571(29139 to 40546)	139.9(117.3 to 167.1)	17.5(7.5 to 31.1)
Southeast Asia	640386(486433 to 839944)	124.3(96.3 to 159.9)	1146656(892434 to 1477241)	166.5(129.2 to 216.3)	33.9(30.4 to 37.4)
Cambodia	25562(19710 to 32486)	229.2(183 to 284.8)	46189(35478 to 60342)	265.9(206.6 to 343.7)	16(8.2 to 24)
Indonesia	101300(73664 to 135438)	48.1(35.9 to 63)	248461(184521 to 328902)	92.5(68.7 to 121.8)	92.5(87.1 to 99.4)

Lao People's Democratic Republic	11056(8739 to 13962)	240.2(195.4 to 296.6)	20906(16125 to 27194)	269.2(210.8 to 344.7)	12.1(3.9 to 22.2)
Malaysia	34749(26240 to 45628)	186.9(144.7 to 241.4)	79149(60778 to 103885)	242.5(186.5 to 312.4)	29.7(23.3 to 37)
Maldives	366(263 to 494)	157.7(118.7 to 208.1)	1134(872 to 1480)	219.5(165.3 to 285.5)	39.2(32.4 to 47.6)
Mauritius	1985(1480 to 2690)	165.9(125.2 to 221.4)	2700(2084 to 3467)	216.8(164.2 to 282.7)	30.6(24.1 to 39)
Myanmar	99057(77201 to 126068)	217.8(173.6 to 273.2)	138736(107133 to 180111)	244.5(188.7 to 316.4)	12.3(4.3 to 19.3)
Philippines	42881(31339 to 57728)	59.4(44.4 to 78.9)	127151(94162 to 169771)	105.1(78.1 to 138.9)	77(73.3 to 81.1)
Sri Lanka	30982(22921 to 40947)	166.3(124.6 to 217.6)	47869(36276 to 61851)	220.3(166.3 to 287)	32.5(25.7 to 39.5)
Seychelles	148(113 to 194)	195.8(152.8 to 251.7)	260(205 to 324)	256.2(199.4 to 326.2)	30.9(23.2 to 40.3)
Thailand	145340(110711 to 189417)	227.1(176.5 to 290.8)	163025(127828 to 205760)	246.1(189.1 to 319.7)	8.4(1.8 to 14.5)
Timor-Leste	1710(1326 to 2172)	205.7(163.3 to 259.1)	3865(2929 to 5145)	261.3(206.3 to 337.3)	27(19.8 to 34.7)
Viet Nam	144398(109465 to 189041)	198.3(154.8 to 254.8)	265708(211404 to 331248)	278(218.5 to 349.4)	40.2(31.3 to 51.4)
Oceania	6399(4840 to 8371)	94(73.1 to 120.3)	15219(11665 to 19748)	109.2(85 to 140.3)	16.1(12.1 to 21)
American Samoa	51(39 to 67)	102.4(79.4 to 131.8)	67(51 to 86)	118.7(92.3 to 152.5)	15.9(9.8 to 22.9)
Cook Islands	19(14 to 26)	98.4(73.3 to 128.4)	20(15 to 25)	115.4(88 to 151.3)	17.3(10.6 to 24.9)
Micronesia (Federated States of)	110(84 to 141)	103.5(81.7 to 130.5)	130(100 to 168)	120.2(93.5 to 153.4)	16.1(9.6 to 22.6)
Fiji	832(626 to 1088)	101.8(78.5 to 130.6)	1135(875 to 1446)	121.2(93.7 to 154.5)	19(12.5 to 25.5)
Guam	146(110 to 189)	98.7(75.2 to 126.9)	193(148 to 249)	115.6(88.5 to 149.3)	17.1(10.3 to 23.7)
Kiribati	81(63 to 103)	105.2(83.8 to 131.6)	136(105 to 174)	108.6(84.7 to 136.9)	3.2(-2.1 to 8.6)
Nauru	11(8 to 14)	106.6(82.9 to 136.8)	14(11 to 19)	125.7(98.4 to 161.7)	17.9(12.2 to 24.2)
Niue	2(2 to 3)	101.7(78.7 to 131.9)	2(2 to 2)	122.8(93.9 to 157.9)	20.8(14.5 to 28.7)
Marshall Islands	49(37 to 64)	105.2(83.7 to 134.2)	69(54 to 91)	114.5(89.8 to 148.1)	8.8(2.4 to 15)

Northern Mariana Islands	51(38 to 68)	99.2(75.6 to 129)	49(38 to 63)	117.7(91 to 151.4)	18.7(11.3 to 25.3)
Palau	17(13 to 23)	103.4(78.4 to 132.9)	23(18 to 28)	125.1(96.8 to 159.6)	21(14.6 to 28)
Papua New Guinea	3859(2901 to 5056)	89.4(68.9 to 114.9)	11089(8441 to 14397)	106.1(82.1 to 137.2)	18.8(12.8 to 25.5)
Samoa	169(126 to 224)	98.5(76.3 to 125.9)	256(194 to 336)	116.5(90.4 to 149.6)	18.2(11.5 to 24.7)
Solomon Islands	360(277 to 469)	106.3(84.8 to 134.5)	816(628 to 1048)	119.2(93.6 to 151.6)	12.2(5.5 to 17.7)
Tokelau	2(1 to 2)	93.9(72.1 to 123.3)	2(1 to 2)	116.7(89.3 to 150.5)	24.3(17 to 32.1)
Tonga	100(75 to 129)	101.2(77.8 to 129.2)	122(91 to 157)	117.7(90.2 to 150.9)	16.3(9.6 to 22.6)
Tuvalu	9(7 to 12)	96.7(74.5 to 123.4)	14(11 to 19)	118.4(91.4 to 151.8)	22.5(14.9 to 30.3)
Vanuatu	176(138 to 222)	117.1(94.9 to 144.7)	364(281 to 471)	119.2(93.4 to 151.8)	1.8(-4.5 to 7.4)
North Africa and Middle East	693835(514641 to 913057)	183.5(140.1 to 237)	1745503(1329173 to 2271525)	271.6(206.1 to 350.9)	48(43.9 to 52.2)
Afghanistan	26137(20722 to 32766)	218.9(181.3 to 265.7)	104471(81520 to 133394)	245.2(196.6 to 306.3)	12(4.4 to 20.9)
Algeria	58397(42744 to 76369)	208(159.4 to 265.4)	120880(91024 to 157230)	284.6(212.7 to 370.8)	36.9(29.4 to 45.3)
Bahrain	1105(828 to 1466)	197.7(149.3 to 258.7)	4188(3257 to 5346)	289(219.2 to 378.4)	46.2(38.3 to 54.2)
Egypt	108283(79411 to 143562)	180.1(135.5 to 236.9)	281600(211921 to 372590)	266.9(202 to 348.8)	48.2(40.8 to 57)
Iran (Islamic Republic of)	97503(71047 to 129219)	148.6(111.9 to 192.5)	212552(163469 to 275493)	248.4(188 to 321.4)	67.2(61.7 to 73.4)
Iraq	34869(25107 to 46085)	183.7(138.2 to 239.5)	131682(98119 to 176349)	282.1(212.5 to 367.9)	53.6(45.1 to 61.7)
Jordan	8215(5925 to 11258)	191.6(144.4 to 256.3)	36686(27549 to 48617)	288.9(220 to 375.4)	50.8(41.7 to 61.1)
Kuwait	3982(2948 to 5270)	202.1(151.4 to 263.5)	13614(10467 to 17650)	294.4(221.1 to 386.5)	45.6(37.3 to 54.6)
Lebanon	6520(4824 to 8668)	193.3(146.4 to 254.4)	15021(11578 to 19219)	294.7(224.7 to 378.5)	52.4(43.9 to 60)
Libya	9094(6595 to 12082)	195.8(148.8 to 253.1)	20448(15574 to 26975)	280.8(212 to 370.9)	43.4(36.7 to 51.7)
Morocco	55272(41362 to 72366)	196(150 to 252.2)	100696(76990 to 130121)	270.3(206.7 to 348.6)	37.9(29.8 to 45.2)
Palestine	4607(3387 to 6037)	209.9(160.6 to 269.1)	15708(11740 to 20719)	289.6(220.5 to 376.5)	38(30.5 to 46.2)

