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# The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019, based on Global Burden Disease Study 2019

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The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019, based on Global Burden Disease Study 2019

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Running title: Global burden of inflammatory bowel disease

# Abstract

**Objectives** We aim to provide the most updated estimates on the global burden of inflammatory bowel disease (IBD) to improve management strategies.

**Design** We extracted data from the Global Burden of Disease (GBD) 2019 database to evaluate IBD burden with different measures in 204 countries and territories from 1990 to 2019.

**Setting** Studies from the GBD 2019 database generated by population-representative data sources identified through literature review and research collaborations were included.

Participants Patients with IBD diagnosis.

**Outcomes** Total numbers, age-standardised rates of prevalence, mortality and disability-adjusted life year (DALY), and their estimated annual percentage changes (EAPCs) were the main outcomes.

**Results** In 2019, there were approximately 4.9 million cases of IBD globally, with China and the United States had the highest number of cases [911405 and 762890 respectively (66.9 and 245.3 cases per 100 000 population respectively)]. Between 1990 and 2019, the global age-standardised rates of prevalence, deaths, and DALYs decreased (EAPC = -0.66, -0.69, and -1.04, respectively). However, age-standardised prevalence rate increased in 13 out of 21 GBD regions. And a total of 147 out of 204 countries or territories experienced an increase in age-standardised prevalence rate. From 1990 to 2019, IBD prevalent cases, deaths and DALYs were higher in females than males. Higher SDI was associated with higher age-standardised prevalence rates. **Conclusions** IBD will continue to be a major public health burden due to increasing numbers of prevalent cases, deaths, and DALYs. The epidemiology trends and disease burden of IBD have changed dramatically at regional and national level, so understanding these changes would be beneficial for policy makers to tackle IBD. **Keywords:** Inflammatory bowel disease; Global burden of disease; Prevalence;

Disability-adjusted life years; Estimated annual percentage change.

# Strengths and limitations of this study

This is the most updated estimate on IBD epidemiology globally, including 204 countries some of which were not assessed before.

GBD 2019 incorporated more studies, adjusted diagnostic criteria, and further improved data reliability, hence, presenting data more representative to individuals. One of the limitations is heterogeneity in population and location between studies included.

Another limitation is the variability in study design and data collection methods also affects the precision of the estimates, which is only partially compensated in our analysis model.

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## Introduction

Inflammatory bowel diseases (IBDs), including Crohn's disease and ulcerative colitis, are debilitating and chronic inflammatory disorders of the gastrointestinal tract that have no cure.<sup>1</sup> IBD is characterised by a relapsing-remitting course and a heterogeneous clinical presentation that includes episodes of abdominal pain, chronic diarrhea, rectal bleeding, and weight loss, which are often associated with systemic symptoms such as fatigue and occasionally fever.<sup>2</sup> Because IBD can cause significant morbidity and lead to complications such as strictures, fistulas, infections, and cancer, this disorder lead to substantial health care costs and place a great stress on health care systems.<sup>3,4</sup> Although the cause of IBD remains unknown, the pathogenesis of IBD is suggested to be associated with genetic susceptibility of the host, intestinal microbiota, other environmental factors (e.g., diet, smoking, and physiological stress), and immunological abnormalities.<sup>5</sup>

Traditionally, IBD has been regarded as a disease of the western world; however, studies over the last two decades have shown a rapid increasing incidence in newly industrialized countries in the Middle East, Asia, and South America.<sup>6</sup> Conversely, IBD incident rates appear to be plateauing in the Western world in the 21st century.<sup>7</sup> These significant changes highlights the need for a comparable, consistent and systematic analysis of disease burden and trends concerning IBD in different regions and countries, which can be used to give a convincing evidence for rational allocation of resources and heath care planning in reducing the global burden of IBD.

The Global Burden of Diseases (GBD) 2019 Study, a systematical worldwide epidemiological study most recently, assessed prevalence, morbidity, mortality, disability of 369 diseases by location, sex, age and year,<sup>8</sup> which provides a unique opportunity to understand the state of IBD. The purpose of this study was to use data from GBD 2019 study to determine the global, regional and national burden of IBD across 204 countries and territories from 1990 to 2019 by age, gender and social-development index (SDI).

# Methods

The general methodology of GBD 2019 has been reported in detail in previous publications.<sup>8-11</sup> In brief, GBD Study collected data from censuses, household surveys, civil registration and vital statistics, disease registries, health service use, satellite imaging, disease notifications, and other sources.<sup>9</sup> A Bayesian meta-regression modelling tool, DisMod-MR 2.1, was used to model and derive estimates of the burden under several conditions in 204 countries and territories from 1990 to 2019.<sup>9</sup> The model included all of the above available information for each disease and applied correcting process for known bias to derive country-specific estimates of prevalence and of the burden of diseases, which have been described in previous studies.<sup>8</sup> Uncertainty intervals (UIs) were generated for every metric using the 25th and 975th ordered 1000 draw values of the posterior distribution.<sup>9</sup>

We extracted from the GBD database yearly crude and age-standardised estimates of different measures of the burden of IBD from 1990 to 2019 and the respective 95% UIs via the Global Health Data Exchange (GHDx) query tool (http://ghdx.healt hdata.org/gbd-results-tool). For the GBD 2019 assessment, IBD was defined according to 10th revisions of the International Classification of Diseases (ICD-10: K50-K51.319, K51.5-K52, K52.8-K52.9). The variables obtained from the database included prevalent cases, death numbers, disability-adjusted life-years (DALYs) numbers, years of life lost (YLLs) numbers, years lived with disability (YLDs) numbers, and their corresponding age-standardised rates (ASRs) at the global, regional, and national levels. Prevalence rate (per 100 000) was defined as aggregated cases (including new cases and previously diagnosed cases) divided by the population size; mortality rate (per 100 000) was defined as the number of annual deaths divided by the total population size, and DALYs were calculated as the sum of YLLs and YLDs. These data were stratified by age (1-4, 5-9, every 5-year age group up to 95 years, and 95 years and older), calendar year (1990-2019), region, and country (or territory). Geographically, the world was classified into 21 regions. Moreover, 204 countries and territories were divided into five categories, according to the socio-demographic index (SDI), the geometric average of total fertility, per capita income, and average years of education, ranging from zero to one.<sup>12</sup> The larger the

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SDI, the more developed the country.<sup>13</sup>

Estimated average percentage change (EAPC) was used to evaluate the trends in age-standardised rates of prevalence, death, and DALY over a specific period. The natural logarithm of age-standardised rate is assumed to be linear along with time; that is,  $y = \alpha + \beta x + \varepsilon$ , where  $y = \ln$  (rate), x = calendar year, and  $\varepsilon =$  error term. Based on this formula,  $\beta$  represents the positive or negative age-standardised rate trends. EAPC was calculated as  $100 \times (\exp (\beta) - 1)$ , and its 95% confidence interval (CI) could also be calculated from this model.<sup>14</sup> The age-standardised indicator was recognized to be in an increasing trend if the 95% CI of the corresponding EAPC estimation > 0, to be a decreasing trend if the 95% CI < 0, and to be stable if the 95% CI included 0. All statistical analyses and visualizations were conducted using R statistical software program (version 4.1.0). *P* value < 0.05 was considered statistically significant.

Because the study was based on publicly available dataset, this study was exempted by the ethics committee of the Third Xiangya Hospital of Central South University. This study followed the guideline of cross-sectional study described in the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER).<sup>15</sup>

# Patient and public involvement

Patients and/or the public were not involved in the study design, or data interpretation, or manuscript drafting, or dissemination plans of this research.

## Results

## Burden of IBD at global level

Globally, IBD accounted for 4.90 million (95% UI 4.35 to 5.50) prevalent cases, 0.40 million (0.36 to 0.46) incident cases, and 40998 (34933 to 44661) deaths in 2019 (Supplementary Table 1 and Figure 1A). Meanwhile, 1.62 million (1.36 to 1.92) DALYs, 0.73 million (0.49 to 0.99) YLDs, and 0.90 million (0.78 to 1.00) YLLs were due to IBD in 2019 (Supplementary Table 1, Supplementary Table 2, and Supplementary Figure 1-5).

Between 1990 and 2019, the global age-standardised prevalence rate of IBD decreased from 73.23 (95% UI 63.86 to 83.63) in 1990 to 59.25 (52.78 to 66.47) in

2019 per 100000 population with the EAPC being -0.66 (95% CI -0.75 to -0.57) (Table 1; Figure 1B, 1C; and Figure 2A). The global age-standardised death rate decreased from 0.67 (0.57 to 0.78) in 1990 to 0.54 (0.46 to 0.59) in 2019 per 100000 population by an average of -0.69 (-0.81 to -0.57) (Table 1, Figure 2B, and Supplementary Figure 6-7). The global age-standardised DALY rate decreased from 27.20 (21.70 to 32.39) in 1990 to 20.15 (16.86 to 23.71) in 2019 per 100000 population at -1.04 per year (-1.06 to -1.01) (Table 1, Figure 2C, and Supplementary Figure 8-9). The same decreased trend was found in the age-standardised incidence rate [EAPC = -0.60 (-0.73 to -0.48)], the age-standardised YLL rate [EAPC = -1.33 (-1.37 to -1.30)] and the age-standardised YLD rate [EAPC = -0.62 (-0.70 to -0.53)] (Supplementary Table 3 and Supplementary Figure 10-12).

#### **Burden of IBD at GBD regional level**

Western Europe was the top region for largest numbers of both prevalent cases [1.03] million (95% UI 0.93 to 1.13)] and deaths [11981 (9244 to 13315)] in 2019 (Supplementary Table 1). Western Europe was also the region with the highest age-standardised death rate [1.11 (0.87 to 1.23)] in 2019, followed by High-income North America [0.97 (0.79 to 1.05)] and Australasia [0.72 (0.53 to 0.83)] (Figure 3B). The highest age-standardised prevalence rates in 2019 were observed in High-income Asia Pacific [210.54 (183.69 to 239.68)], High-income North America [209.60 (195.48 to 224.46)] and Western Europe [188.22 (169.47 to 207.48)] (Figure 3A). In 2019, Oceania showed the lowest numbers of both prevalent cases [417 (338 to 509)] and deaths [36 (26 to 51)]. And Oceania [3.87 (3.16 to 4.71)] had the lowest age-standardised prevalence rate among regions in 2019. The lowest age-standardised death rate of IBD in 2019 was found in High-income Asia Pacific [0.13 (0.11 to 0.18)] (Table 1). The highest age-standardised DALY rates in 2019 were observed in High-income North America [51.27 (40.90 to 62.35)], Western Europe [46.79 (36.98 to 57.57)], and Central Europe [35.84 (27.66 to 44.67)] (Figure 3C). While Southeast Asia [7.45 (6.06 to 8.76)] had the lowest age-standardised DALY rate.

From 1990 to 2019, an increase in total prevalent cases, deaths and DALYs was seen across most of GBD regions, as shown in Figure 4. However, the trends in

age-standardised prevalence rate, age-standardised death rate and age-standardised DALY rate over the time differed substantially between the GBD regions. Age-standardised prevalence rate increased in 13 GBD regions and decreased in 5 regions, with the highest increasing trend in East Asia [EAPC = 2.79 (2.41 to 3.18)] and the largest decrease in High-income North America [EAPC = -1.32 (-1.75 to -0.89)] (Figure 2A). Age-standardised death rate declined in more than 60% of GBD regions, such as High-income Asia Pacific [EAPC = -4.29 (-4.64 to -3.93)], East Asia [EAPC = -3.98 (-4.33 to -3.63)], and Andean Latin America [EAPC = -2.74 (-3.16 to -2.32)] (Figure 2B). Most of the GBD regions had a decreased trend in age-standardised DALY rate, with the largest decrease in Andean Latin America [EAPC = -3.68 (-4.17 to -3.18)], East Asia [EAPC = -2.31 (-2.48 to -2.15)], and Southeast Asia [EAPC = -2.29 (-2.44 to -2.15)] (Figure 2C). However, Australasia had the largest increase in age-standardised death rate [EAPC = 1.77 (1.41 to 2.13)] and age-standardised DALY rate [EAPC = 0.93 (0.75 to 1.12)].

# Burden of IBD at national and territorial level

At the national and territorial level in 2019, China and United States of America had the highest number of prevalent cases [911405 (95% UI 776347 to 1069533), 762890 (712357 to 813654), respectively], the highest number of death cases [4676 (3774 to 5461), 5910 (4622 to 6464), respectively], and the highest number of DALYs [232464 (179903 to 291090), 215289 (175991 to 256059), respectively] (Supplementary Table 4, Figure 1A, and Supplementary Figure 1-2). In 2019, the highest age-standardised prevalence rates of IBD were observed in Norway [498.95 (429.41 to 570.55)], Canada [357.73 (323.05 to 393.88)] and Hungary [332.82 (309.79 to 356.72)]; and the lowest age-standardised prevalence rates were found in Solomon Islands [3.35 (2.73 to 4.12)], Kiribati [3.55 (2.90 to 4.32)] and Papua New Guinea [3.65 (2.96 to 4.45)] (Supplementary Table 5 and Figure 1B). Netherlands had the highest age-standardised death rate in 2019 [2.08 (1.58 to 2.40)], and Singapore had the lowest [0.07 (0.06 to 0.11)] (Supplementary Figure 6).

Between 1990 and 2019, age-standardised prevalence rates were found in an increasing trend in 147 countries or territories (Figure 1C). During the same period,

47 and 129 countries or territories experienced a significant increase and decrease in age-standardised death rate of IBD, respectively, and the highest increase and decrease was noted in Germany [EAPC = 3.73 (3.26 to 4.20)] and Republic of Korea [EAPC = -7.96 (-8.67 to -7.25)], respectively (Supplementary Figure 7). Age-standardised DALY rates of IBD increased in 49 countries or territories, with the greatest increase in Mauritius [EAPC = 1.88 (1.53 to 2.23)], and decreased in 133 countries or territories, with the highest decrease in Peru [EAPC = -5.08 (-5.69 to -4.47)] (Supplementary Figure 9).

# Burden of IBD by age and sex patterns

 Overall, the global number of prevalent cases, death cases and DALYs were totally higher in females than males in 2019 (Supplementary Table 1). The age-standardised death rate was 0.56 (95% UI 0.45 to 0.62) per 100000 population in males and 0.52 (0.43 to 0.58) per 100000 population in females (Table 1). The age-standardised DALY rate was 20.6 (17.2 to 24.3) in males and 19.7 (16.2 to 23.5) in females (Table 1). While the age-standardised prevalence rate was similar between males and females in 2019.

The highest peak of IBD age-specific prevalence rate occurred at age 60-64 years both in females and males in 2019 (Figure 5A). The highest rates of death and DALYs observed were in the oldest age group ( $\geq$ 95 years) for both sexes (Figure 5B, 5C). In 2019, the number of prevalent cases peaked in the 50-54 years age group in both sexes. The number of deaths was highest in males aged 80-84 years and females aged 85-89 years, and the number of DALYs was highest in males aged 50-54 years and females aged 55-59 years. The highest number of YLLs occurred in the group aged 65-69 years (75234, [95% UI 63865 to 83022]), while the highest number of YLDs occurred in the group aged 45-49 years (80776, [53187 to 113688]) (Supplementary Figure 13).

From 1990 to 2019, the number of prevalent cases, death cases and DALYs continued to increase in both sexes and were higher in females than males in all years. The age-standardised prevalence rate, death rate and DALY rate all decreased in both sexes during the same period (Supplementary Figure 14-16).

# Burden of IBD by Socio-demographic Index (SDI)

Higher SDI was associated with higher age-standardised prevalence rates of IBD, with values that were higher than the global rate in high and high-middle SDI quintiles, and lower than the global rate in the other three SDI quintiles (Table 1). High SDI quintile had the highest age-standardised prevalence rate, death rate and DALY rate in 2019. Between 1990 and 2019, age-standardised death rate and age-standardised DALY rate decreased in all SDI quintiles except the high SDI quintile, where it increased [EAPC = 0.82 (0.64 to 1.01)] and remained stable [EAPC = 0.00 (-0.06 to 0.05)], respectively (Table 1 and Figure 2B, 2C). Whereas, age-standardised prevalence rate decreased in high and high-middle SDI quintiles and increased in other three SDI quintiles during the observation period (Table 1 and Figure 2A).

The observed global and regional age-standardised prevalence, death, and DALY rates in relation to SDI are shown in Figure 6, expressed in the annual time series from 1990 to 2019. Regions generally followed the trend of increased death and DALY rates with higher SDI. However, more than 60% of the regions showed an increase trend in age-standardised prevalence rate during this study period. At the global level, the age-standardised prevalence, death, and DALY rates dropped with increasing SDI values but above the expected levels during the past 30 years.

# Discussion

In this study, we comprehensively analyzed the temporal trend in IBD burden at the global, regional, and national levels. GBD 2019 reported 4.90 million IBD estimates globally in 2019 and 4.79 million in 2017, while GBD 2017 reported 6.85 million in 2017.<sup>16</sup> The discrepancy could be partly attributed to the improved specificity of case definition since GBD 2019 adjusted administrative data inputs toward expected stringent diagnosis using previously published IBD data with ICD codes.<sup>11</sup> In addition, GBD 2019 improved model fit prevalence and incidence by setting more plausible bounds on excess mortality rate and passing less-informative priors to lower levels of the geographical hierarchy in DisMod-MR 2.1.<sup>11</sup> Indeed, GBD 2019 study

 provides the most current overview of the burden of IBD. It incorporated more data sources, with some carried out in regions not previously assessed, providing updated estimates on IBD global epidemiology.<sup>11</sup> Besides, GBD 2019 updated the bias adjustment, which further improved the data reliability.<sup>11</sup> After these adjustments, our study confirmed two epidemiological shifts in IBD since 1990. The number of prevalent cases increased globally since 1990, with China and United States of America in the top number of cases. The age-standardised rates of death and DALYs decreased, implying significant improvements in IBD management. The changing trend and geographical patterns made implications for policy-makers to prioritise IBD management, especially in newly industrialised countries.

The highest age-standardised prevalence rates were observed in High-income North America, Western Europe, and High-income Asia Pacific. The pattern was also shown in the high SDI countries such as Norway and Canada. This is consistent with several previous meta-analysis,<sup>6,17</sup> and might correlate with several risk factors of IBD.<sup>18,19</sup> Deeply processed food with low fiber, high fat, and sugar is a risk factor for decreased microbial species.<sup>20-22</sup> Others include smoking, hygiene, latitude resulting in vitamin D/sun exposure.<sup>23,24</sup> Though the largest reduction in age-standardised prevalence rate was also observed in High-income North America, which was consistent with some of the previous report,<sup>6,25</sup> indicating the shift of the epidemiological stages of IBD in western countries.<sup>26,27</sup>

Despite increasing numbers of prevalent cases, the global age-standardised prevalence rate showed a decreasing trend. The discrepancy reflects denominator effects of increasing global population and age-specific effects.<sup>28</sup> Coward S and his colleagues<sup>29</sup> reported that the prevalence rate in elderly and adults was ten times more than pediatric in Canada. The trend in age-standardised prevalence rate differed substantially between the GBD regions. The highest increasing trend was observed in East Asia. At the national level, China, with a total number of 911405 IBD patients, was a prominent contribution to the total numbers of global IBD. The pattern is consistent with several previous report,<sup>6,30</sup> which is related mainly to urbanization, industrialization, and some area cultural westernization in China.<sup>31</sup> With

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epidemiological surveillance strategies shifting from paper-record to electronic healthcare databases using International Classification of Disease (ICD) codes, advances in health-care facilities like the implementation of endoscopy,<sup>32</sup> detection and diagnosis of IBD also increased.

IBD causes body disability.<sup>33,34</sup> Consistent with the previous study,<sup>4</sup> the age-standardised DALY and mortality rate showed a decreasing trend globally, especially in East Asia, likely resulting from the improved treatment strategy such as early use of biological agents and patient support programs.<sup>35</sup> The introduction of biological agents improved life quality and reduced surgery rate.<sup>30,36</sup> Unfortunately, the cost of biologic therapy is considerable, estimated at more than US\$25,000 per year.<sup>37</sup> More attention should be paid in increasing access to modern therapies in lower SDI countries.

There are some limitations of our study. First, the accuracy of the estimated IBD burden largely depends on the availability and quality of data acquired, which could be partially compensated by statistical methods. However, in regions with scarce data, especially in low-SDI countries, estimates could only rely on predictive covariates or data from a single country which is less representative. Extra cautions should be made when interpreting data in these areas. Additional high-quality population-based studies should be done, especially in countries with scarce data. Second, estimates discrepancies compared to some of the previously published studies could be further improved, although GBD 2019 has improved model fit to prevalence and incidence, partly overcoming the discrepancies. For example, the prevalence rate in Canada was only 46 to 57 per 100,000 population in GBD 2017. However, around 520 per 100,000 population was reported by a previous large population-based study in Canada.<sup>38</sup> GBD 2019 reported 357.73 in 100,000 population after adjustment. Third, UC-specific and CD-specific trends were not assessed due to the lack of relevant data. The association between IBD and certain risk factors should also be included in the future. Nevertheless, GBD 2019 provided the most up-to-date estimated IBD global epidemiology for the last three decades and implications for new hypotheses. It has covered 204 countries. Therefore, it generates more representative data and can

compensate for biases in individual literatures.

# Conclusions

Despite the reduction in age-standardised rate of prevalence, death, and DALY, IBD will continue to be a major public health burden due to increasing numbers of prevalent cases globally. However, the trend is shifted substantially since 1990. When the age-standardised prevalence rate rapidly increases in newly industrialized countries especially in east Asia, the incidence has been stabilized or even decreased in western countries like high-income north America. The prevalence of IBD in newly industrialized countries is quickly approaching western countries. More systematic epidemiologic monitoring strategies, especially in low-SDI countries and risk factors integrated into the estimate model of the GBD Study would further facilitate IBD management. Our findings might help some policymakers to justify medical resources allocation, especially in low SDI countries.

# Abbreviations

EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; SDI, socio-demographic index; GBD, Global Burden of Disease, Injuries, and Risk Factors Study; DALYs, disability adjusted life years; YLDs, years of life lived with disability; YLLs, years of life lost; IHME, Institute for Health Metrics and Evaluation; GATHER, Guidelines for Accurate and Transparent Health Estimates Reporting; ASR, age-standardised rate; UI, uncertainty interval; CI, confidence interval.

#### Ethics approval and consent to participate

This study did not involve human participants and the study did not need ethics approval because it used publicly available data.

# **Consent for publication**

Not applicable.

# Availability of supporting data

 The data were obtained through an online query tool from the website of IHME (http://ghdx.healthdata.org/).

## **Declaration of interests**

The authors declare no conflict of interests.

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## **Author Contributions**

Study concept and design: Decai Zhang and Rui Wang. Acquisition of data: Zhaoqi Li and Shaojun Liu. Data analysis and interpretation: Rui Wang RW, Zhaoqi Li, Shaojun Liu, and Decai Zhang. Drafting the manuscript: Decai Zhang and Rui Wang. Critical revision of manuscript: all authors. All authors had full access to all the data in the study and had final responsibility for the decisions to submit for publication.

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# References

1. Seyed Tabib NS, Madgwick M, Sudhakar P, Verstockt B, Korcsmaros T, Vermeire S. Big data in IBD: big progress for clinical practice. *Gut.* 2020;69(8):1520-1532.

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- Magro F, Gionchetti P, Eliakim R, et al. Third European Evidence-based Consensus on Diagnosis and Management of Ulcerative Colitis. Part 1: Definitions, Diagnosis, Extra-intestinal Manifestations, Pregnancy, Cancer Surveillance, Surgery, and Ileo-anal Pouch Disorders. *J Crohns Colitis*. 2017;11(6):649-670.
- Agrawal M, Spencer EA, Colombel JF, Ungaro RC. Approach to the Management of Recently Diagnosed Inflammatory Bowel Disease Patients: A User's Guide for Adult and Pediatric Gastroenterologists. *Gastroenterology*. 2021;161(1):47-65.
- 4. Piovani D, Danese S, Peyrin-Biroulet L, Bonovas S. Inflammatory bowel disease: estimates from the global burden of disease 2017 study. *Aliment Pharmacol Ther.* 2020;51(2):261-270.
- 5. Guan Q. A Comprehensive Review and Update on the Pathogenesis of Inflammatory Bowel Disease. *J Immunol Res.* 2019;2019:7247238.
- Ng SC, Shi HY, Hamidi N, et al. Worldwide incidence and prevalence of inflammatory bowel disease in the 21st century: a systematic review of population-based studies. *Lancet*. 2017;390(10114):2769-2778.
- 7. Khalili H. The Changing Epidemiology of Inflammatory Bowel Disease: What Goes Up May Come Down. *Inflamm Bowel Dis.* 2020;26(4):591-592.
- Collaborators GBDD. Global age-sex-specific fertility, mortality, healthy life expectancy (HALE), and population estimates in 204 countries and territories, 1950-2019: a comprehensive demographic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;396(10258):1160-1203.
- Diseases GBD, Injuries C. 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.* 2020;396(10258):1204-1222.
- Collaborators GBDUHC. Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 2020;396(10258):1250-1284.
- Collaborators GBDRF. Global burden of 87 risk factors in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;396(10258):1223-1249.
- Collaborators GBDM. Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2017;390(10100):1084-1150.
- Alcohol GBD, Drug Use C. The global burden of disease attributable to alcohol and drug use in 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet Psychiatry*. 2018;5(12):987-1012.
- Deng Y, Zhao P, Zhou L, et al. Epidemiological trends of tracheal, bronchus, and lung cancer at the global, regional, and national levels: a population-based study. *J Hematol Oncol*. 2020;13(1):98.
- 15. Stevens GA, Alkema L, Black RE, et al. Guidelines for Accurate and Transparent Health Estimates Reporting: the GATHER statement. *Lancet*. 2016;388(10062):e19-e23.
- 16. Collaborators GBDIBD. The global, regional, and national burden of inflammatory bowel disease in 195 countries and territories, 1990-2017: a systematic analysis for the Global

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	Burden of Disease Study 2017. Lancet Gastroenterol Hepatol. 2020;5(1):17-30.
17.	Ye Y, Manne S, Treem WR, Bennett D. Prevalence of Inflammatory Bowel Disease in
17.	Pediatric and Adult Populations: Recent Estimates From Large National Databases in the
	United States, 2007-2016. Inflamm Bowel Dis. 2020;26(4):619-625.
18.	de Souza HSP, Fiocchi C, Iliopoulos D. The IBD interactome: an integrated view of aetiology,
10.	pathogenesis and therapy. <i>Nat Rev Gastroenterol Hepatol.</i> 2017;14(12):739-749.
19.	Ng SC, Tsoi KK, Kamm MA, et al. Genetics of inflammatory bowel disease in Asia:
17.	systematic review and meta-analysis. <i>Inflamm Bowel Dis.</i> 2012;18(6):1164-1176.
20.	Ananthakrishnan AN, Khalili H, Konijeti GG, et al. A prospective study of long-term intake
20.	of dietary fiber and risk of Crohn's disease and ulcerative colitis. <i>Gastroenterology</i> .
	2013;145(5):970-977.
21.	Suez J, Korem T, Zeevi D, et al. Artificial sweeteners induce glucose intolerance by altering
	the gut microbiota. <i>Nature</i> . 2014;514(7521):181-186.
22.	Ananthakrishnan AN. Environmental risk factors for inflammatory bowel diseases: a review.
	Dig Dis Sci. 2015;60(2):290-298.
23.	Kaplan GG, Ng SC. Understanding and Preventing the Global Increase of Inflammatory
	Bowel Disease. <i>Gastroenterology</i> . 2017;152(2):313-321 e312.
24.	Piovani D, Danese S, Peyrin-Biroulet L, Bonovas S. Environmental, Nutritional, and
	Socioeconomic Determinants of IBD Incidence: A Global Ecological Study. J Crohns Colitis.
	2020;14(3):323-331.
25.	Zhao M, Gonczi L, Lakatos PL, Burisch J. The Burden of Inflammatory Bowel Disease in
	Europe in 2020. J Crohns Colitis. 2021;15(9):1573-1587.
26.	Kaplan GG, Windsor JW. The four epidemiological stages in the global evolution of
	inflammatory bowel disease. Nat Rev Gastroenterol Hepatol. 2021;18(1):56-66.
27.	Kaplan GG. The global burden of IBD: from 2015 to 2025. Nat Rev Gastroenterol Hepatol.
	2015;12(12):720-727.
28.	Collaborators GBDM. Global, regional, and national age-sex-specific mortality and life
	expectancy, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017.
	Lancet. 2018;392(10159):1684-1735.
29.	Coward S, Clement F, Benchimol EI, et al. Past and Future Burden of Inflammatory Bowel
	Diseases Based on Modeling of Population-Based Data. Gastroenterology.
	2019;156(5):1345-1353 e1344.
30.	Qiu Y, Ren W, Liu Y, Chen WE, Pan XH, Ren JJ. Disease burden of inflammatory bowel
	disease in China from 1990 to 2017: Findings from the global burden of diseases 2017.
	EClinicalMedicine. 2020;27:100544.
31.	Su HJ, Chiu YT, Chiu CT, et al. Inflammatory bowel disease and its treatment in 2018: Global
	and Taiwanese status updates. J Formos Med Assoc. 2019;118(7):1083-1092.
32.	Pavlovic-Calic N, Salkic NN, Gegic A, Smajic M, Alibegovic E. Crohn's disease in Tuzla
	region of Bosnia and Herzegovina: a 12-year study (1995-2006). Int J Colorectal Dis.
	2008;23(10):957-964.
33.	Shafer LA, Sofia MA, Rubin DT, et al. An International Multicenter Comparison of
	IBD-Related Disability and Validation of the IBDDI. Clin Gastroenterol Hepatol.
	2021;19(12):2524-2531.
34.	Marinelli C, Zingone F, Inferrera M, et al. Factors associated with disability in patients with

ulcerative colitis: A cross-sectional study. J Dig Dis. 2020;21(2):81-87.

- 35. Jones JL, Nguyen GC, Benchimol EI, et al. The Impact of Inflammatory Bowel Disease in Canada 2018: Quality of Life. *J Can Assoc Gastroenterol.* 2019;2(Suppl 1):S42-S48.
- Frolkis AD, Lipton DS, Fiest KM, et al. Cumulative incidence of second intestinal resection in Crohn's disease: a systematic review and meta-analysis of population-based studies. *Am J Gastroenterol.* 2014;109(11):1739-1748.
- Marchetti M, Liberato NL. Biological therapies in Crohn's disease: are they cost-effective? A critical appraisal of model-based analyses. *Expert Rev Pharmacoecon Outcomes Res.* 2014;14(6):815-824.
- Benchimol EI, Manuel DG, Guttmann A, et al. Changing age demographics of inflammatory bowel disease in Ontario, Canada: a population-based cohort study of epidemiology trends. *Inflamm Bowel Dis.* 2014;20(10):1761-1769.

# **Figure legends**

 **Figure 1.** The global prevalence burden of IBD in 204 countries and territories. (A) The absolute number of IBD prevalent cases in 2017. (B) The age-standardised prevalence rate (per 100 000 population) of IBD in 2017. (C) The EAPC of age-standardised prevalence rate for IBD between 1990 and 2019.

EAPC=estimated annual percentage change. IBD=inflammatory bowel disease.

**Figure 2.** The EAPCs in age-standardised rates of prevalence (A), deaths (B), and DALYs (C) due to IBD from 1990 to 2019, both sexes, by GBD region, and by SDI quintile.

DALYs=disability adjusted life years. EAPC=estimated annual percentage change. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Socio-demographic Index.

**Figure 3.** The age-standardised rates of prevalence (A), deaths (B), and DALYs (C) due to IBD by sex, across 21 regions, in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the age-standardised rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

**Figure 4.** The absolute number of prevalent cases (A), deaths (B), and DALYs (C) due to IBD for all GBD regions from 1990 to 2019.

DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease.

**Figure 5.** Age patterns by sex of the total number and age-standardised rates of prevalent cases (A), deaths (B), and DALYs (C) due to IBD at the global level in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the number of cases. Shading indicates the 95% UI for the rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

**Figure 6.** The age-standardised rates of IBD prevalence (A), deaths (B), and DALYs globally and for 21 GBD regions by SDI from 1990 to 2019.

The expected age-standardised rates in 2019 based solely on SDI were represented by the black line. For each region, points from left to right depict estimates from each year from 1990 to 2019. DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Socio-demographic Index.

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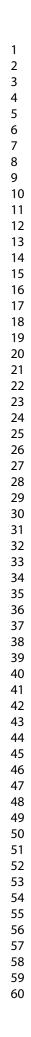
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Table 1 Age-standardised prevalence, death and DALY rates for inflammatory bower
disease (IBD) in 1990 and 2019 and their temporal trends from 1990 to 2019