Oman	4007(2923 to 5379)	191.5(141.8 to 253.1)	14753(11242 to 19556)	289(219.2 to 375.2)	50.9(41.7 to 59.8)
Qatar	930(692 to 1242)	186.8(139.7 to 248.1)	9338(6969 to 12446)	283.7(216.4 to 368.2)	51.9(44 to 61.2)
Saudi Arabia	33256(24678 to 44170)	186.2(140.7 to 246)	113939(88241 to 147467)	286.3(218.4 to 369.1)	53.7(45.9 to 63.5)
Sudan	40730(29724 to 54289)	186.9(142.6 to 243.7)	120298(88747 to 158686)	266(202.8 to 343)	42.3(34.7 to 50.9)
Syrian Arab Republic	30464(22445 to 40410)	210.3(160.9 to 271.2)	45533(33851 to 60546)	290.5(217.9 to 379.3)	38.1(29.8 to 46.5)
Tunisia	18152(13549 to 24081)	197.2(150.1 to 258.7)	32354(24669 to 41602)	283.8(215.5 to 367.6)	43.9(36.7 to 51.5)
Turkey	118816(88719 to 157039)	180.3(136.5 to 235.8)	233992(178596 to 304678)	279.6(213.3 to 362.8)	55.1(46.6 to 65)
United Arab Emirates	3883(2896 to 5176)	188.6(141.2 to 246.2)	25790(19858 to 33486)	275.2(209.6 to 356.5)	45.9(37.1 to 54.3)
Yemen	29147(21765 to 38354)	202.6(159 to 260.6)	90189(67070 to 118136)	260.2(199.5 to 333.3)	28.4(21.1 to 37.1)
South Asia	2067302(1659767 to 2605802)	175.7(144.2 to 216.3)	5214009(4114157 to 6620999)	266.7(212.7 to 334.9)	51.8(44.3 to 59.1)
Bangladesh	1086795(878628 to 1373311)	943.8(779.9 to 1156.2)	2295561(1818278 to 2870740)	1349.8(1092.2 to 1673.1)	43(32.1 to 53.6)
Bhutan	6081(5002 to 7541)	893.1(754.5 to 1074.1)	9738(7713 to 12242)	1174.4(942.1 to 1459.6)	31.5(19.8 to 44.7)
India	693665(536610 to 880080)	75.3(59.8 to 94.2)	2262369(1719023 to 2935055)	149.4(114.7 to 191.7)	98.4(91.2 to 106.2)
Nepal	183008(151680 to 220119)	931.8(781 to 1103.9)	259904(214401 to 318709)	792.8(667.9 to 952.7)	-14.9(-20.1 to -9.5)
Pakistan	97755(75912 to 123791)	80.3(65 to 98.8)	386438(297740 to 498451)	147(115.3 to 186.8)	83.1(73.3 to 93.9)
Southern Sub-Saharan Africa	88704(65069 to 118927)	145.4(110.3 to 191.8)	154821(116584 to 203979)	183(138.5 to 241)	25.9(22.1 to 30.2)
Botswana	4132(3139 to 5402)	282.8(225.8 to 361.2)	8008(6240 to 10262)	313.1(246 to 398.7)	10.7(4.7 to 17.2)
Lesotho	5414(4150 to 7067)	269.3(214.4 to 339.7)	6267(4845 to 8171)	264.9(208 to 340.6)	-1.6(-7 to 4)
Namibia	3933(2984 to 5246)	249.3(196.9 to 323.3)	7460(5576 to 9926)	284.1(216.8 to 369.7)	14(5.2 to 21.9)
South Africa	45225(32701 to 60694)	104.9(78 to 138.7)	87538(65357 to 115647)	149.6(111.6 to 198)	42.6(38.2 to 47.6)

Eswatini	2307(1723 to 3089)	252.1(197.5 to 326.1)	3555(2698 to 4723)	273.7(212.3 to 357)	8.6(1.2 to 15)
Zimbabwe	27692(20202 to 37641)	236.5(183.2 to 309.5)	41992(31303 to 56477)	247.7(189 to 326.7)	4.7(-0.3 to 10.1)
Western Sub-Saharan Africa	168713(126222 to 221418)	81.4(62.6 to 106.3)	611213(445004 to 824269)	120.1(89.7 to 158.9)	47.6(42.4 to 52.8)
Benin	5483(4056 to 7317)	108.3(82.6 to 142.3)	19804(14435 to 26749)	141.6(106.7 to 187.4)	30.8(22.6 to 38.3)
Burkina Faso	10877(8085 to 14343)	108.2(82.6 to 139.8)	34961(25891 to 47083)	141.6(108.1 to 189.5)	30.9(21.5 to 39.2)
Cameroon	12137(9040 to 16000)	109.2(83.6 to 142.4)	48314(34507 to 64836)	145.5(107.5 to 192.9)	33.3(25.1 to 41.6)
Cabo Verde	426(304 to 582)	112.4(82.6 to 150.6)	970(721 to 1311)	160(119 to 214.5)	42.3(34.6 to 51)
Chad	7220(5508 to 9420)	115.2(90.4 to 147.7)	24296(17751 to 32811)	136.2(103.7 to 179.8)	18.3(10.3 to 26.8)
Cote d'Ivoire	12620(10771 to 14582)	282.6(237.7 to 330.4)	9297(8517 to 10059)	282.8(253.8 to 311.1)	0.1(-9.7 to 11.4)
Gambia	1262(945 to 1652)	117.5(90.8 to 151.4)	3820(2763 to 5141)	147.7(110.9 to 194)	25.8(17.1 to 34.2)
Ghana	19917(14949 to 25996)	122.9(95.7 to 158.5)	55052(41014 to 74384)	155.7(119 to 206)	26.7(18.8 to 34.1)
Guinea	6894(5237 to 8955)	108.6(83.3 to 138.8)	19753(14196 to 26583)	142(105.8 to 186.4)	30.8(21.5 to 40.9)
Guinea-Bissau	1258(966 to 1630)	114.3(91 to 144.5)	3063(2272 to 4024)	140.4(107.1 to 182)	22.8(12.5 to 32.6)
Liberia	2172(1594 to 2836)	106.1(80.5 to 137.8)	8235(6042 to 11159)	150.4(113 to 201.1)	41.7(32.4 to 51.4)
Mali	9947(7540 to 13011)	110(85.5 to 141.6)	35065(25224 to 46930)	144.4(108.5 to 187.4)	31.3(22 to 39.7)
Mauritania	2415(1777 to 3191)	109.6(82.8 to 143.4)	6976(5051 to 9600)	154(115.6 to 204.5)	40.5(32.4 to 49.3)
Niger	9859(7599 to 12735)	115.6(91.5 to 146.4)	36104(26117 to 48405)	143(107.4 to 188.1)	23.7(13.9 to 34.6)
Nigeria	46218(33805 to 62195)	47.3(35.3 to 62.8)	223056(161039 to 301567)	92.8(68.7 to 122.7)	96.3(90.2 to 104.1)
Sao Tome and Principe	146(107 to 197)	110.1(84.4 to 144.5)	347(253 to 470)	148.1(109.8 to 195.5)	34.5(26.2 to 42.4)
Senegal	9424(6991 to 12338)	114.7(88.1 to 147.5)	24641(17840 to 33455)	144.4(108.6 to 191.4)	25.9(17 to 35)
Sierra Leone	4209(3098 to 5539)	109(81.7 to 141.8)	14173(10263 to 19146)	149.4(113 to 199.3)	37.1(29.9 to 46.7)
Togo	4501(3299 to 5962)	112.1(86.3 to 145.6)	12512(9174 to 16564)	143.3(108.2 to 187)	27.8(19.7 to 36.1)