6	disease (IBD) in 1990 and 2019 and their temporal trends from 1990 to 2019									
7	Age-standardised prevalence rate			Age-st	andardized deat	th rate	Age-standardized DALY rate			
8 9 Channastaniatian	per 100,000 population			per 100,000 population			per 100,000 population			
9 <sub>Characteristics</sub> 10	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	
11	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	
<del>12</del> 13										
1 <b>G</b> lobal	73.23 (63.86	59.25 (52.78	-0.66 (-0.75	0.67 (0.57	0.54 (0.46	-0.69 (-0.81	27.20 (21.70	20.15 (16.86	-1.04 (-1.06	
15	to 83.63)	to 66.47)	to -0.57)	to 0.78)	to 0.59)	to -0.57)	to 32.39)	to 23.71)	to -1.01)	
1 <b>9</b> ex 18	71 50 (60 10	50 20 (52 60	056(064	0 (0 (0 56	0.56 (0.45	0.79 ( 0.92	27 40 (21 78	20 (4 (17 16	0.00 ( 1.01	
1 Male	71.52 (62.12	59.30 (52.60	-0.56 (-0.64	0.69 (0.56	0.56 (0.45	-0.78 (-0.83	27.40 (21.78	20.64 (17.16	-0.99 (-1.01	
20	to 81.89)	to 66.91)	to -0.49)	to 0.88)	to 0.62)	to -0.72)	to 33.22)	to 24.31)	to -0.97)	
21 2 <sup>Eemale</sup>	75.01 (65.67	59.33 (52.89	-0.74 (-0.85	0.63 (0.50	0.52 (0.43	-0.64 (-0.80	27.09 (20.30	19.70 (16.16	-1.09 (-1.12	
	to 85.45)	to 66.18)	to -0.64)	to 0.74)	to 0.58)	to -0.47)	to 32.42)	to 23.49)	to -1.06)	
23 24 24										
25	200.83	183.14	-0.34 (-0.43	0.72 (0.65	0.84 (0.69	0.82 (0.64	43.95 (34.13	42.93 (33.66	0.00 (-0.06	
2∯righ 27	(176.43 to	(166.58 to	to -0.24)	to 0.85)	to 0.92)	to 1.01)	to 55.06)	to 53.08)	to 0.05)	
28	226.92)	201.17)						,		
29 High-middle 30	82.41 (71.42	73.85 (65.38	-0.32 (-0.47	0.52 (0.46	0.38 (0.34	-1.17 (-1.32	25.92 (21.34	19.34 (15.59	-1.12 (-1.17	
	to 95.06)	to 83.09)	to -0.18)	to 0.60)	to 0.43)	to -1.02)	to 30.93)	to 23.73)	to -1.07)	
31 3⊉⁄Iiddle	22.50 (19.00	30.57 (25.70	1.25 (1.04 to	0.57 (0.40	0.31 (0.26	-2.44 (-2.59	18.11 (14.29	11.61 (9.70	-1.63 (-1.68	
33	to 26.62)	to 36.01)	1.47)	to 0.74)	to 0.34)	to -2.29)	to 21.72)	to 13.71)	to -1.58)	
34 35 <sup>ow-middle</sup>	19.02 (15.75	20.94 (17.41	0.52 (0.40 to	0.74 (0.47	0.48 (0.38	-1.75 (-1.90	23.29 (16.18	15.37 (12.47	-1.58 (-1.65	
35 <sup>0</sup> 36	to 22.93)	to 25.11)	0.64)	to 1.06)	to 0.58)	to -1.60)	to 30.53)	to 18.32)	to -1.51)	
36 3ℤ <sub>OW</sub>	12.40 (10.21	12.85 (10.64	0.29 (0.19 to	0.67 (0.48	0.55 (0.43	-0.80 (-0.86	22.19 (14.49	17.19 (13.57	-0.94 (-0.99	
38	to 15.06)	to 15.81)	0.39)	to 0.99)	to 0.70)	to -0.74)	to 29.80)	to 21.70)	to -0.89)	
30 BD region										
40 Andean Latin 41	16.55 (14.08	17.09 (14.60	0.06 (0.03 to	0.54 (0.36	0.26 (0.20	-2.74 (-3.16	26.36 (15.78	9.83 (7.75	-3.68 (-4.17	
41 42 <sup>merica</sup>	to 19.39)	to 19.88)	0.10)	to 0.71)	to 0.32)	to -2.32)	to 38.96)	to 12.19)	to -3.18)	
43	108.86	156.30	0.92 (0.61 to	0.54 (0.47	0 72 (0 53	1 77 (1 41	26 10 (20 18	21 00 (76 87	0.02 (0.75	
44 Australasia	(92.21 to	(137.65 to	0.83 (0.61 to	0.54(0.47)	0.72 (0.53	1.77 (1.41	26.19 (20.48	34.98 (26.87	0.93 (0.75	
45 46	126.63)	177.07)	1.05)	to 0.64)	to 0.83)	to 2.13)	to 32.91)	to 44.64)	to 1.12)	
	27.93 (23.96	26.31 (22.13	-0.05 (-0.13	0.56 (0.44	0.42 (0.31	-1.24 (-1.41	23.38 (16.68	18.21 (13.08	-0.91 (-1.06	
47 48 48	to 32.85)	to 31.28)	to 0.03)	to 0.69)	to 0.53)	to -1.08)	to 34.05)	to 24.76)	to -0.76)	
49	76.86 (64.98	78.72 (66.39	0.09 (0.05 to	0.39 (0.30	0.32 (0.28	-1.00 (-1.12	26.11 (21.03	22.26 (18.04	-0.70 (-0.76	
50entral Asia 51	to 91.56)	to 93.40)	0.12)	to 0.46)	to 0.37)	to -0.89)	to 31.71)	to 27.31)	to -0.65)	
52	208.99	160.49		0.15 (0.10	o 17 (o 10	<u> </u>			1 00 / 1 05	
53 54 54	(179.90 to	(145.58 to	-1.25 (-1.64	0.46 (0.43	0.47 (0.40	0.30 (0.17	46.28 (36.16	35.84 (27.66	-1.08 (-1.37	
54 55	243.75)	176.95)	to -0.87)	to 0.52)	to 0.55)	to 0.44)	to 57.91)	to 44.67)	to -0.78)	
55 56 entral Latin	37.84 (32.42	32.59 (27.93	-0.49 (-0.58	0.32 (0.28	0.37 (0.30	0.98 (0.68	14.84 (12.69	14.68 (12.25	0.32 (0.08	
5 <sub>America</sub>	to 44.16)	to 38.07)	to -0.41)	to 0.35)	to 0.43)	to 1.28)	to 17.31)	to 17.41)	to 0.56)	
58 59 <sup>entral</sup>	8.22 (6.76 to	8.21 (6.80	-0.14 (-0.33	0.72 (0.51	0.60 (0.45	-0.69 (-0.77	22.26 (14.75	17.77 (12.98	-0.79 (-0.88	
69 ub-Saharan	10.11)	to 10.11)	to 0.06)	to 1.03)	to 0.83)	to -0.60)	to 32.74)	to 24.27)	to -0.70)	
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1									
2 3 <sub>Africa</sub>									
-	22.51 (18.72	46.22 (39.36	2.79 (2.41 to	0.86 (0.59	0.31 (0.25	-3.98 (-4.33	24.23 (17.74	13.08 (10.31	-2.31 (-2.48
5 <sub>East Asia</sub>	to 26.72)	to 53.98)	3.18)	to 1.14)	to 0.35)	to -3.63)	to 29.83)	to 16.19)	to -2.15)
7	88.07 (75.40	82.82 (70.77	0.01 (-0.11 to	0.49 (0.38	0.51 (0.43	-0.25 (-0.53	27.68 (21.86	26.67 (21.96	-0.30 (-0.45
8Eastern Europe	to 103.25)	to 96.45)	0.14)	to 0.56)	to 0.58)	to 0.04)	to 33.71)	to 32.46)	to -0.14)
9 1₿astern	10105.20)	(0 ) 0. 10)	0.11)	10 0.50)	10 0.00)	10 0.0 1)	10 55.71)	10 52.10)	10 0.11)
1§ub-Saharan	6.27 (5.25 to	7.21 (6.01	0.46 (0.42 to	0.72 (0.52	0.69 (0.50	-0.12 (-0.20	22.58 (16.13	19.44 (14.69	-0.46 (-0.54
12 Africa 13	7.68)	to 8.82)	0.50)	to 1.01)	to 0.93)	to -0.05)	to 33.35)	to 25.63)	to -0.39)
14 High-income 15	126.18	210.54	1.04 (0.68 to	0.40 (0.24	0.13 (0.11	-4.29 (-4.64	26.43 (19.87	34.55 (23.75	0.35 (0.11
15 1ê <sup>sia Pacific</sup>	(105.73 to	(183.69 to	1.41)	to 0.47)	to 0.18)	to -3.93)	to 33.86)	to 46.76)	to 0.60)
1 <del>0</del> <sup>310</sup> 1 uenie	149.32)	239.68)	1.11)	10 0.17)	10 0.10)	10 5.55)	10 55.00)	10 10.70)	10 0.00)
18 High-income	346.93	209.60	-1.32 (-1.75	0.68 (0.61	0.97 (0.79	1.43 (1.15	65.62 (48.61	51.27 (40.90	-0.46 (-0.72
19 20 <sup>10rth America</sup>	(303.63 to	(195.48 to	to -0.89)	to 0.83)	to 1.05)	to 1.72)	to 84.95)	to 62.35)	to -0.20)
	392.66)	224.46)	10 0.07)	10 0.05)	10 1.05)	(0 1.72)	10 0 1.95)	10 02.55)	10 0.20)
21 2 <sup>North</sup> Africa	36.27 (31.06	48.26 (40.98	0.97 (0.84 to	0.34 (0.24	0.26 (0.22	-0.86 (-0.93	14.36 (10.79	13.26 (10.60	-0.30 (-0.34
23gnd Middle	to 41.91)	to 56.94)	1.10)	to 0.49)	to 0.30)	to -0.80)	to 18.73)	to 16.47)	to -0.25)
2 <u>∉</u> ast 25	10 11.91)	10 50.5 1)	1.10)	(0 0.19)	10 0.50)	10 0.00)	10 10.75)	10 10.17)	10 0.25)
25 26 <sub>ceania</sub>	4.34 (3.51 to	3.87 (3.16	-0.54 (-0.72	0.63 (0.42	0.44 (0.33	-1.41 (-1.50	20.60 (13.34	14.93 (10.45	-1.29 (-1.38
27	5.20)	to 4.71)	to -0.35)	to 0.86)	to 0.60)	to -1.32)	to 28.78)	to 21.01)	to -1.20)
28 2§outh Asia	19.68 (15.98	20.11 (16.38	0.26 (0.10 to	0.69 (0.47	0.44 (0.33	-1.91 (-2.07	21.48 (14.77	14.00 (10.70	-1.68 (-1.78
30	to 24.40)	to 24.81)	0.42)	to 1.06)	to 0.57)	to -1.74)	to 29.47)	to 17.52)	to -1.58)
	4.40 (3.55 to	6.69 (5.52	1.58 (1.27 to	0.50 (0.27	0.28 (0.21	-2.36 (-2.52	13.16 (8.47	7.45 (6.06	-2.29 (-2.44
31 Southeast Asia 32	5.35)	to 8.04)	1.90)	to 0.66)	to 0.33)	to -2.19)	to 15.9)	to 8.76)	to -2.15)
33 Southern Latin	19.22 (15.96	20.53 (17.36	0.28 (0.08 to	0.31 (0.27	0.28 (0.25	-0.46 (-0.62	11.10 (9.69	10.06 (8.61	-0.40 (-0.50
34 35 <sup>America</sup>	to 22.60)	to 24.24)	0.49)	to 0.34)	to 0.34)	to -0.30)	to 12.66)	to 11.94)	to -0.31)
3 <b>6</b> outhern	10.44 (8.67	11.78 (9.83	0.53 (0.45 to	0.42 (0.33	0.44 (0.36	0.25 (-0.16	15.11 (10.88	13.66 (11.37	-0.12 (-0.44
33ub-Saharan	to 12.74)	to 14.31)	0.61)	to 0.53)	to 0.51)		to 18.87)	to 15.90)	to 0.20)
38 Africa 39	10 12.7 1)	10 1 1.5 1)	0.01)	10 0.00)	(0 0.01)		10 10.07)	10 10.90)	(0 0.20)
4 <sup>d</sup> ropical Latin	65.14 (57.26	47.34 (41.21	-0.87 (-1.08	0.47 (0.41	0.44 (0.40	0.03 (-0.14	23.37 (19.94	19.26 (16.53	-0.44 (-0.61
4America	to 74.08)	to 54.02)	to -0.65)	to 0.51)	to 0.51)	to 0.21)	to 27.30)	to 22.44)	to -0.26)
42 43	156.46	188.22	0.37 (0.26 to	0.82 (0.73	1.11 (0.87	1.51 (1.27	39.24 (31.18	46.79 (36.98	0.59 (0.49
4) Western Europe	(139.89 to	(169.47 to	0.48)	to 1.04)	to 1.23)	to 1.75)	to 48.16)	to 57.57)	to 0.69)
45	173.69)	207.48)	0.10)	10 1.0 1)	(0 1.25)	10 1.75)	10 10.10)	10 57.57)	10 0.07)
46 Western	8.49 (7.03 to	10.09 (8.38	0.78 (0.66 to	0.56 (0.33	0.5 (0.35 to	-0.37 (-0.46	19.69 (11.64	16.77 (11.61	-0.57 (-0.66
47 48 <sup>sub-Saharan</sup>	10.33)	to 12.23)	0.78 (0.00 to	to 0.91)	0.67)	to -0.28)	to 30.47)	to 22.73)	to -0.48)
49 frica	10.33)	(0.12.23)	0.201		0.07)	10 0.20)	10 50.77	w 22.15j	
50 51	Abbreviat	tions: CI, co	onfidence int	erval; DAI	LY, disabili	ty adjusted	life year; E	EAPC,	
51	estimated	annual ne	ercentage ch	nange <sup>,</sup> GB	D Global	Burden o	f Disease	SDI	

estimated annual percentage change; GBD, Global Burden of Disease; SDI, Socio-demographic Index; UI, uncertainty interval.



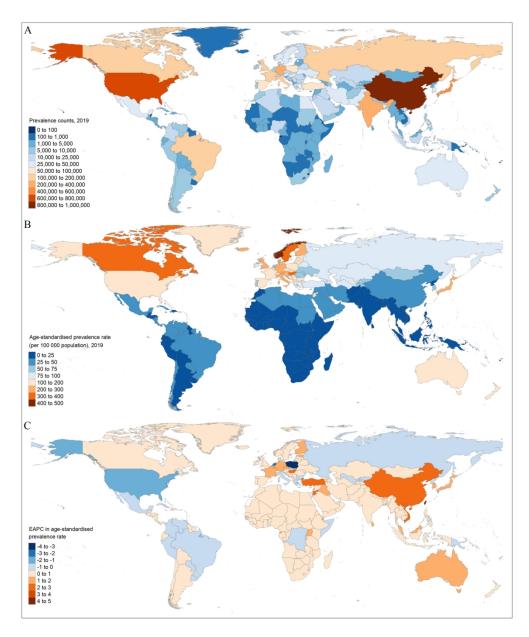


Figure 1. The global prevalence burden of IBD in 204 countries and territories. (A) The absolute number of IBD prevalent cases in 2017. (B) The age-standardised prevalence rate (per 100 000 population) of IBD in 2017. (C) The EAPC of age-standardised prevalence rate for IBD between 1990 and 2019. EAPC=estimated annual percentage change. IBD=inflammatory bowel disease.

128x156mm (300 x 300 DPI)

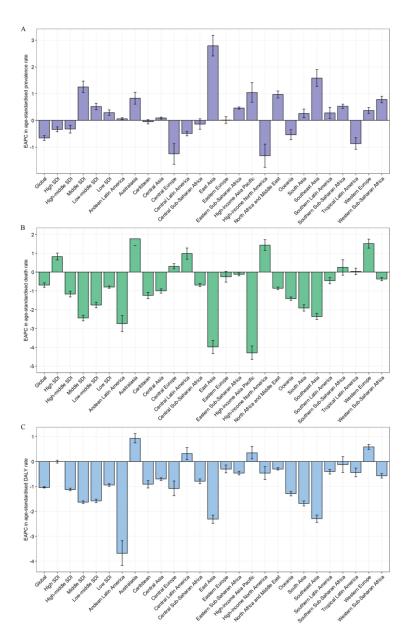
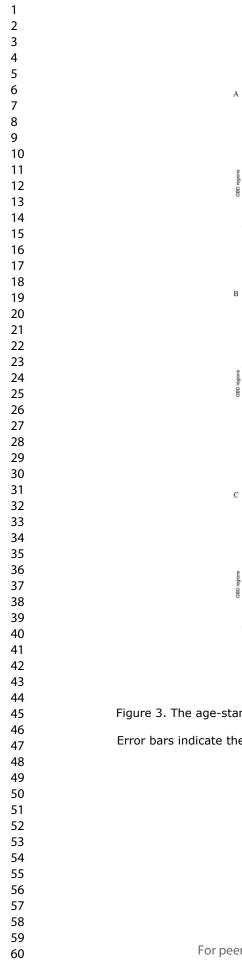


Figure 2. The EAPCs in age-standardised rates of prevalence (A), deaths (B), and DALYs (C) due to IBD from 1990 to 2019, both sexes, by GBD region, and by SDI quintile. DALYs=disability adjusted life years. EAPC=estimated annual percentage change. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Socio-demographic Index.

134x214mm (300 x 300 DPI)

High-income Asia Pacific

igh-income North America



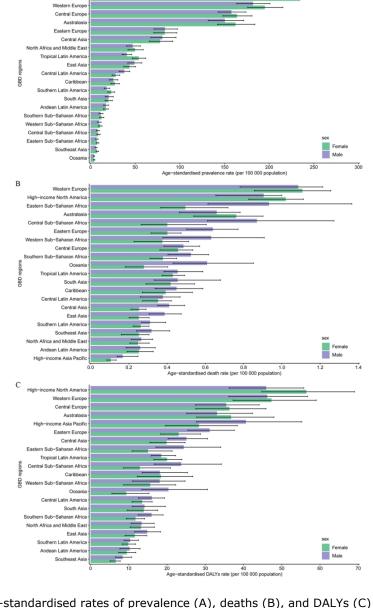
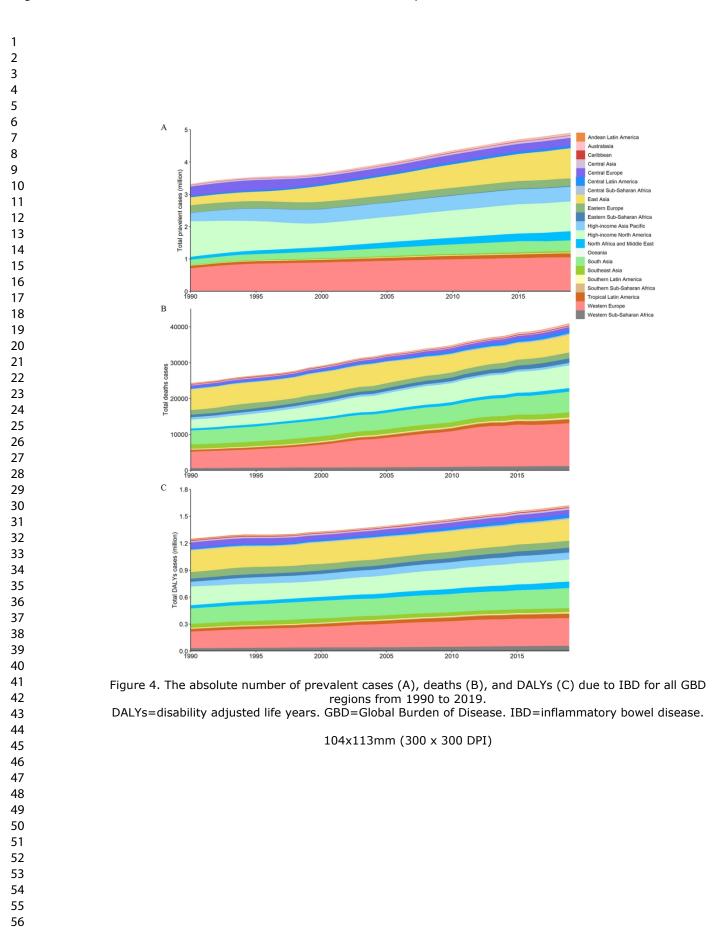


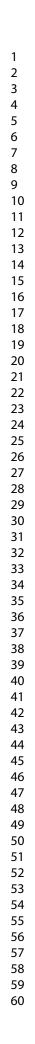
Figure 3. The age-standardised rates of prevalence (A), deaths (B), and DALYs (C) due to IBD by sex, across 21 regions, in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the age-standardised rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

82x140mm (300 x 300 DPI)



- 59 60



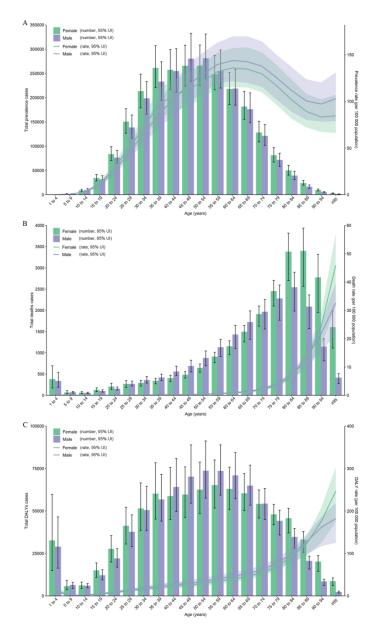


Figure 5. Age patterns by sex of the total number and age-standardised rates of prevalent cases (A), deaths (B), and DALYs (C) due to IBD at the global level in 2019.