Eastern Sub-Saharan Africa	180185(133926 to 241754)	87.1(67 to 113.2)	591822(432475 to 797031)	127(96.7 to 166.9)	45.7(42.2 to 49)
Burundi	6654(4935 to 8829)	113.1(87 to 147.1)	21173(15729 to 28386)	164(126.5 to 215)	45(38.4 to 53.3)
Comoros	692(522 to 911)	135.5(106.4 to 173.6)	1387(1048 to 1841)	178.9(138.5 to 234.7)	32.1(23.7 to 41.5)
Djibouti	736(540 to 993)	133.4(102.1 to 175.1)	2245(1684 to 2985)	176.8(133.3 to 232.7)	32.5(24.8 to 38.6)
Eritrea	3725(2796 to 4941)	112.9(88.2 to 146.1)	12810(9537 to 17316)	167.8(129.6 to 220)	48.6(40.4 to 56.3)
Ethiopia	10376(7483 to 14042)	19.5(14.9 to 25.3)	69516(47854 to 96524)	53.8(38.8 to 73.3)	176.1(150.9 to 207.1)
Kenya	11826(8203 to 16357)	42.5(30.5 to 57.5)	39717(27742 to 54753)	65.4(47.4 to 88.7)	54(50 to 58.7)
Madagascar	17303(12754 to 23497)	129.8(98.5 to 174)	48938(36285 to 66388)	162.9(124.4 to 216.6)	25.5(17.4 to 33.7)
Malawi	13063(9752 to 17269)	126.6(98.1 to 166.3)	36340(26684 to 48509)	172.1(133.6 to 222.6)	35.9(29.7 to 43.2)
Mozambique	18683(14250 to 24340)	134.5(107.7 to 171.6)	63027(47593 to 82392)	199(158 to 250.4)	47.9(40.3 to 56)
Rwanda	10444(8010 to 13639)	135.2(106.8 to 171.3)	25796(19312 to 34867)	182(141 to 241.5)	34.6(25.1 to 46.3)
Somalia	9876(7451 to 13157)	128.5(101.8 to 168.1)	36194(27410 to 48246)	159.4(125.3 to 206.1)	24.1(18.4 to 30.5)
South Sudan	7507(5439 to 10159)	113.4(85.4 to 150.1)	15377(11097 to 20728)	147.5(111.3 to 191.9)	30.1(23.5 to 36.6)
United Republic of Tanzania	34784(25551 to 46605)	122.9(93.6 to 162.6)	105167(76553 to 142373)	169.9(128.6 to 225.6)	38.2(32 to 45.5)
Uganda	23060(16873 to 31006)	125.3(96.9 to 163.1)	78076(56588 to 104088)	170.3(130.6 to 221.4)	35.9(28.6 to 43.7)
Zambia	11322(8318 to 15238)	127.1(98.7 to 162.5)	35588(26487 to 48935)	173.7(133.7 to 230.5)	36.7(28.5 to 45.9)
Central Sub-Saharan Africa	126246(96656 to 160464)	209.3(166.2 to 263.2)	416895(315480 to 538242)	284.3(224.9 to 361.7)	35.8(30.3 to 42.2)
Angola	22150(16731 to 28257)	194.1(152.8 to 243.1)	91755(68655 to 120703)	275.7(214.3 to 353.4)	42(33.8 to 50.5)
Central African Republic	6744(5370 to 8435)	233(191.3 to 282.4)	14416(11183 to 18167)	245.3(197.4 to 303)	5.3(-0.2 to 10.7)
Congo	5155(3868 to 6708)	188.8(148.8 to 239.8)	15090(11355 to 19859)	263.5(202.9 to 344.5)	39.6(29.7 to 49)

Democratic Republic of the Congo	89392(68435 to 114246)	213.9(169.7 to 271.4)	285813(217758 to 368161)	291.2(230 to 369.3)	36.1(28.7 to 44)
Equatorial Guinea	832(648 to 1038)	185.3(149 to 229.6)	4631(3385 to 6277)	272(207.2 to 356.3)	46.8(33 to 60.4)
Gabon	1973(1443 to 2617)	184.4(140.6 to 241.8)	5190(3888 to 6879)	269.6(204.5 to 350.6)	46.2(39 to 53.2)

Table S7: Years lived with disability (YLDs) of appendicitis in 1990 and 2019 for both sexes and percentage change of age-standardised rates(ASR) by location					
	1990		2019		Percentage change in ASR from 1990 and 2019
	Counts (95% UI)	Rate (95% UI)	Counts (95% UI)	Rate (95% UI)	
Global	128706(82721 to 188292)	2.3(1.5 to 3.3)	211113(137041 to 303366)	2.7(1.8 to 3.9)	20.4(16.2 to 25.1)
High-income North America	6156(4024 to 8892)	2.2(1.4 to 3.2)	7057(4756 to 9721)	2(1.3 to 2.8)	-8.9(-21.9 to 6.8)
Canada	602(372 to 903)	2.2(1.3 to 3.3)	776(493 to 1160)	2.2(1.3 to 3.3)	0.9(-21.3 to 30.4)
Greenland	1(1 to 2)	2(1.2 to 3.1)	1(1 to 2)	2.2(1.4 to 3.2)	8.6(-14.1 to 36.5)
United States of America	5552(3635 to 8001)	2.2(1.4 to 3.2)	6280(4187 to 8721)	2(1.3 to 2.7)	-10(-23.7 to 6.2)
Australasia	671(406 to 1049)	3.3(2 to 5.1)	882(546 to 1332)	3.4(2 to 5.2)	2.4(-22.8 to 35.2)
Australia	547(328 to 862)	3.2(1.9 to 5)	741(450 to 1144)	3.3(2 to 5.3)	3.5(-25.7 to 42.7)
New Zealand	124(76 to 190)	3.6(2.2 to 5.5)	141(89 to 204)	3.5(2.2 to 5.1)	-2(-27.2 to 34.8)
High-income Asia Pacific	9194(5824 to 13631)	5.5(3.5 to 8.2)	7111(4538 to 10230)	5.4(3.4 to 7.9)	-2.2(-11.7 to 8.9)
Brunei Darussalam	14(8 to 23)	4.8(2.8 to 7.6)	23(14 to 36)	5.2(3.2 to 8.3)	6.8(-21.5 to 39.3)
Japan	6557(4121 to 9639)	5.7(3.6 to 8.5)	4613(3014 to 6651)	5.4(3.5 to 7.9)	-5.9(-14 to 4.3)
Singapore	165(95 to 260)	5.1(3 to 8)	234(143 to 357)	5.2(3.1 to 8.1)	1.8(-23 to 37.9)
Republic of Korea	2458(1454 to 3803)	5(3 to 7.7)	2241(1356 to 3395)	5.3(3.2 to 8.4)	6.9(-19.7 to 43.9)
Western Europe	10892(6969 to 16108)	3(1.9 to 4.4)	11990(7743 to 17155)	3.3(2.1 to 4.8)	12(0.6 to 25.9)
Andorra	2(1 to 3)	3(1.8 to 4.8)	2(1 to 3)	3.1(1.8 to 4.7)	3.6(-26.2 to 46.4)
Austria	314(198 to 461)	4.5(2.8 to 6.8)	359(229 to 515)	5.2(3.3 to 7.5)	14.2(-15 to 58.1)
Belgium	315(186 to 483)	3.4(1.9 to 5.2)	385(235 to 564)	4(2.4 to 5.9)	19.6(-13 to 74)
Cyprus	259(157 to 408)	2.6(1.5 to 4.1)	279(174 to 418)	3.4(2 to 5.3)	29.3(-9.8 to 87.2)
Denmark	154(93 to 237)	3.1(1.8 to 4.9)	170(106 to 257)	3.3(2 to 5.1)	6.2(-23.9 to 44.8)