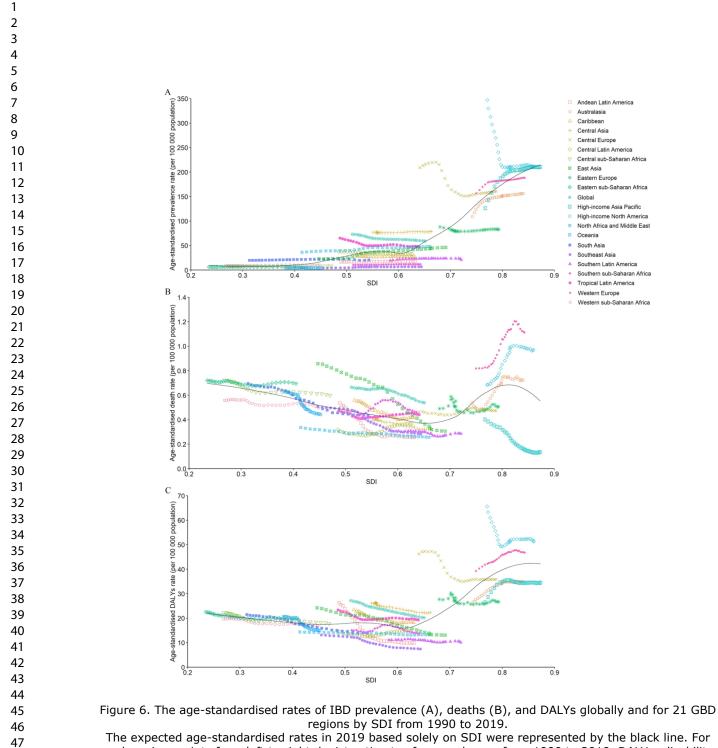
Error bars indicate the 95% uncertainty interval (UI) for the number of cases. Shading indicates the 95% UI for the rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

84x148mm (300 x 300 DPI)

49

50

60



The expected age-standardised rates in 2019 based solely on SDI were represented by the black line. For each region, points from left to right depict estimates from each year from 1990 to 2019. DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Sociodemographic Index.

159x194mm (300 x 300 DPI)

Supplement to: The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019, based on Global Burden Disease Study 2019

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Supplementary Figure 3: The absolute number of incident cases due to IBD for 204 countries and territories in 2019.

Supplementary Figure 4: The absolute number of YLLs due to IBD for 204 countries and territories in 2019.

Supplementary Figure 5: The absolute number of YLDs due to IBD for 204 countries and territories in 2019.

Supplementary Figure 6: The age-standardised death rate (per 100 000 population) of IBD for 204 countries and territories in 2019.

Supplementary Figure 7: The EAPC of age-standardised death rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 8: The age-standardised DALY rate (per 100 000 population) of IBD for 204 countries and territories in 2019.

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Supplementary Figure 10: The EAPC of age-standardised incidence rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 11: The EAPC of age-standardised YLL rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 12: The EAPC of age-standardised YLD rate for IBD in 204 countries and territories between 1990 and 2019.

 Supplementary Figure 13: Global counts and age-specific rates of YLLs and YLDs due to IBD across age group in 2019.

Supplementary Figure 14: Trends from 1990 to 2019 in number and age-standardised prevalence rate of IBD at the global level.

Supplementary Figure 15: Trends from 1990 to 2019 in number and age-standardised death rate of IBD at the global level.

Supplementary Figure 16: Trends from 1990 to 2019 in number and age-standardised DALY rate of IBD at the global level.

# **Supplementary Tables**

Supplementary Table 1: Prevalent cases, deaths and disability adjusted life years (DALYs) of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019

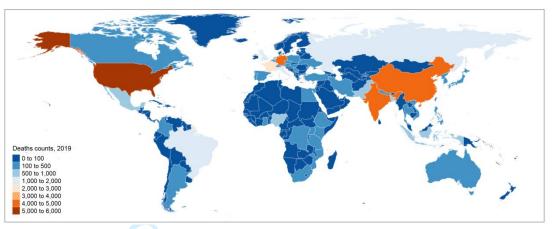
Supplementary Table 2: Incident cases, YLLs and YLDs of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019.

Supplementary Table 3: Age-standardised incidence, YLL and YLD rates for inflammatory bower disease (IBD) in 1990 and 2019 and their temporal trends from 1990 to 2019.

Supplementary Table 4: Prevalent cases, deaths and disability adjusted life years (DALYs) for inflammatory bower disease (IBD) by 204 countries or territories in 2019 and 2019, and their percentage change from 1990 to 2019.

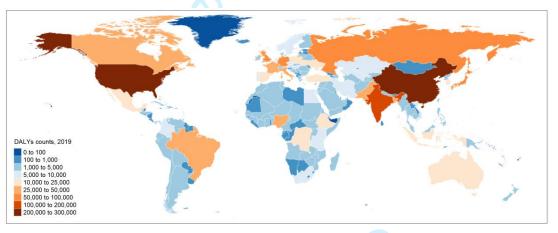
Supplementary Table 5: Age-standardised prevalence, death and DALY rates for inflammatory bower disease (IBD) by 204 countries or territories in 1990 and 2019, and their temporal trends from 1990 to 2019.

**Supplementary Figure 1.** The absolute number of deaths due to IBD for 204 countries and territories in 2019.



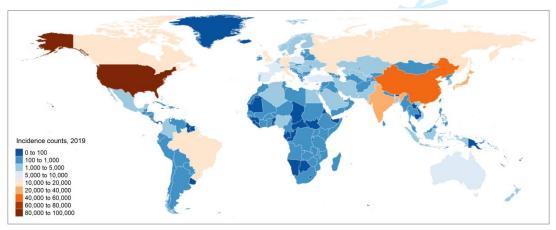
IBD, inflammatory bowel disease.

**Supplementary Figure 2.** The absolute number of DALYs due to IBD for 204 countries and territories in 2019.



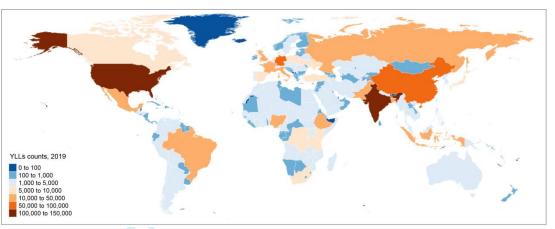
DALYs, disability adjusted life years; IBD, inflammatory bowel disease.

**Supplementary Figure 3.** The absolute number of incident cases due to IBD for 204 countries and territories in 2019.



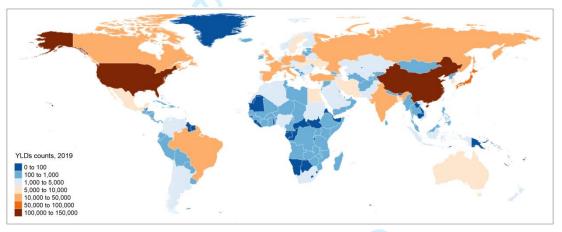
IBD, inflammatory bowel disease.

**Supplementary Figure 4.** The absolute number of YLLs due to IBD for 204 countries and territories in 2019.



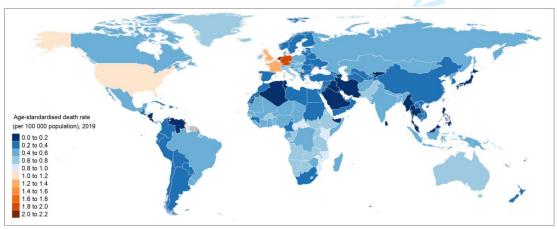
IBD, inflammatory bowel disease; YLLs, years of life lost.

**Supplementary Figure 5.** The absolute number of YLDs due to IBD for 204 countries and territories in 2019.



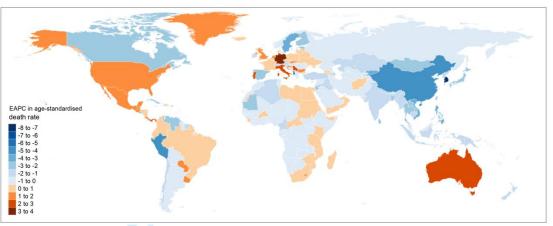
IBD, inflammatory bowel disease; YLDs, years of life lived with disability.

**Supplementary Figure 6.** The age-standardised death rate (per 100 000 population) of IBD for 204 countries and territories in 2019.



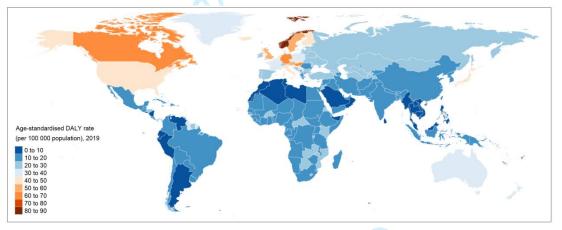
IBD, inflammatory bowel disease.

**Supplementary Figure 7.** The EAPC of age-standardised death rate for IBD in 204 countries and territories between 1990 and 2019.



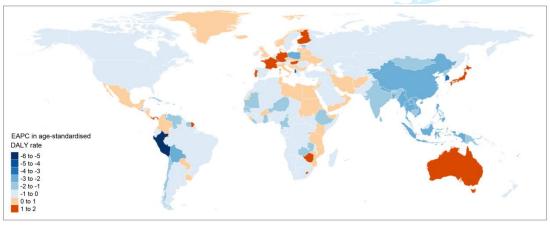
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 8.** The age-standardised DALY rate (per 100 000 population) of IBD for 204 countries and territories in 2019.



DALY, disability adjusted life year; IBD, inflammatory bowel disease.

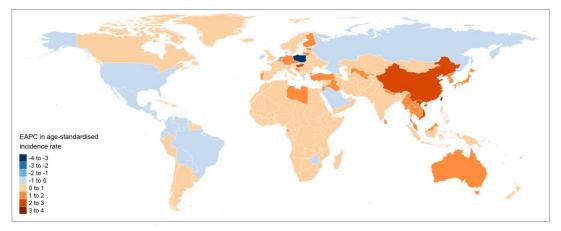
**Supplementary Figure 9.** The EAPC of age-standardised DALY rate for IBD in 204 countries and territories between 1990 and 2019.



DALY, disability adjusted life year; EAPC, estimated annual percentage change; IBD,

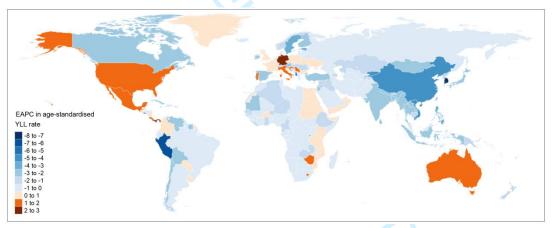
inflammatory bowel disease.

**Supplementary Figure 10.** The EAPC of age-standardised incidence rate for IBD in 204 countries and territories between 1990 and 2019.



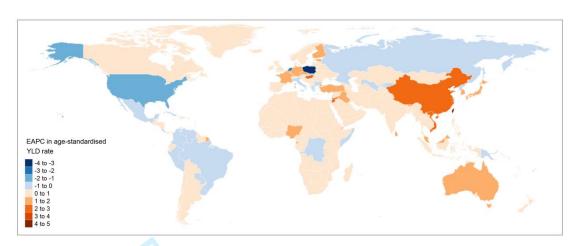
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 11.** The EAPC of age-standardised YLL rate for IBD in 204 countries and territories between 1990 and 2019.



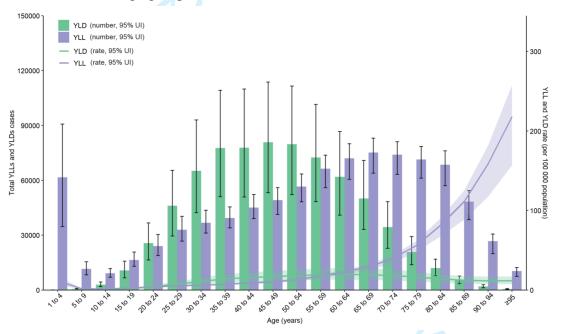
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; YLL, years of life lost.

**Supplementary Figure 12.** The EAPC of age-standardised YLD rate for IBD in 204 countries and territories between 1990 and 2019.



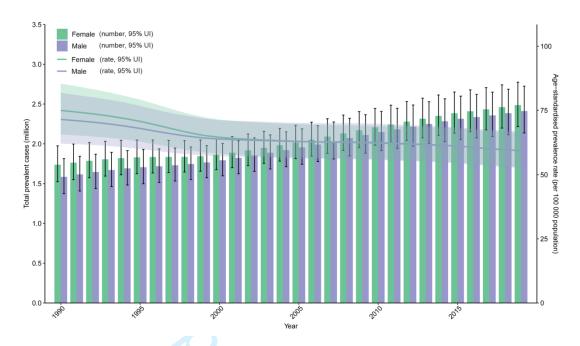
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; YLD, years of life lived with disability.

**Supplementary Figure 13.** Global counts and age-specific rates of YLLs and YLDs due to IBD across age group in 2019.



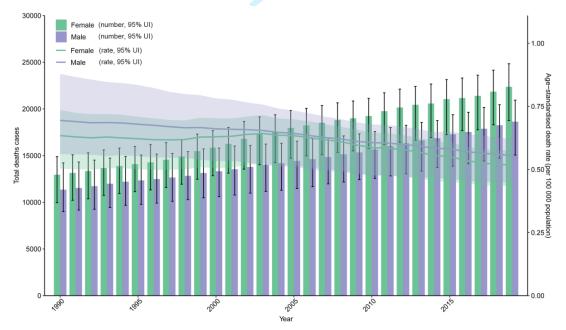
Error bars indicate the 95% uncertainty interval (UI) for YLLs and YLDs. Shading indicates the 95% UI for the rates. IBD, inflammatory bowel disease; YLDs, years of life lived with disability; YLLs, years of life lost.

**Supplementary Figure 14.** Trends from 1990 to 2019 in number and age-standardised prevalence rate of IBD at the global level.



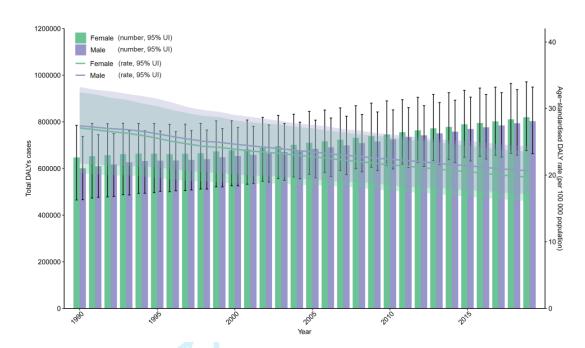
Error bars indicate the 95% uncertainty interval (UI) for number of prevalent cases. Shading indicates the 95% UI for the age-standardised prevalence rate. IBD, inflammatory bowel disease.

**Supplementary Figure 15.** Trends from 1990 to 2019 in number and age-standardised death rate of IBD at the global level.



Error bars indicate the 95% uncertainty interval (UI) for number of death cases. Shading indicates the 95% UI for the age-standardised death rate. IBD, inflammatory bowel disease.

**Supplementary Figure 16.** Trends from 1990 to 2019 in number and age-standardised DALY rate of IBD at the global level.



Error bars indicate the 95% uncertainty interval (UI) for number of DALYs cases. Shading indicates the 95% UI for the age-standardised DALY rate. DALY, disability adjusted life year; IBD, inflammatory bowel disease.

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Supplementary Table 1 Prevalent cases, deaths and disability adjusted life years (DALYs) of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019

7	Prevalent cases				Deaths		DALYs		
8 9 Characteristics 10 11 <del>12</del>	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)
13 14 15 <sup>Global</sup> 16 17	3322132 (2903627 to 3790430)	4898558 (4353233 to 5499296)	47.45 (43.76 to 51.43)	24295 (20258 to 28376)	40998 (34933 to 44661)	68.75 (47.12 to 94.62)	1248275 (963014 to 1503174)	1622498 (1356296 to 1915042)	29.98 (14.83 to 50.21)
18 <sup>6ex</sup> 19 20 21Male 22 23	1584462 (1374414 to 1814399)	2411840 (2136219 to 2724369)	52.22 (48.47 to 56.34)	11347 (9002 to 14218)	18633 (15060 to 20938)	64.21 (37.52 to 90.74)	600963 (466033 to 736983)	802748 (663563 to 949342)	33.58 (15.75 to 53.92)
24 25 26 <sub>Female</sub> 27 28 29	1737670 (1523309 to 1974864)	2486718 (2216240 to 2775262)	43.11 (39.03 to 47.31)	12947 (9953 to 14888)	22365 (18759 to 24838)	72.74 (47.65 to 115.99)	647311 (465166 to 785221)	819751 (676700 to 971584)	26.64 (10.70 to 54.99)
29 30 quintile 31 32 3 <sup>High</sup> 34 35	1883348 (1654416 to 2128434)	2283717 (2079286 to 2493360)	21.26 (15.68 to 27.38)	7386 (6656 to 8731)	17801 (14215 to 19552)	141.02 (73.28 to 161.46)	415485 (323781 to 520634)	603330 (489511 to 729627)	45.21 (26.78 to 56.21)
36 37 <sub>High-middle</sub> 38 39	942961 (817123 to 1086707)	1362491 (1206918 to 1538822)	44.49 (40.70 to 48.74)	5045 (4476 to 5782)	7272 (6519 to 8110)	44.13 (24.31 to 65.11)	288336 (236216 to 344578)	352794 (285252 to 432623)	22.36 (12.11 to 32.44)
40 41 <sub>Middle</sub> 42 43	301457 (252149 to 355140)	818871 (688348 to 968484)	171.64 (163.13 to 181.21)	5425 (4146 to 6768)	6598 (5602 to 7341)	21.61 (-2.11 to 58.92)	248139 (184995 to 297495)	291088 (240412 to 345833)	17.31 (-3.67 to 60.14)
44 45_ow-middle 46 47	152118 (124851 to 184061)	335789 (278324 to 403122)	120.74 (115.27 to 126.61)	4533 (3018 to 6152)	6180 (4994 to 7392)	36.34 (9.54 to 81.14)	203020 (126472 to 268417)	236584 (189248 to 283804)	16.53 (-9.40 to 65.68)
48 49_ow 50 51	41264 (33866 to 50406)	95941 (78454 to 116802)	132.51 (127.59 to 136.94)	1893 (1144 to 2626)	3125 (2442 to 4016)	65.06 (21.70 to 141.90)	92718 (45634 to 147570)	137867 (100264 to 180825)	48.69 (1.39 to 148.81)
51 52 <sup>GBD</sup> region 53 54 <sup>Andean</sup> Latin 55 <sup>America</sup> 56	4294 (3643 to 5026)	10380 (8875 to 12027)	141.73 (131.47 to 153.82)	168 (99 to 249)	144 (111 to 182)	-14.37 (-45.71 to 56.11)	10768 (5527 to 17349)	5942 (4666 to 7395)	-44.82 (-67.80 to 12.24)
57 58Australasia 59 60	24135 (20445 to 28083)	53225 (47167 to 59881)	120.53 (104.13 to 137.71)	117 (103 to 139)	400 (291 to 465)	241.68 (120.09 to 298.29)	5802 (4531 to 7299)	13328 (10488 to 16560)	129.69 (92.95 to 151.94)

2 3 4 5 Caribbean	8194 (7012 to 9634)	13360 (11262 to 15892)	63.04 (55.79 to 71.54)	157 (118 to 208)	210 (156 to 264)	33.66 (3.39 to 70.80)	7451 (5008 to 11792)	8900 (6523 to 11709)	19.44 (-16.93 to 53.06)
6 7 8 9 <sup>Central Asia</sup> 10	42100 (35493 to 49944)	72034 (60489 to 86073)	71.10 (65.37 to 77.74)	215 (167 to 251)	249 (218 to 288)	15.70 (-1.33 to 47.63)	15952 (12800 to 19230)	20237 (16357 to 24806)	26.86 (10.10 to 46.33)
11 12 Central Europe 13 14	290304 (249715 to 338920)	236196 (214732 to 259804)	-18.64 (-24.57 to -11.98)	604 (563 to 696)	958 (799 to 1104)	58.66 (24.18 to 83.87)	61546 (47417 to 77414)	54694 (42729 to 67570)	-11.13 (-18.70 to -3.30)
15 16 <sup>C</sup> entral Latin 17America 18	40471 (34451 to 47294)	81606 (69904 to 95542)	101.64 (96.51 to 107.43)	301 (270 to 330)	854 (702 to 997)	183.85 (135.53 to 232.71)	18096 (15456 to 20849)	36178 (30219 to 43014)	99.92 (74.40 to 127.28)
19Central 2Q <sub>Sub-Saharan</sub> 21 22 <sup>Africa</sup>	2781 (2267 to 3400)	7015 (5690 to 8639)	152.29 (138.04 to 168.85)	193 (118 to 301)	355 (254 to 497)	84.05 (16.03 to 200.18)	9491 (4855 to 17734)	15574 (10733 to 22385)	64.1 (-9.96 to 213.74)
23 24 <sub>East</sub> Asia 25 26	244790 (202981 to 291054)	925074 (788347 to 1085238)	277.90 (260.33 to 300.79)	5734 (4169 to 7374)	4983 (4074 to 5769)	-13.11 (-36.64 to 22.31)	240231 (167510 to 299891)	239963 (187123 to 299808)	-0.11 (-25.58 to 54.11)
27 2&Eastern Europe 29 30	233969 (199922 to 274757)	237672 (203164 to 276577)	1.58 (-0.80 to 4.10)	1305 (992 to 1507)	1633 (1370 to 1865)	25.06 (5.75 to 56.78)	72932 (57526 to 88869)	77123 (63287 to 94008)	5.75 (-4.27 to 21.34)
3 <sup>Eastern</sup> 3 <b>2</b> ub-Saharan 33 <sub>Africa</sub> 34	7067 (5804 to 8596)	18830 (15395 to 22997)	166.43 (160.39 to 173.14)	697 (462 to 1111)	1253 (923 to 1678)	79.64 (7.37 to 192.58)	35480 (16916 to 68481)	52928 (39435 to 74044)	49.18 (-19.5 to 202.23)
35 <sub>High</sub> -income 36 37 <sup>Asia Pacific</sup> 38	255028 (213480 to 302123)	459062 (403027 to 520418)	80.00 (65.57 to 95.92)	685 (439 to 789)	694 (556 to 912)	1.33 (-19.66 to 85.83)	51699 (38591 to 66563)	78601 (55261 to 105049)	52.04 (37.02 to 68.81)
39High-income 40North America 41	1100006 (961428 to 1248970)	920750 (859032 to 982587)	-16.30 (-22.94 to -9.05)	2442 (2189 to 2964)	6314 (5076 to 6886)	158.55 (83.64 to 182.08)	209072 (155328 to 270983)	245234 (200564 to 294018)	17.30 (2.00 to 33.02)
42 <sub>North</sub> Africa 43 44 <sup>and</sup> Middle 45 <sup>cast</sup> 46	89159 (76544 to 102596)	282534 (239506 to 334478)	216.89 (196.52 to 234.98)	592 (407 to 836)	1033 (866 to 1226)	74.43 (20.30 to 164.45)	35438 (25569 to 46318)	72755 (56928 to 91112)	105.30 (56.49 to 171.10)
47 48 49	199 (159 to 240)	417 (338 to 509)	109.69 (96.12 to 124.69)	22 (14 to 31)	36 (26 to 51)	65.38 (12.06 to 142.01)	1036 (602 to 1625)	1696 (1107 to 2576)	63.81 (3.61 to 170.09)
50 51 <sub>South</sub> Asia 52 53	157942 (127077 to 195839)	335746 (272330 to 413946)	112.58 (106.64 to 120.13)	3864 (2533 to 5504)	5702 (4286 to 7410)	47.58 (16.55 to 93.31)	171448 (105178 to 227334)	221978 (166881 to 278494)	29.47 (1.12 to 76.01)
54 55 <sub>Southeast</sub> Asia 56 57	16557 (13040 to 20323)	48152 (39527 to 58063)	190.83 (174.97 to 212.05)	1230 (741 to 1536)	1498 (1139 to 1771)	21.79 (-3.10 to 72.54)	45316 (30762 to 56838)	46686 (38847 to 55186)	3.02 (-20.10 to 46.45)
585outhern Latin 59 <sub>America</sub> 60	9153 (7618 to 10754)	15243 (12896 to	66.53 (58.55 to 74.68)	139 (123 to 151)	236 (210 to 280)	69.36 (46.49 to 101.01)	5248 (4578 to 5993)	7740 (6670 to 9152)	47.49 (32.63 to 65.73)

1 2 3 4 5 Southern 6 Sub-Saharan 7 Africa 8 9 Tropical Latin 10 11 12 13 14 Western Europe 15 16 Western 17 18 Sub-Saharan 19 Africa	3760 (3109 to 4581) 74856 (65373 to 85425) 707145 (634121 to 786986) 10222 (8432 to 12421)	18023) 8141 (6736 to 9864) 117653 (102012 to 134397) 1026504 (925440 to 1127578) 28965 (23820 to 35133)	116.54 (109.70 to 124.72) 57.17 (51.82 to 63.44) 45.16 (41.37 to 48.78) 183.36 (178.45 to 188.56)	138 (99 to 169) 455 (400 to 492) 4600 (4132 to 5864) 634 (365 to 996)	240 (198 to 278) 1047 (950 to 1217) 11981 (9244 to 13315) 1178 (805 to 1610)	74.44 (31.74 to 161.11) 129.84 (109.36 to 167.46) 160.46 (66.17 to 190.17) 85.67 (40.49 to 177.24)	6615 (4279 to 9518) 27724 (23589 to 32357) 185733 (149509 to 227830) 31197 (14381 to 47867)	9230 (7542 to 10926) 46997 (40115 to 54972) 310691 (255911 to 371106) 56026 (35327 to 78051)	<ul> <li>39.54 (-0.67)</li> <li>to 121.74)</li> <li>69.52 (59.16)</li> <li>to 83.74)</li> <li>67.28 (34.40)</li> <li>to 79.72)</li> <li>79.59 (30.21)</li> <li>to 198.66)</li> </ul>
20         21         22         23         24         25         26         27         28         29         30         31         32         33         34         35         36         37         38         39         40         41         42         43         44         45         46         47         48         49         50         51         52         53         54         55         56         57         58         59         60		tions: GBI	D=Global E val.	Burden of		DI=Socio-de		Index.	

3 4 5		•				YLDs of infange from 1	•		
6	``````````````````````````````````````	Incident cases		1	YLLs			YLDs	
7 8 Characteristics 9 10	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)
11 12 13 <sup>Global</sup> 14 15 <sub>Sex</sub>	293572 (257425 to 336651)	404552 (360521 to 456478)	37.80 (33.91 to 41.98)	757137 (557008 to 914270)	895798 (779706 to 999120)	18.31 (-1.81 to 52.08)	491137 (326283 to 678806)	726701 (487015 to 993466)	47.96 (43.96 to 52.28)
16 17 18 <sup>Male</sup> 19	153074 (133344 to 174640)	213814 (189759 to 241304)	39.68 (36.00 to 43.73)	370299 (264345 to 462642)	450214 (368766 to 507382)	21.58 (-1.85 to 53.89)	230665 (152583 to 318772)	352534 (235403 to 486701)	52.83 (48.57 to 57.83)
20 21 25 <sup>7</sup> emale 23 <sup>24</sup> SDI quintile	140498 (123361 to 161173)	190738 (171154 to 213778)	35.76 (31.29 to 39.92)	386839 (242819 to 477114)	445584 (372799 to 510194)	15.19 (-5.95 to 67.02)	260473 (173833 to 359493)	374167 (251188 to 513406)	43.65 (39.16 to 48.19)
25 26 2≯High 28	171841 (151878 to 195746)	196451 (179556 to 217510)	14.32 (9.64 to 19.56)	139690 (129255 to 171300)	268406 (221318 to 288862)	92.14 (36.87 to 107.98)	275795 (183466 to 378544)	334924 (229615 to 452309)	21.44 (15.85 to 27.66)
29 30 3 Ħigh-middle 32	71474 (62545 to 81510)	94553 (84101 to 107156)	32.29 (29.05 to 36.06)	149876 (130428 to 171308)	151980 (137423 to 168345)	1.40 (-11.32 to 17.80)	138460 (92476 to 192296)	200814 (133980 to 276597)	45.03 (40.58 to 50.41)
33 34	27459	59817	117.84	201655	167470	-16.95	46484	123619	165.94
35 <sup>44</sup> 35 <sup>41iddle</sup>	(23259 to	(50973 to	(108.98 to	(144191 to	(141946 to	(-32.64 to	(30292 to	(80636 to	(155.28 to
36	32310)	70648)	127.40)	243718)	187219)	19.35)	65651)	174495)	177.70)
37	17434	36681	110.40	179309	184730	3.02 (-21.85	23711	51855	118.69
38 Low-middle 39	(14532 to	(30862 to	(104.05 to	(103608 to	(144128 to	to 54.27)	(15318 to	(33811 to	(110.14 to
40	20935)	44031)	116.72)	244139)	223656)	10 54.27)	33814)	73563)	127.95)
41 42 43 44	5279 (4395 to 6379)	12215 (10164 to 14793)	131.41 (126.67 to 136.00)	86179 (39359 to 140538)	122638 (86434 to 167342)	42.31 (-5.62 to 150.88)	6540 (4199 to 9362)	15228 (9694 to 22000)	132.87 (123.17 to 142.33)
45GBD region 46 4Andean Latin 48 <sub>America</sub> 49	472 (402 to 550)	1128 (975 to 1314)	138.95 (128.76 to 150.71)	10085 (4860 to 16590)	4311 (3237 to 5564)	-57.25 (-76.23 to -4.50)	682 (439 to 990)	1631 (1060 to 2311)	139.04 (119.92 to 161.86)
50 51 52 53 53	2979 (2556 to 3481)	6446 (5755 to 7212)	116.39 (101.08 to 132.24)	2212 (1997 to 2709)	5448 (4212 to 6156)	146.25 (61.5 to 182.75)	3590 (2340 to 5079)	7879 (5232 to 10860)	119.48 (94.61 to 145.44)
54 55 56 57	677 (580 to 796)	1312 (1121 to 1571)	93.82 (84.67 to 103.42)	6186 (3853 to 10389)	6861 (4657 to 9603)	10.92 (-26.38 to 51.60)	1266 (836 to 1782)	2038 (1332 to 2893)	61.05 (49.16 to 73.60)
58 56 central Asia	3514 (2995	6461 (5487	83.87 (77.84	9604 (7718	9458 (8184	-1.52	6348 (4181	10778 (7154	69.79 (58.22
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2 3						25.90)			
4 5 6 Central Europe 7	20997 (18082 to 24170)	14809 (13443 to 16391)	-29.47 (-33.69 to -24.67)	19517 (17440 to 21350)	20261 (17005 to 23354)	3.81 (-12.56 to 21.14)	42029 (28219 to 58172)	34433 (23103 to 46581)	-18.07 (-23.95 to -11.37)
8 9 <sub>Central</sub> Latin 10 1 <sup>America</sup>	3968 (3402 to 4618)	6754 (5834 to 7826)	70.22 (64.07 to 77.19)	11909 (10476 to 13363)	23887 (19416 to 28208)	100.58 (62.63 to 141.31)	6187 (4023 to 8802)	12291 (8076 to 17492)	98.64 (90.00 to 107.98)
12 13 1∲ub-Saharan 15Africa	381 (318 to 469)	1150 (955 to 1400)	201.42 (188.00 to 216.18)	9036 (4403 to 17181)	14431 (9735 to 21338)	59.71 (-15.47 to 217.75)	455 (291 to 663)	1142 (725 to 1644)	151.34 (136.85 to 168.27)
16 17	17567	52319	197.82	202402	101852	-49.68	37829	138111	265.09
18 <sup>East Asia</sup>	(14627 to	(44680 to	(178.88 to	(132058 to	(80904 to	(-63.19 to	(24646 to	(90529 to	(244.38 to
19	20802)	61455)	220.44)	259475)	117925)	-16.68)	53906)	194304)	290.80)
20 21 22 <sup>Eastern Europe</sup> 23	18150 (15600 to 21209)	19500 (16838 to 22671)	7.44 (5.08 to 9.90)	39012 (29086 to 45400)	42550 (36378 to 48906)	9.07 (-8.79 to 41.38)	33920 (22663 to 47811)	34573 (23253 to 48708)	1.92 (-2.34 to 6.15)
2∉ <sub>astern</sub> 25 26 27^frica	1092 (908 to 1315)	2938 (2449 to 3538)	168.96 (163.69 to 175.74)	34323 (15796 to 66928)	49854 (36274 to 71146)	45.25 (-23.18 to 204.58)	1157 (736 to 1664)	3074 (1958 to 4469)	165.68 (159.54 to 172.36)
28 2 <b>d</b> Iigh-income 30Asia Pacific 31	18105 (15391 to 21422)	27084 (23870 to 30621)	49.59 (40.22 to 59.35)	14265 (11234 to 15903)	10285 (8672 to 13984)	-27.90 (-41.19 to 11.39)	37434 (24881 to 52603)	68316 (45509 to 94577)	82.50 (67.39 to 99.60)
32	107616	99611	-7.44	48899	111196	127.40	160173	134037	-16.32
33 <sup>High-income</sup>	(94147 to	(91945 to	(-13.45 to	(45188 to	(90610 to	(58.53 to	(106818 to	(92136 to	(-22.94 to
34North America 35	123884)	109000)	-0.48)	60393)	118997)	147.53)	221989)	178957)	-9.00)
3€North Africa 37and Middle 38 East 39	8107 (7040 to 9204)	22722 (19277 to 26952)	180.29 (162.24 to 198.18)	21634 (13448 to 31651)	30142 (25222 to 36090)	39.33 (-4.16 to 131.21)	13804 (8984 to 19350)	42612 (27805 to 59873)	208.69 (184.84 to 233.72)
40 4'Dceania 42	22 (18 to 27)	63 (52 to 77)	181.23 (166.43 to 197.89)	1003 (571 to 1593)	1628 (1040 to 2510)	62.31 (1.40 to 173.45)	33 (20 to 48)	69 (43 to 102)	109.64 (96.04 to 124.81)
43 44	18439	39705	115.33	146986	170233	15.82	24461	51744	111.54
<b>45</b> outh Asia	(15169 to	(32943 to	(107.88 to	(82781 to	(122056 to	(-12.64 to	(15784 to	(33609 to	(102.18 to
46	22582)	48454)	123.07)	202629)	222489)	63.63)	35449)	74915)	121.79)
47 48	1000 (1507	4000 (4102	164.62	42561	38819	-8.79	0755 (1714	<b>7067 (5000</b>	185.53
49 outheast Asia	1882 (1527 to 2270)	4980 (4182	(151.61 to	(28111 to	(32029 to	(-30.14 to	2755 (1714	7867 (5022	(161.80 to
50	to 2270)	to 5972)	181.06)	54072)	46584)	30.72)	to 4108)	to 11568)	213.61)
51 Southern Latin 52	879 (742 to	1382 (1177	57.15 (49.53	3794 (3293	5362 (4801	41.34 (23.31	1454 (944	2377 (1528	63.53 (47.49
53 <sup>America</sup>	1030)	to 1620)	to 64.67)	to 4092)	to 6325)	to 66.99)	to 2091)	to 3449)	to 82.12)
5 <b>\$</b> outhern 55 <sub>3ub-Saharan</sub> 56 57 <sup>4</sup> frica	504 (423 to 608)	989 (837 to 1188)	96.29 (90.20 to 103.76)	6007 (3712 to 8927)	7933 (6389 to 9558)	32.06 (-8.55 to 122.99)	608 (390 to 884)	1298 (837 to 1875)	113.43 (105.15 to 123.26)
58 ropical Latin	7826 (6859	12928	65.19 (58.70	16336	29155	78.46 (62.35	11387 (7351	17842	56.68 (48.38
59 <sub>America</sub> 60	to 8976)	(11334 to	to 72.03)	(14276 to	(26876 to	to 103.68)	to 15958)	(11730 to	to 65.76)