Finland	161(98 to 242)	3.4(2 to 5.1)	155(96 to 234)	3.2(1.9 to 4.9)	-5.3(-32.7 to 34.2)
France	1649(940 to 2595)	3(1.7 to 4.6)	1768(1077 to 2732)	3.1(1.9 to 4.9)	5.2(-25.7 to 48.2)
Germany	2609(1603 to 3993)	3.5(2.1 to 5.5)	3100(1963 to 4557)	4.6(2.8 to 6.9)	30.5(-4.7 to 80.5)
Greece	289(174 to 449)	2.9(1.7 to 4.5)	254(149 to 391)	3.1(1.7 to 4.9)	5.7(-23.1 to 53.2)
Iceland	8(5 to 13)	3.2(1.9 to 5)	12(7 to 17)	3.7(2.1 to 5.7)	13.5(-18.6 to 55.9)
Ireland	108(62 to 172)	2.9(1.7 to 4.7)	136(81 to 208)	3.1(1.8 to 4.8)	4.6(-26.4 to 46.8)
Israel	144(85 to 219)	2.8(1.7 to 4.4)	265(161 to 418)	3(1.8 to 4.8)	6.1(-24.4 to 48.6)
Italy	1366(880 to 2030)	2.5(1.6 to 3.7)	1130(744 to 1638)	2.6(1.7 to 3.9)	7.3(-8 to 26.4)
Luxembourg	13(8 to 21)	3.9(2.3 to 6)	21(13 to 30)	3.9(2.5 to 5.7)	-0.4(-28.8 to 43.1)
Malta	9(5 to 14)	2.5(1.5 to 3.9)	10(6 to 15)	2.9(1.8 to 4.4)	15.3(-21.4 to 70.9)
Monaco	1(0 to 1)	2.9(1.7 to 4.6)	1(1 to 1)	3(1.7 to 4.7)	3.3(-25.9 to 44.7)
Netherlands	458(271 to 701)	3.1(1.8 to 4.8)	472(287 to 709)	3.2(1.9 to 4.9)	2.6(-26.7 to 45.4)
Norway	136(87 to 203)	3.3(2.1 to 5)	178(113 to 257)	3.7(2.3 to 5.3)	10.4(-1.2 to 25.4)
San Marino	1(0 to 1)	3(1.8 to 4.6)	1(1 to 1)	3.1(1.8 to 4.9)	5(-25.1 to 42.2)
Portugal	180(102 to 285)	1.8(1 to 2.9)	179(112 to 262)	2.1(1.2 to 3.2)	18.1(-19.8 to 77.1)
Spain	1140(675 to 1775)	2.9(1.7 to 4.6)	1210(751 to 1825)	3.2(1.9 to 5)	7.8(-24.2 to 54.1)
Sweden	298(188 to 438)	3.8(2.3 to 5.7)	368(225 to 549)	4.3(2.6 to 6.5)	10.9(-15.6 to 41.6)
Switzerland	244(154 to 364)	3.8(2.4 to 5.7)	291(184 to 430)	3.9(2.4 to 5.7)	2.4(-26.4 to 42.8)
United Kingdom	1267(817 to 1858)	2.4(1.5 to 3.5)	1484(979 to 2135)	2.5(1.6 to 3.6)	5.6(-1.8 to 14.2)
Southern Latin America	1238(763 to 1875)	2.5(1.5 to 3.7)	2394(1497 to 3585)	3.6(2.2 to 5.4)	46.6(14.1 to 86.4)
Argentina	807(485 to 1229)	2.4(1.5 to 3.7)	1559(925 to 2449)	3.5(2 to 5.4)	41.8(-0.1 to 98.2)
Chile	354(209 to 576)	2.5(1.5 to 4)	721(437 to 1053)	4.1(2.4 to 6)	60.4(15.2 to 126.5)
Uruguay	77(46 to 121)	2.5(1.5 to 3.9)	115(70 to 175)	3.5(2.1 to 5.3)	38.4(-0.5 to 89.7)
Eastern Europe	5810(3758 to 8680)	2.7(1.7 to 4.1)	5795(3710 to 8441)	3.3(2.1 to 4.9)	19.7(9.4 to 31.6)
Belarus	371(216 to 576)	3.7(2.1 to 5.8)	312(194 to 484)	3.8(2.3 to 6)	2.8(-24.7 to 39.9)

Estonia	55(33 to 82)	3.7(2.2 to 5.6)	42(25 to 61)	3.8(2.2 to 5.8)	2.1(-25.8 to 39.7)
Latvia	97(60 to 146)	3.9(2.3 to 5.9)	64(39 to 95)	4.1(2.5 to 6.4)	6.3(-23.6 to 49.1)
Lithuania	138(83 to 211)	3.9(2.3 to 5.9)	95(60 to 142)	4.1(2.5 to 6.2)	5.5(-21.5 to 41.5)
Republic of Moldova	165(99 to 250)	3.8(2.3 to 5.7)	122(75 to 185)	3.7(2.2 to 5.7)	-1.6(-27.1 to 29.5)
Russian Federation	3490(2235 to 5188)	2.5(1.6 to 3.7)	3941(2522 to 5770)	3.2(2 to 4.8)	29.5(20.9 to 39.3)
Ukraine	1493(894 to 2319)	3.1(1.8 to 4.8)	1221(731 to 1840)	3.3(2 to 5.1)	7.8(-21.3 to 46)
Central Europe	2950(1887 to 4352)	2.5(1.6 to 3.7)	2486(1625 to 3576)	2.7(1.7 to 3.9)	7.4(-3.7 to 20.2)
Albania	90(52 to 143)	2.5(1.5 to 3.9)	64(38 to 99)	2.6(1.5 to 4.1)	6(-24.2 to 48.7)
Bosnia and Herzegovina	116(68 to 177)	2.5(1.4 to 3.8)	70(42 to 105)	2.5(1.5 to 3.9)	0.6(-24.1 to 35.5)
Bulgaria	209(126 to 323)	2.6(1.5 to 4.1)	153(97 to 230)	2.7(1.6 to 4.3)	4.4(-23.8 to 45.9)
Croatia	340(200 to 534)	2.9(1.7 to 4.5)	387(239 to 580)	3.8(2.2 to 5.9)	30.5(-6.3 to 82.5)
Czechia	172(103 to 272)	1.3(0.8 to 2)	482(276 to 772)	1.7(1 to 2.6)	28.5(-8.1 to 75.1)
Hungary	261(164 to 403)	2.6(1.6 to 4.2)	219(136 to 336)	2.7(1.6 to 4.3)	2.7(-25.2 to 39.9)
North Macedonia	51(30 to 81)	2.5(1.5 to 3.9)	49(29 to 76)	2.6(1.4 to 4.2)	3.5(-25.7 to 46)
Montenegro	16(9 to 25)	2.5(1.5 to 4)	14(9 to 22)	2.6(1.5 to 4.1)	2.5(-26.2 to 45.4)
Poland	809(516 to 1217)	2.2(1.4 to 3.3)	704(463 to 997)	2.3(1.5 to 3.3)	2.7(-13.8 to 26.5)
Romania	584(337 to 913)	2.5(1.5 to 4)	411(252 to 627)	2.6(1.5 to 4.1)	2(-27.9 to 40.6)
Serbia	209(124 to 326)	2.3(1.4 to 3.6)	214(131 to 326)	2.9(1.7 to 4.6)	25.3(-12.6 to 75.8)
Slovakia	138(84 to 215)	2.6(1.6 to 4.1)	141(89 to 208)	3.2(1.9 to 4.9)	19.8(-13.1 to 63.5)
Slovenia	53(31 to 81)	2.8(1.6 to 4.4)	53(34 to 77)	3.3(2.1 to 5)	20.1(-20.6 to 83.2)
Central Asia	2170(1368 to 3309)	2.9(1.9 to 4.4)	2799(1767 to 4212)	2.9(1.8 to 4.4)	1.3(-13.5 to 17)
Armenia	97(56 to 153)	2.7(1.6 to 4.3)	83(50 to 130)	3.1(1.7 to 5)	11.7(-23.1 to 57.8)
Azerbaijan	222(125 to 349)	2.8(1.6 to 4.3)	292(173 to 455)	2.9(1.7 to 4.5)	3.9(-27.6 to 46.3)
Georgia	141(82 to 229)	2.6(1.5 to 4.3)	91(55 to 138)	2.9(1.7 to 4.5)	11.4(-21.3 to 60)
Kazakhstan	516(304 to 807)	3(1.8 to 4.7)	530(319 to 833)	3(1.7 to 4.7)	-0.3(-29.3 to 39.2)

Kyrgyzstan	129(75 to 206)	2.7(1.6 to 4.2)	200(119 to 310)	2.9(1.8 to 4.5)	9.9(-20.8 to 55)
Mongolia	172(107 to 258)	6.6(4.2 to 9.8)	131(79 to 201)	4(2.4 to 6.1)	-39.8(-55.4 to -18.6)
Tajikistan	160(91 to 257)	2.7(1.6 to 4.3)	291(169 to 467)	2.8(1.7 to 4.5)	4.3(-24.9 to 46.4)
Turkmenistan	112(65 to 180)	2.7(1.6 to 4.3)	151(93 to 233)	2.9(1.8 to 4.5)	7.3(-23.3 to 49.4)
Uzbekistan	622(364 to 985)	2.7(1.6 to 4.2)	1030(600 to 1610)	2.9(1.7 to 4.4)	6.8(-24 to 50.5)
Central Latin America	7125(4500 to 10503)	3.7(2.4 to 5.4)	10795(6781 to 16177)	4.3(2.7 to 6.4)	16.3(6.1 to 27.3)
Colombia	1585(919 to 2459)	4.4(2.6 to 6.7)	2380(1465 to 3631)	5.2(3.1 to 8)	18(-12 to 55.5)
Costa Rica	164(98 to 264)	4.9(3 to 7.6)	230(138 to 355)	5.1(3 to 7.9)	3.4(-23.7 to 38.2)
El Salvador	373(234 to 556)	5.8(3.7 to 8.6)	302(182 to 458)	4.7(2.8 to 7.1)	-19.5(-42.4 to 10.3)
Guatemala	701(442 to 1026)	7.6(4.8 to 10.9)	1021(603 to 1536)	5.1(3.1 to 7.6)	-32.6(-50.5 to -10.9)
Honduras	298(180 to 470)	5.4(3.4 to 8.3)	591(365 to 891)	5.4(3.3 to 8.1)	-0.2(-27.6 to 33.8)
Mexico	2626(1591 to 4003)	2.5(1.5 to 3.7)	4350(2729 to 6414)	3.5(2.2 to 5.1)	39.9(28.8 to 53.7)
Nicaragua	203(120 to 316)	4.4(2.7 to 6.7)	344(205 to 531)	4.9(2.9 to 7.5)	11.3(-19.7 to 49.1)
Panama	136(79 to 210)	5.1(3 to 7.8)	210(123 to 323)	5(3 to 7.8)	-0.7(-26 to 32.1)
Venezuela (Bolivarian Republic of)	1038(612 to 1584)	4.9(3 to 7.3)	1369(817 to 2145)	5(3 to 7.8)	2.3(-24.2 to 37.8)
Andean Latin America	6399(4300 to 9245)	14.4(9.7 to 20.7)	6569(4287 to 9596)	10(6.5 to 14.5)	-30.7(-41.2 to -17.9)
Bolivia (Plurinational State of)	760(484 to 1118)	10.4(6.6 to 15.1)	1151(712 to 1700)	9.2(5.7 to 13.5)	-11.1(-30.4 to 13.6)
Ecuador	907(581 to 1312)	8.1(5.2 to 11.7)	1832(1200 to 2643)	10(6.5 to 14.3)	23(-2.7 to 57.4)
Peru	4732(3164 to 6831)	18.6(12.4 to 26.7)	3586(2283 to 5416)	10.4(6.6 to 15.6)	-44.3(-56.6 to -29)
Caribbean	1002(636 to 1522)	2.6(1.7 to 3.9)	1574(1023 to 2353)	3.4(2.2 to 5)	28.3(9.7 to 50.4)
Antigua and Barbuda	2(1 to 3)	2.8(1.6 to 4.3)	3(2 to 5)	3.7(2.1 to 5.7)	35(-3.9 to 86.5)
Bahamas	8(4 to 12)	2.6(1.5 to 4.1)	14(8 to 20)	3.5(2.1 to 5.3)	34.8(0.9 to 86.6)
Barbados	7(4 to 11)	2.7(1.5 to 4.3)	10(6 to 15)	3.6(2.2 to 5.6)	34.3(-4 to 88.8)
Belize	5(3 to 8)	2.4(1.4 to 3.8)	15(9 to 24)	3.3(1.9 to 5)	35(-5.6 to 88.3)