1 2 3 4 5 6 Western Europe 7 8 9 Western 1 Sub-Saharan 1 Africa 12	59081 (53733 to 65529) 1314 (1102 to 1599)	14874) 78645 (71611 to 86709) 3628 (3028 to 4401)	33.11 (30.56 to 35.75) 176.18 (171.94 to 180.47)	18011) 81826 (75154 to 106409) 29540 (12580 to 46343)	33305) 160823 (127602 to 175684) 51309 (30850 to 73337)	96.54 (25.96 to 118.11) 73.69 (23.64 to 200.73)	103907 (69789 to 141113) 1657 (1057 to 2403)	25165) 149868 (101976 to 202986) 4717 (3002 to 6840)	44.23 (39.12 to 49.03) 184.63 (179.19 to 190.47)
131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960	UI=unce lost.	rtainty inter	D=Global B rval. YLDs=	years of life	e lived with	ı disability. Y	YLLs=years		

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Supplementary Table 3 Age-standardised incidence, YLL and YLD rates for inflammatory bower disease (IBD) in 1990 and 2019 and their temporal trends from 1990 to 2019

7	Age-standardised incidence rate			Age-star	dardized YLL	rate	Age-standardized YLD rate			
8 9 Characteristics		per 100,000 pop	oulation	per 100	),000 populatio	n	1	per 100,000 pop	ulation	
<sup>9</sup> Characteristics 10	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	
11	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	
<del>12</del> 13										
14 <sub>Global</sub>	6.10 (5.35	4.97 (4.43	-0.60 (-0.73	16.47 (12.78	11.35 (9.89	-1.33 (-1.37	10.73 (7.16	8.80 (5.90	-0.62 (-0.70	
15	to 6.96)	to 5.59)	to -0.48)	to 19.33)	to 12.70)	to -1.30)	to 14.82)	to 12.05)	to -0.53)	
16										
1 <b>3</b> 8ex 18	( 20 (5 (0	5 20 (4 72	0.55 ( 0.69	17.09 (12.05	11.09 (0.92	1 20 ( 1 22	10.22 (6.01	9 (( (5 90	0.52 ( 0.60	
19Male	6.39 (5.60	5.30 (4.72	-0.55 (-0.68	17.08 (12.95	11.98 (9.82	-1.29 (-1.32	10.32 (6.91	8.66 (5.80	-0.53 (-0.60	
20	to 7.29)	to 5.99)	to -0.43)	to 20.96)	to 13.45)	to -1.27)	to 14.27)	to 11.93)	to -0.47)	
21 22 <sup>Female</sup>	5.80 (5.12	4.64 (4.16	-0.65 (-0.78	15.95 (10.70	10.74 (8.88	-1.39 (-1.43	11.15 (7.43	8.96 (6.02	-0.69 (-0.79	
	to 6.61)	to 5.20)	to -0.53)	to 19.09)	to 12.44)	to -1.35)	to 15.41)	to 12.30)	to -0.59)	
23 SDI region 24	10.04									
25 261: 1	18.96	17.61 (16.03	-0.16 (-0.30	14.41 (13.34	15.64 (13.09	0.56 (0.41	29.54 (19.66	27.29 (18.55	-0.30 (-0.39	
26 <sub>41igh</sub> 27	(16.73 to	to 19.41)	to -0.01)	to 17.57)	to 16.73)	to 0.70)	to 40.6)	to 37.18)	to -0.21)	
28	21.58)									
29 High-middle 30	6.12 (5.36	5.58 (4.97	-0.35 (-0.45	13.87 (12.06	8.37 (7.56	-1.99 (-2.11	12.05 (8.08	10.97 (7.26	-0.26 (-0.40	
30 31	to 6.99)	to 6.28)	to -0.24)	to 15.79)	to 9.33)	to -1.88)	to 16.72)	to 15.12)	to -0.13)	
32Middle	1.83 (1.58	2.27 (1.94	1.07 (0.95	14.68 (11.06	7 (5.95 to	-2.77 (-2.85	3.43 (2.26	4.61 (3.01	1.22 (1.01 to	
33	to 2.15)	to 2.68)	to 1.18)	to 17.93)	7.79)	to -2.69)	to 4.84)	to 6.52)	1.43)	
34 35 35	2.00 (1.70	2.21 (1.88	0.46 (0.35	20.36 (13.37	12.15 (9.66	-1.99 (-2.09	2.93 (1.93	3.22 (2.12	0.50 (0.38 to	
35 36	to 2.40)	to 2.65)	to 0.57)	to 27.43)	to 14.61)	to -1.90)	to 4.16)	to 4.56)	0.62)	
37 <sub>.0w</sub>	1.46 (1.23	1.52 (1.29	0.37 (0.31	20.24 (12.52	15.18 (11.82	-1.08 (-1.14	1.95 (1.26	2.02 (1.32	0.28 (0.19 to	
38	to 1.77)	to 1.83)	to 0.44)	to 27.74)	to 19.54)	to -1.02)	to 2.82)	to 2.88)	0.37)	
3GBD region										
40 Andean Latin 41	1.63 (1.41	1.82 (1.57	-0.05 (-0.29	23.76 (13.24	7.15 (5.41	-4.50 (-5.07	2.6 (1.67 to	2.68 (1.74	0.05 (0.01 to	
42 <sup>America</sup>	to 1.91)	to 2.12)	to 0.20)	to 36.33)	to 9.17)	to -3.92)	3.8)	to 3.79)	0.08)	
43	13.56	20.03 (17.79	0.94 (0.72	9.98 (9.01	11.54 (8.93	1.11 (0.82 to	16.21 (10.57	23.45 (15.53	0.86 (0.63 to	
44 Australasia 45	(11.64 to	to 22.57)	to 1.16)	to 12.07)	to 13.01)	1.41)	to 22.95)	to 32.51)	1.09)	
46	15.80)									
47 48 <sup>Caribbean</sup>	2.11 (1.83	2.63 (2.24	0.49 (0.34	19.10 (12.84	14.19 (9.36	-1.13 (-1.33	4.28 (2.83	4.02 (2.62	-0.06 (-0.14	
48 49	to 2.49)	to 3.14)	to 0.64)	to 29.41)	to 20.49)	to -0.93)	to 6.06)	to 5.72)	to 0.01)	
5© Central Asia	5.99 (5.13	6.9 (5.87 to	0.50 (0.46	14.63 (11.46	10.56 (9.16	-1.41 (-1.54	11.48 (7.62	11.7 (7.77 to	0.08 (0.04 to	
51	to 7.07)	8.13)	to 0.53)	to 17.20)	to 12.18)	to -1.29)	to 16.46)	16.39)	0.11)	
52 53	15.78	11.59 (10.51	-1.38 (-1.76	15.87 (13.6	11.95 (10.00	-0.91 (-1.11	30.41 (20.26	23.89 (15.95	-1.16 (-1.53	
53 Central Europe 54	(13.61 to	to 12.81)	to -0.99)	to 17.59)	to 13.79)	to -0.72)	to 42.11)	to 32.56)	to -0.79)	
55	18.19)	- /						,		
56Central Latin	3.16 (2.74	2.64 (2.29	-0.70 (-0.87	9.15 (8.21	9.79 (7.96	0.81 (0.47	5.69 (3.74	4.89 (3.22	-0.50 (-0.58	
57 <sub>America</sub> 58	to 3.66)	to 3.06)	to -0.54)	to 10.10)	to 11.55)	to 1.16)	to 8.02)	to 6.96)	to -0.42)	
58 59 <sup>central</sup>	1.04 (0.88	1.26 (1.06	0.64 (0.59	20.92 (13.38	16.45 (11.73	-0.84 (-0.92	1.33 (0.87	1.32 (0.85	-0.16 (-0.35	
6 <b>Ø</b> ub-Saharan	to 1.26)	to 1.52)	to 0.70)	to 31.16)	to 22.99)	to -0.75)	to 1.94)	to 1.91)	to 0.04)	

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1 2									
3 Africa									
•	1.45 (1.22	2.95 (2.55	2.54 (2.39	20.78 (14.55	6.12 (4.90	-4.52 (-4.79	3.45 (2.26	6.95 (4.57	2.74 (2.37 to
5 <sub>East Asia</sub> 6	to 1.71)	to 3.43)	to 2.69)	to 26.09)	to 7.03)	to -4.24)	to 4.87)	to 9.69)	3.12)
7	7.10 (6.12	7.34 (6.34	0.07 (-0.02	14.85 (11.23	14.46 (12.37	-0.56 (-0.82	12.83 (8.55	12.21 (8.15	0.05 (-0.07
8 Eastern Europe 9	to 8.29)	to 8.55)	to 0.17)	to 17.29)	to 16.65)	to -0.30)	to 18.05)	to 17.24)	to 0.17)
1 <b>E</b> astern									
1 Sub-Saharan	0.89 (0.76	1.04 (0.88	0.55 (0.48	21.56 (15.07	18.27 (13.48	-0.51 (-0.59	1.02 (0.66	1.17 (0.76	0.44 (0.40 to
12 13 <sup>Africa</sup>	to 1.07)	to 1.25)	to 0.61)	to 32.54)	to 24.41)	to -0.43)	to 1.46)	to 1.67)	0.48)
13 14 <sup>High-income</sup>	9.25 (7.88	14.93 (13.14	1.10 (0.84	7.85 (6.04	2.74 (2.35	-4.07 (-4.38	18.58 (12.28	31.81 (21.06	1.11 (0.73 to
15Asia Pacific	to 10.91)	to 16.93)	to 1.37)	to 8.80)	to 3.86)	to -3.77)	to 26.01)	to 44.06)	1.49)
16 1 <b>7</b> High income	34.88	24.51 (22.65	0 82 ( 1 20	14.94 (13.84	20.18 (16.54	1.26 (1.03	50.69 (33.71	21 1 (21 24	1 28 ( 1 60
17High-income	(30.59 to		-0.82 (-1.20					31.1 (21.34	-1.28 (-1.69
18 <sub>North</sub> America 19	40.02)	to 26.77)	to -0.45)	to 18.40)	to 21.51)	to 1.50)	to 70.19)	to 41.87)	to -0.86)
20 <sub>North</sub> Africa	2.05 (2.50	2.74 (2.10	0 (2 (0 52	0.00 (5.0)	6.06 (5.00	1 22 ( 1 26		7 01 (4 74	0.00 (0.76 (
21 22 <sup>and Middle</sup>	2.95 (2.59	3.74 (3.19	0.62 (0.53	8.82 (5.96	6.06 (5.08	-1.32 (-1.36	5.55 (3.65	7.21 (4.74	0.88 (0.76 to
2 <b>E</b> ast	to 3.38)	to 4.45)	to 0.72)	to 12.45)	to 7.15)	to -1.29)	to 7.72)	to 10.1)	1.00)
24 25 Dceania	0.44 (0.36	0.56 (0.47	0.87 (0.76	19.89 (12.45	14.30 (9.82	-1.32 (-1.41	0.71 (0.45	0.63 (0.40	-0.53 (-0.72
25)ccaina 26	to 0.52)	to 0.67)	to 0.98)	to 28.10)	to 20.46)	to -1.23)	to 1.03)	to 0.93)	to -0.34)
	2.15 (1.79	2.32 (1.93	0.47 (0.31	18.45 (11.93	10.91 (7.96	-2.10 (-2.23	3.02 (1.97	3.08 (2.01	0.25 (0.09 to
27 South Asia 28	to 2.64)	to 2.84)	to 0.63)	to 26.19)	to 14.27)	to -1.97)	to 4.38)	to 4.49)	0.40)
29 20 South sost Asia	0.46 (0.38	0.70 (0.59	1.45 (1.27	12.43 (7.76	6.35 (5.08	-2.69 (-2.85	0.73 (0.46	1.09 (0.7 to	1.52 (1.22 to
3 <b>©</b> outheast Asia 31	to 0.56)	to 0.84)	to 1.63)	to 15.13)	to 7.61)	to -2.53)	to 1.09)	1.60)	1.83)
32Southern Latin	1.82 (1.54	1.92 (1.63	0.24 (0.15	8.05 (7.00	6.85 (6.15	-0.71 (-0.86	3.05 (1.98	3.21 (2.06	0.23 (0.04 to
33 <sub>America</sub>	to 2.13)	to 2.26)	to 0.34)	to 8.69)	to 8.08)	to -0.56)	to 4.38)	to 4.68)	0.42)
34 35 <sup>Southern</sup>	1 20 (1 10	1 27 (1 17	0.12 (0.00	12 42 (0.22	11 70 (0 6 )	0.00 ( 0.55	1 (7 (1 00	1.07 (1.00	0.49 (0.41 (
3 <b>⊗</b> ub-Saharan	1.30 (1.10	1.37 (1.17	0.13 (0.06	13.43 (9.33	11.79 (9.6 to	-0.20 (-0.55	1.67 (1.08	1.87 (1.22	0.48 (0.41 to
37 <sub>Africa</sub>	to 1.56)	to 1.65)	to 0.20)	to 17.23)	13.95)	to 0.15)	to 2.41)	to 2.70)	0.55)
38 Tropical Latin 39	6.09 (5.40	5.25 (4.60	-0.55 (-0.59	13.65 (11.97	12.09 (11.13	-0.18 (-0.34	9.72 (6.37	7.17 (4.71	-0.83 (-1.04
46 <sup>America</sup>	to 6.93)	to 6.03)	to -0.51)	to 14.87)	to 13.83)	to -0.02)	to 13.54)	to 10.10)	to -0.63)
41	13.98	16.04 (15.22	0 60 (0 55	16.07 (14.92	18.85 (15.12	0.02 (0.72	22 17 (15 52	27.02 (10.01	0.38 (0.26 to
42 Western Europe 43	(12.67 to	16.94 (15.33	0.60 (0.55)	16.07 (14.83		0.92 (0.72	23.17 (15.52	27.93 (19.01	0.38 (0.26 to
43 44	15.48)	to 18.73)	to 0.65)	to 20.58)	to 20.42)	to 1.11)	to 31.53)	to 38.12)	0.49)
45Western	1.01 /0.07	1 17 /1 00	0.26/0.22	10.22 (10.22	15 14 (10 05	0 (0 ( 0 00	1 27 (0 00	1 (2 (1 0)	0.70 (0.44)
46 Sub-Saharan	1.01 (0.86	1.17 (1.00	0.36 (0.22	18.33 (10.38	15.14 (10.25	-0.69 (-0.80	1.37 (0.89	1.63 (1.06	0.78 (0.66 to
47 48 48	to 1.23)	to 1.41)	to 0.50)	to 29.12)	to 20.82)	to -0.58)	to 1.98)	to 2.34)	0.90)
49	Abbrevia	ations: CI=c	onfidence i	nterval. EA	PC=estimat	ed annual r	bercentage c	hange.	
50		11101	C D'		• 1	1 . 1 .	111		

GBD=Global Burden of Disease. SDI=Socio-demographic Index. UI=uncertainty

interval. YLD=years of life lived with disability. YLL=years of life lost.

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Supplementary Table 4 Prevalent cases, deaths and disability adjusted life years (DALYs) for inflammatory bower disease (IBD) by 204 countries or territories in 2019 and 2019, and their percentage change from 1990 to 2019

7			Prevalent ca	ises		Deat	hs		DALYs		
10 11	aracteristics	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	
15	fghanistan	1738 (1410 to 2120)	5699 (4548 to 7113)	228.01 (200.09 to 258.61)	31 (14 to 55)	58 (31 to 89)	88.34 (29.82 to 190.04)	1237 (627 to 2377)	3017 (1879 to 4660)	143.91 (72.00 to 244.29)	
19	Albania	3324 (2792 to 3928)	3896 (3286 to 4630)	17.22 (7.74 to 27.7)	50 (21 to 65)	13 (9 to 19)	-74.70 (-84.65 to -32.21)	3904 (1399 to 5200)	991 (727 to 1300)	-74.62 (-83.28 to -33.39)	
23	Algeria	5982 (5169 to 6928)	16875 (13593 to 20871)	182.11 (149.55 to 221.44)	28 (18 to 44)	53 (38 to 70)	90.14 (11.64 to 209.90)	1826 (1320 to 2675)	4021 (2997 to 5295)	120.18 (51.51 to 190.24)	
26 27	American Samoa	2 (2 to 3)	3 (3 to 4)	48.88 (37.37 to 61.93)	0 (0 to 1)	0 (0 to 0)	-37.72 (-65.35 to 47.30)	15 (9 to 21)	8 (5 to 14)	-47.39 (-70.61 to 25.25)	
30 31	Andorra	69 (58 to 81)	133 (111 to 159)	93.79 (79.63 to 110.16)	0 (0 to 0)	1 (1 to 2)	266.11 (124.63 to 467.38)	17 (13 to 23)	36 (26 to 47)	111.42 (66.64 to 167.41)	
32 33 34 35	Angola	460 (373 to 573)	1648 (1338 to 2017)	258.10 (233.16 to 285.26)	37 (17 to 76)	78 (52 to 117)	112.25 (2.89 to 349.24)	1913 (713 to 4719)	3662 (2249 to 5786)	91.46 (-19.81 to 397.70)	
	ntigua and Barbuda	17 (14 to 20)	34 (28 to 41)	102.06 (85.45 to 119.33)	1 (0 to 1)	1 (0 to 1)	17.47 (-15.05 to 92.04)	18 (13 to 20)	22 (18 to 28)	25.07 (-4.44 to 87.07)	
40 41	Argentina	4828 (3926 to 5756)	7825 (6413 to 9484)	62.10 (49.74 to 73.10)	84 (74 to 93)	143 (124 to 169)	71.49 (45.04 to 102.47)	2981 (2577 to 3433)	4556 (3904 to 5373)	52.84 (34.77 to 71.30)	
44	Armenia	2547 (2109 to 3013)	3263 (2744 to 3956)	28.11 (18.76 to 37.72)	7 (5 to 9)	11 (8 to 13)	51.30 (17.69 to 101.11)	637 (492 to 805)	764 (593 to 979)	19.86 (4.07 to 38.21)	
45 46 47 48	Australia	18262 (15282 to 21523)	44624 (39169 to 50438)	144.35 (122.23 to 167.82)	97 (85 to 120)	369 (259 to 430)	279.18 (123.37 to 350.95)	4536 (3533 to 5743)	11569 (9111 to 14334)	155.05 (104.34 to 184.94)	
49 50 51 52	Austria	25345 (22242 to 28177)	33080 (29600 to 37293)	30.52 (19.87 to 42.12)	99 (88 to 133)	101 (80 to 165)	2.52 (-14.48 to 30.58)	5699 (4484 to 7140)	6463 (4736 to 8366)	13.41 (1.99 to 27.18)	
53 54 <sub>A</sub> 55 56	zerbaijan	4623 (3817 to 5491)	9463 (7886 to 11458)	104.71 (89.06 to 120.81)	12 (9 to 15)	13 (10 to 18)	12.27 (-26.26 to 63.36)	1080 (815 to 1410)	1829 (1289 to 2470)	69.47 (44.70 to 98.86)	
57 58	Bahamas	65 (55 to 77)	123 (102 to 152)	88.60 (70.75 to 107.18)	1 (1 to 1)	2 (1 to 2)	82.56 (39.32 to 142.99)	49 (41 to 57)	78 (63 to 98)	60.27 (27.44 to 102.98)	
59 60	Bahrain	179 (152 to	846 (688 to	373.26	0 (0 to 1)	1 (1 to 2)	178.61	44 (32 to	167 (116 to	283.01	