Bermuda	2(1 to 3)	2.7(1.6 to 4.4)	2(1 to 3)	3.9(2.4 to 5.9)	41(2.2 to 95.6)
Cuba	18(10 to 28)	2.3(1.3 to 3.6)	28(18 to 42)	2.5(1.5 to 3.8)	8.7(-25.2 to 61)
Dominica	2(1 to 3)	2.6(1.5 to 4)	2(1 to 4)	3.2(1.9 to 5.3)	24.2(-12.2 to 74.4)
Dominican Republic	222(127 to 355)	2.7(1.6 to 4.2)	407(247 to 657)	3.6(2.2 to 5.8)	35.2(-4.4 to 96.4)
Grenada	2(1 to 4)	2.5(1.4 to 4)	4(2 to 6)	3.4(2.1 to 5.4)	39.3(1.3 to 96.7)
Guyana	23(14 to 35)	2.6(1.6 to 4)	29(17 to 45)	3.5(2.1 to 5.4)	33.7(-3.5 to 85.6)
Haiti	130(75 to 209)	1.9(1.1 to 2.9)	356(205 to 560)	2.6(1.5 to 4)	38.7(-4.9 to 103.8)
Jamaica	70(40 to 110)	2.7(1.6 to 4.2)	102(61 to 158)	3.5(2.1 to 5.4)	31(-6 to 87.7)
Puerto Rico	102(60 to 162)	2.7(1.6 to 4.3)	112(66 to 170)	3.7(2.1 to 5.7)	35.2(-1.2 to 88.1)
Saint Kitts and Nevis	1(1 to 2)	3(1.7 to 4.6)	2(1 to 3)	3.9(2.3 to 6)	31.1(-6 to 88.4)
Saint Lucia	4(2 to 6)	2.5(1.5 to 4)	6(4 to 10)	3.6(2.1 to 5.8)	41(-0.1 to 96.7)
Saint Vincent and the Grenadines	3(2 to 5)	2.5(1.5 to 4)	4(2 to 6)	3.4(2 to 5.4)	33.7(-5.3 to 91.6)
Suriname	10(6 to 17)	2.4(1.4 to 3.8)	19(11 to 29)	3.3(1.9 to 5.2)	37.3(-2.9 to 92.3)
Trinidad and Tobago	33(19 to 51)	2.5(1.5 to 3.9)	44(27 to 68)	3.4(2 to 5.3)	36.5(-4.4 to 91.5)
United States Virgin Islands	3(2 to 5)	3.1(1.9 to 4.7)	3(2 to 5)	3.9(2.3 to 5.9)	26.1(-7.4 to 77.6)
Tropical Latin America	2176(1371 to 3220)	1.3(0.8 to 1.9)	3616(2379 to 5269)	1.6(1.1 to 2.4)	27.8(17.7 to 39.9)
Brazil	2019(1283 to 3000)	1.2(0.8 to 1.8)	3416(2241 to 4983)	1.6(1 to 2.3)	32.1(21.5 to 45)
Paraguay	156(92 to 243)	3.9(2.4 to 5.9)	200(118 to 305)	2.8(1.7 to 4.2)	-28.9(-47.8 to -2.7)
East Asia	26374(16631 to 39142)	2(1.3 to 2.9)	31567(20685 to 45211)	2.2(1.4 to 3.1)	9.1(1.5 to 18.2)
China	25637(16171 to 38094)	2(1.3 to 2.9)	30593(20038 to 43872)	2.2(1.4 to 3.1)	9.3(1.5 to 18.8)
Democratic People's Republic of Korea	432(278 to 626)	2.1(1.4 to 3)	545(355 to 787)	2(1.3 to 2.9)	-3.7(-8.8 to 1.9)
Taiwan (Province of China)	305(194 to 444)	1.5(0.9 to 2.1)	430(285 to 608)	1.7(1.1 to 2.5)	17.6(7.6 to 31.3)
Southeast Asia	7611(4716 to 11322)	1.5(0.9 to 2.2)	13780(8689 to 20227)	2(1.3 to 2.9)	34.5(20.4 to 51.4)

Cambodia	301(179 to 469)	2.7(1.7 to 4.2)	554(323 to 867)	3.2(1.9 to 5)	16.7(-15.9 to 64.2)
Indonesia	1174(723 to 1772)	0.6(0.3 to 0.8)	2948(1833 to 4410)	1.1(0.7 to 1.6)	97.7(91.9 to 104.9)
Lao People's Democratic Republic	131(75 to 204)	2.9(1.7 to 4.4)	251(146 to 387)	3.2(1.9 to 4.9)	12.5(-16.7 to 56.3)
Malaysia	420(232 to 665)	2.3(1.3 to 3.5)	952(565 to 1490)	2.9(1.8 to 4.5)	28.3(-8 to 80.1)
Maldives	4(3 to 7)	1.9(1.2 to 2.9)	14(8 to 22)	2.7(1.6 to 4.3)	40.1(5.5 to 86.7)
Mauritius	24(15 to 39)	2(1.2 to 3.2)	33(20 to 52)	2.6(1.6 to 4.1)	28.8(-5.5 to 75.3)
Myanmar	1180(700 to 1871)	2.6(1.6 to 4.1)	1677(1008 to 2549)	3(1.8 to 4.5)	13.1(-18.4 to 60.5)
Philippines	505(312 to 760)	0.7(0.4 to 1)	1511(940 to 2271)	1.2(0.8 to 1.9)	78.4(70.9 to 86.6)
Sri Lanka	375(226 to 588)	2(1.2 to 3.1)	583(343 to 878)	2.7(1.6 to 4)	32.3(-1.7 to 77.5)
Seychelles	2(1 to 3)	2.4(1.5 to 3.7)	3(2 to 5)	3.1(1.8 to 4.7)	28.3(-2.2 to 70.1)
Thailand	1741(1012 to 2745)	2.7(1.6 to 4.2)	1982(1195 to 2935)	3(1.7 to 4.5)	8.4(-25 to 51.5)
Timor-Leste	20(12 to 32)	2.4(1.5 to 3.8)	46(26 to 75)	3.2(1.9 to 4.9)	30.4(-8.9 to 82)
Viet Nam	1723(976 to 2762)	2.4(1.4 to 3.7)	3209(1946 to 4831)	3.3(2 to 5)	40.1(1.9 to 97.2)
Oceania	78(49 to 118)	1.2(0.7 to 1.7)	187(118 to 279)	1.3(0.9 to 2)	16.2(12.2 to 21.1)
American Samoa	1(0 to 1)	1.3(0.8 to 1.9)	1(1 to 1)	1.5(0.9 to 2.1)	15.9(9.9 to 22.6)
Cook Islands	0(0 to 0)	1.2(0.8 to 1.8)	0(0 to 0)	1.4(0.9 to 2.1)	17.4(10.6 to 24.9)
Micronesia (Federated States of)	1(1 to 2)	1.3(0.8 to 1.9)	2(1 to 2)	1.5(0.9 to 2.2)	16.5(10 to 23.2)
Fiji	10(6 to 15)	1.3(0.8 to 1.9)	14(9 to 20)	1.5(0.9 to 2.2)	19.1(12.5 to 25.5)
Guam	2(1 to 3)	1.2(0.8 to 1.8)	2(1 to 4)	1.4(0.9 to 2.1)	17.1(10.4 to 23.8)
Kiribati	1(1 to 1)	1.3(0.8 to 1.9)	2(1 to 2)	1.3(0.8 to 1.9)	3.4(-2 to 8.7)
Nauru	0(0 to 0)	1.3(0.8 to 1.9)	0(0 to 0)	1.6(1 to 2.3)	18(12.4 to 24.4)
Niue	0(0 to 0)	1.3(0.8 to 1.8)	0(0 to 0)	1.5(1 to 2.2)	20.9(14.7 to 28.8)
Marshall Islands	1(0 to 1)	1.3(0.8 to 1.9)	1(1 to 1)	1.4(0.9 to 2.1)	8.8(2.5 to 15.1)
Northern Mariana Islands	1(0 to 1)	1.2(0.8 to 1.8)	1(0 to 1)	1.5(0.9 to 2.1)	18.7(11.3 to 25.4)



Palau	0(0 to 0)	1.3(0.8 to 1.9)	0(0 to 0)	1.5(1 to 2.2)	21.1(14.7 to 28)
Papua New Guinea	47(29 to 71)	1.1(0.7 to 1.6)	136(85 to 204)	1.3(0.8 to 1.9)	18.9(13 to 25.7)
Samoa	2(1 to 3)	1.2(0.8 to 1.8)	3(2 to 5)	1.4(0.9 to 2.1)	18.4(11.7 to 24.8)
Solomon Islands	4(3 to 7)	1.3(0.8 to 1.9)	10(6 to 15)	1.5(1 to 2.2)	12.4(5.8 to 17.9)
Tokelau	0(0 to 0)	1.2(0.7 to 1.7)	0(0 to 0)	1.4(0.9 to 2.1)	24.6(17.3 to 32.5)
Tonga	1(1 to 2)	1.2(0.8 to 1.8)	1(1 to 2)	1.5(0.9 to 2.1)	16.5(9.8 to 22.8)
Tuvalu	0(0 to 0)	1.2(0.8 to 1.7)	0(0 to 0)	1.5(0.9 to 2.1)	22.8(15.2 to 30.6)
Vanuatu	2(1 to 3)	1.4(0.9 to 2.1)	4(3 to 7)	1.5(0.9 to 2.2)	3(-14 to 19.2)
North Africa and Middle East	8245(5161 to 12538)	2.2(1.4 to 3.3)	20714(12951 to 30887)	3.2(2 to 4.8)	46.5(32.5 to 63)
Afghanistan	303(175 to 484)	2.6(1.5 to 3.9)	1210(691 to 1915)	2.9(1.7 to 4.4)	11.8(-21 to 59.6)
Algeria	696(393 to 1124)	2.5(1.5 to 3.9)	1446(867 to 2264)	3.4(2.1 to 5.3)	35.9(-1.4 to 90.8)
Bahrain	13(8 to 21)	2.4(1.4 to 3.7)	50(29 to 77)	3.4(2.1 to 5.4)	44.1(3.8 to 103.3)
Egypt	1282(738 to 2130)	2.2(1.3 to 3.5)	3335(1925 to 5267)	3.2(1.9 to 4.9)	47.4(1.5 to 109.1)
Iran (Islamic Republic of)	1167(733 to 1769)	1.8(1.1 to 2.7)	2532(1587 to 3744)	2.9(1.8 to 4.3)	64.4(50.5 to 79.5)
Iraq	412(228 to 671)	2.2(1.3 to 3.5)	1555(917 to 2453)	3.3(2 to 5.2)	52.2(5.4 to 118.6)
Jordan	98(55 to 160)	2.3(1.4 to 3.7)	436(253 to 692)	3.4(2 to 5.4)	49(6.2 to 108.9)
Kuwait	48(27 to 75)	2.4(1.4 to 3.8)	162(97 to 255)	3.5(2.1 to 5.5)	42.6(1.6 to 96.1)
Lebanon	77(45 to 127)	2.3(1.4 to 3.8)	179(105 to 277)	3.5(2.1 to 5.5)	51.7(7.5 to 115.5)
Libya	109(60 to 179)	2.4(1.3 to 3.8)	244(145 to 387)	3.3(2 to 5.3)	40.6(-0.1 to 101.3)
Morocco	659(374 to 1043)	2.3(1.4 to 3.6)	1200(714 to 1916)	3.2(1.9 to 5.1)	36.9(-5.7 to 88.1)
Palestine	54(30 to 92)	2.5(1.5 to 4.1)	185(108 to 293)	3.4(2.1 to 5.3)	36.3(-3.9 to 95.9)
Oman	48(27 to 77)	2.3(1.3 to 3.6)	177(99 to 282)	3.4(2 to 5.3)	49.6(2.9 to 118)
Qatar	11(7 to 18)	2.3(1.3 to 3.6)	111(58 to 182)	3.4(1.9 to 5.3)	49.9(2.4 to 113.2)
Saudi Arabia	394(225 to 642)	2.2(1.3 to 3.5)	1351(791 to 2134)	3.4(2 to 5.3)	52.3(8.3 to 119.9)
Sudan	483(277 to 781)	2.2(1.3 to 3.5)	1429(820 to 2257)	3.2(1.9 to 4.9)	42(1 to 101.4)

Syrian Arab Republic	361(199 to 581)	2.5(1.5 to 3.9)	537(307 to 845)	3.4(2 to 5.3)	35.9(-4 to 88.8)
Tunisia	218(123 to 357)	2.4(1.4 to 3.8)	385(231 to 604)	3.4(2 to 5.3)	41.4(1.2 to 93.9)
Turkey	1415(802 to 2247)	2.2(1.3 to 3.3)	2801(1642 to 4353)	3.3(1.9 to 5.2)	53.9(7.4 to 111.7)
United Arab Emirates	47(27 to 75)	2.3(1.3 to 3.6)	311(172 to 501)	3.3(1.9 to 5.1)	44.5(-0.6 to 106.8)
Yemen	343(194 to 548)	2.4(1.4 to 3.7)	1056(595 to 1674)	3.1(1.8 to 4.8)	27.1(-9.6 to 76.8)
South Asia	23958(15558 to 35683)	2(1.3 to 3)	60854(38899 to 89567)	3.1(2 to 4.5)	52.5(36.3 to 70.7)
Bangladesh	12622(7937 to 18898)	11(7 to 16.2)	26722(17201 to 40128)	15.7(10.1 to 23.5)	42.5(16.1 to 76)
Bhutan	70(46 to 101)	10.3(6.8 to 14.7)	114(72 to 172)	13.6(8.8 to 20.4)	31.5(7.3 to 60.4)
India	8028(5127 to 12010)	0.9(0.6 to 1.3)	26526(16790 to 39330)	1.7(1.1 to 2.6)	101.4(88.2 to 113.6)
Nepal	2116(1358 to 3112)	10.8(7 to 15.7)	3004(1891 to 4369)	9.1(5.7 to 13.1)	-15.4(-32.4 to 4.4)
Pakistan	1121(690 to 1701)	0.9(0.6 to 1.4)	4488(2768 to 6996)	1.7(1.1 to 2.6)	86.1(51.8 to 123.1)
Southern Sub-Saharan Africa	1053(647 to 1620)	1.7(1.1 to 2.6)	1837(1152 to 2840)	2.2(1.4 to 3.3)	25.1(10 to 43.7)
Botswana	49(28 to 78)	3.4(2 to 5.3)	95(55 to 149)	3.7(2.2 to 5.9)	10.3(-21.8 to 57.8)
Lesotho	63(38 to 99)	3.2(2 to 4.8)	74(43 to 118)	3.1(1.9 to 5)	-1.4(-29.8 to 39.4)
Namibia	46(26 to 74)	3(1.7 to 4.6)	89(51 to 140)	3.4(2 to 5.3)	13.9(-18.6 to 61.1)
South Africa	540(329 to 819)	1.3(0.8 to 1.9)	1041(645 to 1583)	1.8(1.1 to 2.7)	41.3(24.5 to 59.9)
Eswatini	27(16 to 44)	3(1.8 to 4.7)	42(24 to 67)	3.2(2 to 5.1)	7.6(-23.7 to 54.1)
Zimbabwe	327(173 to 523)	2.8(1.6 to 4.4)	497(282 to 784)	3(1.7 to 4.6)	4.4(-25.3 to 49.7)
Western Sub-Saharan Africa	2002(1241 to 3044)	1(0.6 to 1.4)	7249(4465 to 11015)	1.4(0.9 to 2.2)	47.9(37 to 58.6)
Benin	66(39 to 105)	1.3(0.8 to 2.1)	237(127 to 379)	1.7(1 to 2.7)	30(-8 to 79.2)
Burkina Faso	130(75 to 209)	1.3(0.8 to 2.1)	414(227 to 672)	1.7(1 to 2.7)	29.9(-8.6 to 79.3)
Cameroon	146(86 to 238)	1.3(0.8 to 2.1)	574(328 to 905)	1.7(1 to 2.7)	31.4(-6.4 to 80)
Cabo Verde	5(3 to 9)	1.4(0.8 to 2.2)	12(7 to 19)	1.9(1.1 to 3.1)	41.3(2 to 93)
Chad	86(49 to 139)	1.4(0.8 to 2.2)	290(155 to 479)	1.6(0.9 to 2.6)	19(-13.5 to 61.7)
Cote d'Ivoire	153(98 to 231)	3.4(2.1 to 5.2)	113(72 to 164)	3.4(2.1 to 5.1)	0(-29.7 to 44.1)