1 2									
3 4	206)	1035)	(309.51 to 442.36)			(82.33 to 326.1)	57)	229)	(204.71 to 374.48)
5 6 7 <sub>Bangladesh</sub> 8 9	11786 (9494 to 14655)	33018 (26285 to 41258)	180.14 (157.01 to 203.31)	544 (333 to 805)	713 (431 to 1068)	30.90 (-18.82 to 117.77)	23781 (13440 to 35324)	26354 (17363 to 37248)	10.82 (-35.76 to 104.55)
10 11 Barbados	183 (153 to 218)	282 (238 to 340)	54.27 (41.76 to 69.09)	1 (1 to 1)	2 (1 to 2)	48.15 (12.33 to 96.63)	58 (47 to 71)	81 (62 to 101)	39.17 (18.58 to 61.35)
12 13 Belarus 14	9910 (8453 to 11723)	11335 (9509 to 13529)	14.38 (6.51 to 23.58)	45 (32 to 60)	58 (42 to 77)	29.88 (-8.49 to 97.40)	2690 (2011 to 3484)	3063 (2364 to 3923)	13.87 (-6.13 to 41.64)
15 16 <sub>Belgium</sub> 17 18	9661 (8871 to 10430)	20093 (17518 to 22821)	107.97 (87.58 to 131.05)	113 (99 to 134)	273 (206 to 319)	141.39 (64.63 to 188.06)	3307 (2755 to 3921)	6370 (5236 to 7678)	92.63 (55.31 to 116.01)
19 20 <sub>Belize</sub> 21 22	26 (22 to 32)	87 (71 to 106)	230.96 (204.21 to 258.71)	1 (1 to 1)	2 (1 to 2)	117.53 (55.55 to 286.06)	40 (29 to 50)	77 (64 to 97)	91.51 (43.10 to 212.80)
23 24 <sub>Benin</sub> 25 26	209 (171 to 253)	685 (549 to 838)	227.98 (203.9 to 255.4)	14 (6 to 24)	30 (18 to 44)	116.13 (28.68 to 334.23)	694 (232 to 1320)	1437 (773 to 2281)	107.25 (11.24 to 374.73)
27 28 Bermuda 29 30	23 (19 to 28)	33 (27 to 39)	42.79 (30.81 to 55.62)	1 (0 to 1)	0 (0 to 1)	-15.72 (-38.69 to 37.20)	18 (14 to 21)	14 (11 to 18)	-22.33 (-40.21 to 11.58)
31 32 Bhutan 33	66 (52 to 83)	158 (128 to 197)	140.27 (120.87 to	2 (1 to 4)	3 (2 to 7)	57.00 (-6.75 to 195.84)	86 (38 to 160)	102 (67 to 202)	18.91 (-35.13 to
24			162.46)				100)	202)	133.49)
34 35 Bolivia 36(Plurinational 37 State of)	569 (473 to 694)	1400 (1171 to 1693)	162.46) 145.90 (129.42 to 165.45)	25 (10 to 48)	34 (26 to 45)	39.57 (-28.99 to 217.03)	1552 (546 to 3375)	1348 (986 to 1772)	133.49) -13.09 (-59.56 to 134.61)
35 <sup>Bolivia</sup> 36(Plurinational			145.90 (129.42 to			39.57 (-28.99 to	1552 (546 to	1348 (986 to	-13.09 (-59.56 to
<ul> <li>35 Bolivia</li> <li>36(Plurinational</li> <li>37 State of)</li> <li>38</li> <li>39 Bosnia and</li> <li>40 Herzegovina</li> <li>41</li> <li>42</li> <li>43</li> <li>44 Botswana</li> <li>45</li> </ul>	694) 4910 (4225	to 1693) 5387 (4726	145.90 (129.42 to 165.45) 9.73 (1.15 to	48) 18 (12 to	45) 26 (13 to	39.57 (-28.99 to 217.03) 40.25 (-11.49 to	1552 (546 to 3375) 1285 (987 to	1348 (986 to 1772) 1372 (949 to	-13.09 (-59.56 to 134.61) 6.80 (-13.90
<ul> <li>35 Bolivia</li> <li>36(Plurinational</li> <li>37 State of)</li> <li>38</li> <li>39 Bosnia and</li> <li>40 Herzegovina</li> <li>41</li> <li>42</li> <li>43 Botswana</li> <li>45</li> <li>46</li> <li>47 Brazil</li> <li>49</li> </ul>	694) 4910 (4225 to 5717) 70 (58 to	to 1693) 5387 (4726 to 6247) 221 (179 to	145.90 (129.42 to 165.45) 9.73 (1.15 to 17.87) 214.79 (189.25 to	48) 18 (12 to 23)	45) 26 (13 to 35)	39.57 (-28.99 to 217.03) 40.25 (-11.49 to 108.03) 104.82 (14.62 to	1552 (546 to 3375) 1285 (987 to 1644) 188 (121 to	1348 (986 to 1772) 1372 (949 to 1778) 388 (241 to	-13.09 (-59.56 to 134.61) 6.80 (-13.90 to 28.67) 106.67 (18.10 to
<ul> <li>35 Bolivia</li> <li>36(Plurinational)</li> <li>37 State of)</li> <li>38</li> <li>39 Bosnia and</li> <li>40 Herzegovina</li> <li>41</li> <li>42</li> <li>43 Botswana</li> <li>45</li> <li>46</li> <li>47 Brazil</li> <li>49</li> <li>50</li> <li>51 Brunei</li> <li>52 Darussalam</li> <li>53</li> </ul>	694) 4910 (4225 to 5717) 70 (58 to 86) 73860 (64511 to 84264) 126 (100 to 155)	to 1693) 5387 (4726 to 6247) 221 (179 to 276) 115697 (100339 to	145.90 (129.42 to 165.45) 9.73 (1.15 to 17.87) 214.79 (189.25 to 244.24) 56.64 (51.18 to 62.94) 134.79 (114.54 to 156.55)	48) 18 (12 to 23) 4 (3 to 6) 451 (396 to	45) 26 (13 to 35) 9 (6 to 13) 1035 (939 to	39.57 (-28.99 to 217.03) 40.25 (-11.49 to 108.03) 104.82 (14.62 to 221.73) 129.44 (108.60 to	1552 (546 to 3375) 1285 (987 to 1644) 188 (121 to 269) 27396 (23325 to	1348 (986 to 1772) 1372 (949 to 1778) 388 (241 to 620) 46350 (39647 to	-13.09 (-59.56 to 134.61) 6.80 (-13.90 to 28.67) 106.67 (18.10 to 226.68) 69.18 (58.65 to 83.50) 99.44 (53.62 to 164.86)
<ul> <li>35 Bolivia</li> <li>36(Plurinational</li> <li>37 State of)</li> <li>38</li> <li>39 Bosnia and</li> <li>40 Herzegovina</li> <li>41</li> <li>42</li> <li>43 Botswana</li> <li>45</li> <li>46</li> <li>47 Brazil</li> <li>49</li> <li>50</li> <li>51 Brunei</li> <li>52 Darussalam</li> </ul>	694) 4910 (4225 to 5717) 70 (58 to 86) 73860 (64511 to 84264) 126 (100 to	to 1693) 5387 (4726 to 6247) 221 (179 to 276) 115697 (100339 to 132222) 295 (237 to	145.90 (129.42 to 165.45) 9.73 (1.15 to 17.87) 214.79 (189.25 to 244.24) 56.64 (51.18 to 62.94) 134.79 (114.54 to	<ul> <li>48)</li> <li>18 (12 to 23)</li> <li>4 (3 to 6)</li> <li>451 (396 to 488)</li> </ul>	45) 26 (13 to 35) 9 (6 to 13) 1035 (939 to 1207)	39.57 (-28.99 to 217.03) 40.25 (-11.49 to 108.03) 104.82 (14.62 to 221.73) 129.44 (108.60 to 167.01) 127.20 (58.12 to	1552 (546 to 3375) 1285 (987 to 1644) 188 (121 to 269) 27396 (23325 to 31992) 57 (40 to	1348 (986 to 1772) 1372 (949 to 1778) 388 (241 to 620) 46350 (39647 to 54190) 114 (89 to	-13.09 (-59.56 to 134.61) 6.80 (-13.90 to 28.67) 106.67 (18.10 to 226.68) 69.18 (58.65 to 83.50) 99.44 (53.62

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3 4 5			200.27) 121.41			350.02)			380.59) 51.13
6 Burundi 7	207 (169 to 255)	459 (369 to 561)	(105.47 to 137.36)	21 (13 to 37)	38 (24 to 58)	76.44 (-8.52 to 253.21)	1064 (461 to 2387)	1608 (1001 to 2527)	(-33.49 to 272.32)
8 9 10 Cabo Verde 11 12	23 (19 to 28)	63 (51 to 78)	176.77 (156.29 to 198.45)	1 (0 to 1)	1 (1 to 1)	37.26 (-16.62 to 131.63)	34 (21 to 47)	43 (35 to 54)	28.23 (-15.29 to 118.40)
13 14 Cambodia 15	218 (168 to 273)	595 (467 to 730)	172.54 (148.48 to 197.52)	26 (14 to 39)	38 (26 to 48)	46.42 (-4.73 to 167.94)	1175 (547 to 2166)	1222 (890 to 1546)	3.97 (-44.25 to 128.29)
16 17 18 <sup>Cameroon</sup> 19	538 (438 to 666)	1938 (1576 to 2393)	259.93 (232.74 to 288.04)	30 (14 to 46)	58 (30 to 95)	95.05 (-1.81 to 218.33)	1367 (583 to 2134)	2830 (1520 to 4639)	107.06 (11.41 to 245.01)
20 21 22 Canada 23	116922 (112352 to 121655)	157737 (142113 to 173888)	34.91 (23.15 to 47.18)	270 (241 to 302)	403 (323 to 605)	49.15 (24.68 to 106.93)	22694 (17260 to 29101)	29915 (21904 to 38441)	31.82 (19.21 to 46.22)
<ul> <li>24</li> <li>25 central African</li> <li>26 Republic</li> <li>27</li> </ul>	116 (95 to 145)	243 (199 to 299)	109.71 (91.54 to 126.84)	12 (7 to 19)	21 (12 to 35)	80.23 (18.71 to 166.11)	510 (273 to 935)	890 (475 to 1568)	74.48 (9.24 to 167.75)
28 29 Chad 30 31	251 (205 to 306)	713 (580 to 881)	184.44 (162.13 to 208.28)	21 (10 to 35)	44 (25 to 64)	108.90 (42.17 to 222.10)	960 (360 to 1689)	2084 (1020 to 3460)	117.09 (31.20 to 260.72)
32 33 Chile	3739 (3165 to 4369)	6732 (5813 to 7788)	80.06 (68.43 to 93.27)	46 (36 to 51)	70 (59 to 89)	53.60 (25.60 to 123.36)	1928 (1573 to 2244)	2612 (2169 to 3169)	35.45 (14.76 to 72.90)
34 35 36 China 37	239473 (198363 to 285024)	911045 (776347 to 1069533)	280.44 (262.77 to 303.34)	5560 (4048 to 7203)	4676 (3774 to 5461)	-15.89 (-39.57 to 19.52)	234245 (162916 to 293663)	232464 (179903 to 291090)	-0.76 (-26.71 to 54.23)
38 39 40 Colombia 41	6732 (5626 to 7997)	15348 (13025 to 18234)	127.99 (113.25 to 144.58)	56 (48 to 61)	154 (116 to 202)	175.73 (106.78 to 258.47)	3215 (2689 to 3798)	6419 (4991 to 7986)	99.66 (64.35 to 143.95)
42 43 44 Comoros 45	21 (17 to 26)	48 (39 to 60)	123.01 (106.31 to 142.32)	2 (1 to 3)	4 (2 to 6)	81.66 (13.33 to 277.77)	77 (29 to 137)	119 (75 to 174)	54.58 (-16.19 to 298.98)
46 47 48 49	145 (120 to 178)	421 (343 to 518)	189.59 (170.45 to 215.68)	9 (6 to 14)	17 (12 to 25)	87.61 (15.68 to 196.61)	396 (237 to 645)	681 (463 to 980)	72.21 (-4.05 to 195.14)
50 51 <sub>Cook</sub> Islands 52 53	1 (1 to 1)	1 (1 to 2)	28.57 (18.27 to 40.87)	0 (0 to 0)	0 (0 to 0)	-14.75 (-42.49 to 32.51)	8 (5 to 11)	5 (3 to 7)	-33.66 (-57.85 to 4.48)
54 55 <sub>Costa Rica</sub> 56 57	670 (560 to 796)	1637 (1380 to 1937)	144.55 (127.55 to 162.48)	3 (2 to 3)	10 (7 to 13)	270.81 (169.90 to 398.49)	190 (150 to 238)	524 (399 to 669)	176.16 (128 to 235.84)
58 59 <sup>C ôte</sup> d'Ivoire 60	578 (465 to 714)	1562 (1251 to 1950)	170.18 (151.08 to	25 (11 to 42)	54 (32 to 79)	111.95 (32.09 to	1324 (535 to 2260)	2583 (1501 to 3952)	95.11 (14.75 to 276.09)

Page	48	of	70

1 2									
3 4			190.01)			290.61)			
5	9449 (8823	10780 (9980	14.09 (9.79	16 (14 to	33 (25 to	106.49	1866 (1411	2288 (1717	22.61 (2.99
6 Croatia 7	to 10129)	to 11592)	to 18.67)	24)	42)	(18.11 to 180.74)	to 2410)	to 2898)	to 39.06)
8 9	2240 (2702	4574 (2750)	41 19 (20 72	26 (22 +-	42 (22 +-	16.33	1510 (1151	1(92)(1225	1076 ( 9.19
10 Cuba	3240 (2702 to 3901)	4574 (3750 to 5525)	41.18 (29.72 to 54.70)	36 (23 to 43)	42 (33 to 53)	(-11.71 to	1518 (1151 to 1818)	1682 (1335 to 2085)	10.76 (-8.18 to 38.33)
11 12			,	,	,	79.06)			
13 14 Cyprus	344 (292 to	962 (870 to	179.86 (151.26 to	12 (7 to 16)	16 (12 to	35.72 (-8.18	257 (180 to	370 (303 to	43.92 (7.35
15	400)	1050)	216.30)	12 (7 10 10)	20)	to 121.22)	333)	444)	to 105.55)
16 17	10218 (8616	20802	103.57	71 (64 to	114 (87 to	59.45 (13.25	3246 (2697	5259 (4127	62.01 (34.95
18 <sup>Czechia</sup>	to 12269)	(19084 to	(74.68 to	82)	141)	to 100.62)	to 3932)	to 6597)	to 90.03)
19 20 <sub>Democratic</sub>	,	22519)	138.01)			,	,	,	,
21	3097 (2554	4965 (4120	60.33 (48.19	74 (41 to	108 (75 to	45.76 (-9.28	3363 (1697	3161 (2323	-5.99
22 People's 23 Republic of	to 3714)	to 5978)	to 72.89)	114)	147)	to 166.1)	to 6033)	to 4117)	(-46.37 to
24 Korea 25 Democratic									81.39)
26 Democratic	1975 (1605	4445 (3597	125.06	130 (79 to	231 (159 to	77.23 (4.65	6456 (3284	10018 (6738	55.18
2 <b>∱</b> epublic of the 28 Congo	to 2418)	to 5502)	(107.08 to 145.69)	207)	336)	to 194.58)	to 12595)	to 15367)	(-21.39 to 209.02)
29	13729	15310							
30 31 <sup>Denmark</sup>	(12468 to	(13920 to	11.51 (5.37 to 17.43)	43 (38 to 50)	70 (60 to 83)	65.35 (42.63 to 92.58)	2893 (2227 to 3654)	3391 (2644 to 4239)	17.21 (8.04 to 27.16)
32	15154)	16882)		50)		10 92.38)	10 3034)	10 4239)	,
33 34	20 (16 to	90 (72 to	342.41	1 (1 ( 0)	2 (2 + 5)	190.20	60 (27 to	144 (88 to	138.93
35 Djibouti 36	25)	111)	(307.26 to 378.51)	1 (1 to 2)	3 (2 to 5)	(72.46 to 408.23)	121)	236)	(25.91 to 367.14)
37	10 (16)	22 (19 (				-9.08	22 (10 )	21 (16)	-11.16
38 39 Dominica	19 (16 to 23)	22 (18 to 27)	17.43 (7.09 to 28.52)	1 (1 to 1)	1 (0 to 1)	(-35.39 to	23 (19 to 28)	21 (16 to 27)	(-34.54 to
40	/	,				27.05)	)	,	19.86)
41 42 <sup>Dominican</sup>	1239 (1022	2521 (2070	103.40 (87.28 to	11 (9 to 16)	22 (16 to	99.41 (29.65	732 (527 to	1109 (821 to	51.44 (0.42
43 Republic 44	to 1507)	to 3084)	121.86)	11 (3 to 10)	30)	to 202.38)	1060)	1450)	to 118.17)
45	1159 (1021	3315 (2981	186.04	16 (12 to	34 (24 to	107.95	982 (705 to	1475 (1120	50.25 (3.59
46 <sub>Ecuador</sub> 47	to 1302)	to 3667)	(172.00 to	21)	44)	(37.86 to	1302)	to 1823)	to 124.68)
48	17107	39271	200.27) 129.56			223.02)			109.10
49 50 <sub>Egypt</sub>	(14592 to	(31782 to	(97.49 to	59 (35 to	119 (70 to	100.85 (5.49	4521 (3160	9453 (6709	(57.59 to
51 52	19726)	48388)	159.21)	119)	186)	to 238.69)	to 6354)	to 12613)	171.14)
53	842 (701 to	1478 (1239	75.42 (62.88			-28.67	661 (461 to	437 (329 to	-33.83
54 El Salvador 55	998)	to 1741)	to 87.97)	13 (8 to 16)	9 (7 to 12)	(-54.13 to	881)	574)	(-55.24 to
56			397.19			18.21)			-1.58) 63.28
57 <sub>Equatorial</sub>	19 (16 to	95 (79 to	(353.40 to	2 (1 to 3)	3 (2 to 4)	66.29 (-6.86	73 (37 to	119 (73 to	(-22.44 to
59 <sup>Guinea</sup> 60	24)	117)	443.01)			to 195.01)	135)	184)	233.97)
00									