Gambia	15(9 to 25)	1.4(0.9 to 2.2)	46(26 to 76)	1.8(1.1 to 2.8)	27(-7.5 to 70.3)
Ghana	239(141 to 375)	1.5(0.9 to 2.3)	658(385 to 1061)	1.9(1.1 to 3)	25.9(-8.9 to 71.1)
Guinea	83(49 to 131)	1.3(0.8 to 2)	234(132 to 370)	1.7(1 to 2.6)	29.3(-7.6 to 79.2)
Guinea-Bissau	15(9 to 24)	1.4(0.8 to 2.1)	37(21 to 59)	1.7(1 to 2.7)	22.6(-13.8 to 68.4)
Liberia	26(15 to 40)	1.3(0.8 to 2)	98(53 to 155)	1.8(1 to 2.8)	40.5(-1.5 to 96.6)
Mali	119(70 to 192)	1.3(0.8 to 2.1)	418(233 to 681)	1.7(1 to 2.8)	30.8(-5.9 to 79.5)
Mauritania	29(17 to 46)	1.3(0.8 to 2)	83(45 to 139)	1.9(1.1 to 3)	40.3(-1.9 to 98)
Niger	117(71 to 179)	1.4(0.9 to 2.1)	424(234 to 696)	1.7(1 to 2.7)	23(-10.7 to 69.4)
Nigeria	534(327 to 806)	0.5(0.3 to 0.8)	2627(1598 to 3991)	1.1(0.7 to 1.7)	101.1(93.9 to 109.8)
Sao Tome and Principe	2(1 to 3)	1.3(0.8 to 2)	4(2 to 7)	1.8(1 to 2.8)	34.7(-3.6 to 86.1)
Senegal	113(68 to 179)	1.4(0.9 to 2.2)	292(167 to 460)	1.7(1 to 2.6)	24.6(-11.9 to 69)
Sierra Leone	50(30 to 79)	1.3(0.8 to 2)	170(94 to 273)	1.8(1 to 2.8)	37(0.8 to 91.8)
Togo	54(32 to 86)	1.4(0.8 to 2.1)	150(85 to 235)	1.7(1 to 2.7)	28.4(-8.3 to 77.6)
Eastern Sub-Saharan Africa	2123(1300 to 3234)	1(0.6 to 1.6)	6956(4286 to 10506)	1.5(0.9 to 2.2)	45.5(31.2 to 61.2)
Burundi	80(47 to 125)	1.4(0.8 to 2.1)	250(135 to 389)	2(1.1 to 3)	42.8(3.2 to 94)
Comoros	8(5 to 13)	1.6(1 to 2.5)	16(9 to 27)	2.1(1.2 to 3.4)	30.8(-7.6 to 80.8)
Djibouti	9(5 to 14)	1.6(0.9 to 2.5)	27(15 to 43)	2.1(1.2 to 3.4)	32.2(-6.7 to 85.3)
Eritrea	45(27 to 71)	1.4(0.8 to 2.1)	153(86 to 249)	2(1.2 to 3.2)	48(4.8 to 101.1)
Ethiopia	106(65 to 162)	0.2(0.1 to 0.3)	783(468 to 1219)	0.6(0.4 to 0.9)	207.4(178.6 to 243.7)
Kenya	133(79 to 208)	0.5(0.3 to 0.7)	460(276 to 710)	0.8(0.5 to 1.1)	58.5(53.9 to 63.8)
Madagascar	207(114 to 357)	1.6(0.9 to 2.6)	583(336 to 942)	2(1.2 to 3.1)	24.7(-13.9 to 80.1)
Malawi	156(90 to 244)	1.5(0.9 to 2.3)	434(236 to 700)	2.1(1.2 to 3.1)	36.6(0.5 to 86.1)
Mozambique	220(128 to 345)	1.6(1 to 2.5)	739(423 to 1173)	2.4(1.4 to 3.6)	47.8(6.9 to 100.2)
Rwanda	123(73 to 196)	1.6(1 to 2.5)	310(176 to 498)	2.2(1.3 to 3.4)	36.9(-3 to 85.9)
Somalia	117(70 to 189)	1.5(1 to 2.4)	424(229 to 690)	1.9(1.1 to 2.9)	22.1(-13.8 to 67.8)

South Sudan	90(53 to 146)	1.4(0.8 to 2.2)	183(105 to 295)	1.8(1.1 to 2.8)	29.2(-3.5 to 69.4)
United Republic of Tanzania	418(240 to 667)	1.5(0.9 to 2.3)	1249(680 to 2073)	2(1.1 to 3.3)	36.7(-3 to 90)
Uganda	274(159 to 440)	1.5(0.9 to 2.3)	922(502 to 1498)	2(1.2 to 3.2)	35.6(-6.1 to 86.2)
Zambia	134(78 to 206)	1.5(0.9 to 2.3)	418(230 to 681)	2.1(1.2 to 3.3)	35.8(-5.3 to 92.5)
Central Sub-Saharan Africa	1479(906 to 2276)	2.5(1.5 to 3.7)	4900(3015 to 7598)	3.4(2.1 to 5.1)	36(8 to 72.8)
Angola	263(152 to 410)	2.3(1.4 to 3.5)	1082(612 to 1706)	3.3(2 to 5.1)	41.4(-1.4 to 93.6)
Central African Republic	78(48 to 122)	2.7(1.7 to 4.2)	168(98 to 257)	2.9(1.8 to 4.4)	5.9(-26.3 to 48.8)
Congo	60(33 to 95)	2.2(1.3 to 3.4)	179(105 to 278)	3.1(1.9 to 4.8)	40.3(-2.1 to 109.3)
Democratic Republic of the Congo	1044(609 to 1662)	2.5(1.5 to 3.9)	3354(1988 to 5210)	3.4(2.1 to 5.2)	36.3(-0.5 to 89.9)
Equatorial Guinea	10(6 to 15)	2.2(1.3 to 3.4)	54(30 to 87)	3.2(1.9 to 5.1)	46.3(1.8 to 107)
Gabon	23(13 to 38)	2.2(1.3 to 3.5)	61(36 to 95)	3.2(1.9 to 4.9)	44.8(3.2 to 101.2)