1 2										
3 4 5 6	Eritrea	114 (93 to 141)	327 (263 to 398)	186.49 (164.83 to 210.17)	9 (4 to 17)	23 (15 to 34)	165.47 (22.99 to 516.12)	474 (168 to 1107)	1017 (645 to 1643)	114.61 (-12.62 to 493.09)
7 8 9 10	Estonia	1311 (1148 to 1494)	1821 (1593 to 2066)	38.90 (26.62 to 51.17)	10 (9 to 12)	9 (6 to 11)	-17.88 (-40.41 to 15.88)	511 (425 to 601)	448 (341 to 573)	-12.32 (-28.71 to 9.89)
11 12 13 14	Eswatini	38 (31 to 47)	80 (65 to 98)	109.48 (95.32 to 125.52)	2 (1 to 3)	4 (2 to 5)	72.30 (1.22 to 254.21)	106 (47 to 206)	153 (101 to 227)	44.21 (-27.03 to 242.69)
15 16 17 18	Ethiopia	1763 (1447 to 2135)	4457 (3634 to 5454)	152.76 (143.58 to 162.31)	219 (128 to 398)	325 (197 to 489)	48.24 (-33.27 to 200.06)	11296 (4911 to 25054)	12866 (8426 to 19913)	13.90 (-51.97 to 197.17)
19 20 21 22	Fiji	28 (23 to 34)	42 (35 to 52)	50.29 (36.12 to 66.63)	1 (1 to 2)	2 (1 to 2)	27.79 (-16.31 to 91.11)	59 (45 to 80)	68 (49 to 91)	14.67 (-24.77 to 72.54)
23 24 25 26	Finland	9450 (8777 to 10150)	19960 (17972 to 22078)	111.22 (94.08 to 127.73)	33 (24 to 39)	39 (33 to 46)	18.82 (-5.40 to 68.55)	2012 (1537 to 2571)	3465 (2517 to 4569)	72.24 (51.93 to 93.91)
27 28 29 30	France	60982 (55563 to 66348)	101092 (91225 to 111418)	65.77 (54.06 to 77.24)	943 (807 to 1043)	2181 (1253 to 2615)	131.25 (51.63 to 168.76)	23073 (19741 to 26699)	40856 (30081 to 48291)	77.07 (34.58 to 97.82)
31 32 33	Gabon	65 (54 to 80)	163 (134 to 201)	150.81 (132.67 to 173.19)	4 (2 to 6)	5 (4 to 8)	52.52 (-4.74 to 134.04)	144 (85 to 223)	205 (137 to 294)	42.02 (-13.99 to 140.73)
34 35 36 37	Gambia	49 (39 to 60)	130 (105 to 161)	162.91 (142.17 to 186.15)	3 (1 to 5)	5 (3 to 7)	85.18 (3.78 to 214.51)	132 (63 to 243)	215 (140 to 298)	62.69 (-6.86 to 192.83)
38 39 40 41	Georgia	5100 (4308 to 6037)	4210 (3545 to 5060)	-17.45 (-22.85 to -11.71)	16 (10 to 22)	17 (10 to 22)	3.41 (-22.82 to 40.33)	1222 (911 to 1581)	991 (741 to 1269)	-18.96 (-30.33 to -5.81)
42 43 44 45	Germany	101153 (87240 to 117946)	236048 (208508 to 266966)	133.36 (115.87 to 150.36)	1201 (987 to 2011)	4286 (3156 to 4903)	256.72 (63.30 to 351.66)	37493 (30500 to 51704)	92002 (74718 to 107721)	145.38 (51.12 to 187.04)
46 47 48 49	Ghana	982 (800 to 1189)	2894 (2355 to 3533)	194.61 (176.45 to 216.26)	56 (24 to 95)	103 (57 to 155)	84.24 (5.66 to 242.87)	2633 (1097 to 4201)	4506 (2554 to 6654)	71.16 (2.12 to 227.26)
50 51 52 53	Greece	12180 (10236 to 14240)	10403 (9422 to 11537)	-14.59 (-23.98 to -3.38)	35 (30 to 40)	66 (54 to 80)	86.77 (51.57 to 131.14)	2407 (1790 to 3170)	2424 (1911 to 3027)	0.69 (-13.02 to 15.85)
54 55 56 57	Greenland	78 (64 to 92)	108 (92 to 125)	39.24 (25.78 to 55.52)	0 (0 to 0)	0 (0 to 1)	147.84 (18.45 to 275.98)	17 (13 to 23)	25 (19 to 33)	49.12 (13.65 to 82.39)
58 59 60	Grenada	16 (13 to 19)	28 (23 to 35)	76.27 (60.87 to 93.49)	1 (1 to 1)	1 (1 to 2)	29.20 (-4.73 to 79.53)	33 (27 to 39)	43 (36 to 52)	30.86 (1.58 to 68.87)

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2 3 4 5 Guam 6	8 (6 to 9)	12 (10 to 14)	49.19 (36.21 to 64.35)	0 (0 to 0)	0 (0 to 0)	21.60 (-20.17 to 84.57)	9 (7 to 12)	9 (7 to 13)	2.91 (-31.52 to 53.3)
7 8 9 Guatemal 10	a 1041 (867 to a 1243)	3192 (2680 to 3791)	206.76 (185.26 to 227.66)	13 (8 to 22)	35 (27 to 45)	180.16 (34.43 to 377.94)	866 (522 to 1506)	1761 (1381 to 2210)	103.35 (6.31 to 246.71)
11 12 13 14	309 (251 to 384)	677 (543 to 826)	119.23 (103.12 to 138.21)	19 (6 to 34)	29 (14 to 46)	49.62 (-7.31 to 159.78)	1008 (272 to 2032)	1414 (609 to 2445)	40.38 (-20.12 to 170.29)
15 16 <sub>Guinea-Bis</sub> 17 18	44 (36 to sau 54)	103 (83 to 126)	134.63 (116.21 to 153.25)	4 (2 to 7)	6 (3 to 8)	39.91 (-18.84 to 175.43)	201 (66 to 403)	265 (152 to 392)	31.85 (-30.36 to 186.15)
19 20 <sub>Guyana</sub> 21 22	126 (103 to 152)	170 (139 to 210)	35.00 (24.45 to 45.80)	5 (4 to 6)	6 (5 to 9)	20.04 (-18.42 to 74.53)	239 (189 to 291)	257 (191 to 336)	7.22 (-25.07 to 53.03)
23 24 Haiti 25 26	860 (708 to 1057)	1916 (1570 to 2384)	122.68 (105.23 to 142.3)	58 (24 to 105)	85 (45 to 125)	45.78 (-11 to 148.4)	3030 (946 to 6879)	3782 (1875 to 6104)	24.85 (-33.53 to 156.75)
27 28 Honduras 29 30	619 (513 to 734)	1803 (1499 to 2141)	191.20 (171.74 to 211.20)	22 (14 to 31)	50 (31 to 69)	128.99 (47.94 to 251.69)	1240 (712 to 1929)	1816 (1191 to 2508)	46.37 (-11.95 to 139.27)
31 32 Hungary 33 34	24215 (21977 to 26809)	42233 (39099 to 45377)	74.41 (64.26 to 86.04)	84 (76 to 109)	100 (80 to 128)	19.27 (-4.55 to 45.83)	5849 (4647 to 7201)	8339 (6257 to 10544)	42.56 (25.99 to 56.19)
35 36 Iceland 37	357 (301 to 420)	872 (752 to 1007)	144.33 (123.25 to 167.58)	2 (2 to 2)	4 (3 to 5)	107.81 (52.43 to 151.5)	90 (71 to 113)	187 (142 to 239)	107.79 (81.26 to 131.98)
38 39 40 India 41	133927 (107800 to 166434)	270719 (219873 to 332264)	102.14 (95.94 to 110.29)	2770 (1783 to 3802)	4214 (2950 to 5531)	52.13 (19.29 to 98.65)	127568 (77798 to 169843)	164416 (117527 to 208276)	28.89 (1.40 to 72.21)
42 43 44 Indonesia 45	5025 (3974 to 6141)	11410 (9158 to 13704)	127.09 (115.15 to 141.04)	704 (401 to 910)	913 (582 to 1179)	29.58 (2.63 to 76.95)	26026 (16965 to 34445)	24943 (18268 to 32252)	-4.16 (-31.91 to 42.06)
46 47 Iran (Islam 48 Republic o 49	(12153 to	40493 (32952 to 49751)	170.60 (160.28 to 181.00)	51 (33 to 68)	132 (55 to 164)	158.02 (43.67 to 247.65)	4022 (3121 to 5103)	9481 (6679 to 12439)	135.71 (84.19 to 177.03)
50 51 Iraq 52 53	2270 (1890 to 2694)	10029 (8221 to 12199)	341.76 (303.6 to 377.49)	34 (21 to 51)	51 (38 to 67)	52.37 (-14.19 to 162.33)	2135 (1267 to 3447)	3719 (2808 to 4931)	74.13 (2.20 to 190.75)
54 55 <sup>Ireland</sup>	3253 (2736 to 3869)	5762 (4988 to 6655)	77.13 (58.69 to 97.43)	33 (29 to 37)	51 (41 to 65)	53.61 (25.28 to 93.62)	1106 (922 to 1332)	1623 (1294 to 2033)	46.76 (29.96 to 67.57)
56 57 58 Israel 59 60	3274 (2767 to 3882)	6640 (5924 to 7451)	102.78 (76.8 to 132.02)	22 (18 to 24)	46 (38 to 63)	111.01 (70.80 to 199.17)	1000 (812 to 1229)	1851 (1484 to 2306)	85.14 (61.05 to 116.46)

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#### 2 3 33890 183929 186447 272.23 44427 4 1.37 (-2.84 351 (310 to 1305 (944 to 31.09 (5.26 (70.52 to Italy (159353 to (165268 to (24913 to (34629 to 5 to 6.10) 581) 1468) to 46.90) 209019) 6 209220) 339.63) 43884) 54814) 7 21.88 12.67 543 (455 to 884 (737 to 62.81 (49.97 304 (231 to 343 (264 to 8 Jamaica 6 (4 to 7) 7 (5 to 10) (-16.58 to (-13.90 to 9 1059) to 76.46) 432) 648) 367) 110.45) 66.78) 10 11 236120 408632 41769 67424 73.06 (59.11 367 (270 to 452 (350 to 23.32 (1.39 61.42 (48.32 12 Japan (196281 to (353858 to (30062 to (46877 to 13 to 88.73) 394) 629) to 112.57) to 75.54) 281825) 468152) 56026) 91495) 14 15 614.12 135.70 376.81 1611 (1394 11508 (9646 13 (10 to 452 (339 to 2155 (1536 16 Jordan (540.91 to 6 (4 to 8) (49.91 to (274.79 to 17 to 1851) to 13565) 17) 570) to 2953) 683.77) 281.75) 495.45) 18 19 15823 11689 (9797 35.36 (26.10 76 (56 to 82 (66 to 7.52 (-17.29 4458 (3567 5172 (4164 16.03 (-1.28 20 Kazakhstan (13219 to 21 to 14063) to 46.10) 95) 100) to 48.48) to 5515) to 37.13) to 6466) 18930) 22 23 230.72 144.03 868 (711 to 2870 (2364 74 (46 to 180 (111 to 3011 (1930 6453 (4376 114.3 (40.66 24 Kenya (219.85 to (82.74 to 1056) to 3474) 125) 265) to 4593) to 9370) to 213.60) 25 242.5) 228.15) 26 60.33 (46.38 5.25 (-33.24 28 (11 to 30 (14 to 4.10 (-35.53 27 1 (0 to 1) 1 (0 to 1) Kiribati 2(2 to 3)4 (3 to 4) 28 to 76.77) to 73.45) 58) 55) to 92.08) 29 230.91 195.71 197.49 30 863 (798 to 2857 (2338 188 (140 to 558 (391 to 4 (3 to 5) Kuwait (174.37 to 1 (1 to 2) (125.48 to (143.44 to 31 937) to 3483) 241) 755) 32 298.63) 314.39) 262.68) 33 -7.05 -36.11 4283 (3592 69.58 (59.46 1109 (784 to 2526 (2126 15 (10 to 1031 (789 to 34 Kyrgyzstan 10 (8 to 12) (-51.26 to (-27.91 to 35 to 3008) to 5083) to 81.49) 19) 1376) 1325) 29.99) 14.99) 36 37 Lao People's 167.27 90 (70 to 241 (191 to 8.81 (-34.31 385 (177 to 387 (234 to 0.50 (-45.77 38 Democratic (144.93 to 10 (5 to 15) 11 (6 to 17) 39 113) 300) to 91.32) 639) 610) to 106.92) 193.03) Republic 40 41 -4.0112 (10 to 3273 (2810 3226 (2843 -1.44 (-8.09 14 (11 to 18.35 (-5.77 811 (632 to 779 (605 to 42 (-15.43 to Latvia 43 to 3770) to 3623) to 5.70) 14) 17)to 47.79) 1017) 981) 8.10) 44 45 182.89 148.06 146.92 881 (721 to 2494 (2037 220 (161 to 545 (394 to 46 (160.10 to 3 (2 to 4) (25.25 to (90.21 to Lebanon 8 (4 to 12) 47 1091) to 3050) 297) 737) 205.97) 359.10) 219.00) 48 46.51 51.75 49 95 (78 to 150 (122 to 58.00 (46.76 222 (137 to 326 (210 to 50 Lesotho 6 (4 to 8) 9 (6 to 12) (-12.69 to (-15.14 to 115) 185) to 69.06) 323) 480) 51 142.65) 129.83) 52 176.51 46.34 35.96 53 104 (85 to 288 (233 to 360 (108 to 490 (271 to 54 Liberia (-36.97 to (154.41 to 7 (3 to 12) 11 (6 to 17) (-18.23 to 354) 705) 129) 833) 55 199.50) 235.23) 268.26) 56 203.80 159.15 160.02 57 629 (514 to 1910 (1557 229 (166 to 595 (436 to Libya 58 (175.90 to 4 (3 to 7) 11 (7 to 15) (33.45 to (65.02 to 759) to 2333) 324) 782) 59

**BMJ** Open

345.08)

262.55)

233.83)

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3 4 Lithuania 5	4535 (3980 to 5145)	4848 (4481 to 5210)	6.90 (-3.51 to 20.95)	14 (10 to 16)	18 (14 to 23)	26.29 (-2.24 to 67.72)	1054 (817 to 1321)	1105 (861 to 1375)	4.77 (-8.66 to 20.85)
6 7 <sub>Luxembourg</sub> 8	775 (680 to 879)	1503 (1318 to 1707)	93.98 (81.65 to 107.23)	5 (4 to 6)	11 (8 to 13)	124.41 (55.78 to 172.33)	202 (162 to 247)	376 (297 to 471)	85.81 (59.15 to 105.40)
9 10 11 <sub>Madagascar</sub> 12 13	490 (401 to 604)	1330 (1089 to 1651)	171.16 (153.22 to 190.88)	36 (17 to 60)	69 (48 to 103)	92.10 (5.72 to 331.04)	1875 (646 to 3722)	3000 (2035 to 4374)	60.01 (-23.07 to 329.63)
13 14 15 Malawi 16 17	336 (273 to 415)	741 (603 to 910)	120.33 (105.3 to 136.64)	39 (19 to 76)	55 (38 to 78)	39.48 (-33.91 to 218.89)	2236 (716 to 5491)	2323 (1541 to 3545)	3.89 (-57.34 to 225.03)
18 19 Malaysia 20	638 (533 to 747)	2165 (1879 to 2498)	239.19 (213.74 to 272.55)	16 (13 to 20)	41 (30 to 56)	157.56 (64.69 to 265.74)	612 (503 to 742)	1434 (1090 to 1814)	134.26 (68.55 to 208.48)
21 22 23 Maldives 24	6 (5 to 7)	27 (21 to 33)	357.26 (319.05 to 402.53)	0 (0 to 1)	1 (1 to 1)	97.39 (13.04 to 268.14)	19 (10 to 33)	29 (23 to 38)	58.10 (-20.10 to 218.81)
25 26 27 Mali 28	396 (321 to 489)	1033 (841 to 1256)	161.12 (141.84 to 182.05)	29 (9 to 53)	55 (26 to 93)	90.14 (10.52 to 338.68)	1569 (384 to 3318)	2748 (1107 to 5138)	75.21 (-6.44 to 320.25)
29 30 31 <sup>Malta</sup> 32	275 (237 to 318)	390 (346 to 441)	42.03 (32.40 to 52.30)	2 (2 to 2)	6 (5 to 7)	182.23 (117.73 to 248.53)	84 (68 to 102)	149 (123 to 178)	77.16 (51.73 to 106.18)
33 34 Marshall 35 <sub>Islands</sub> 36	1 (1 to 1)	2 (2 to 3)	81.58 (65.63 to 99.90)	0 (0 to 0)	0 (0 to 0)	14.19 (-33.41 to 79.45)	10 (6 to 17)	12 (6 to 20)	15.49 (-36.36 to 90.92)
37 38 39 40	118 (96 to 144)	330 (270 to 405)	179.57 (158.4 to 202.27)	8 (4 to 11)	9 (6 to 13)	19.95 (-22.88 to 109.37)	322 (167 to 487)	376 (245 to 543)	16.93 (-28.24 to 120.07)
41 42 <sub>Mauritius</sub> 43 44	47 (37 to 58)	86 (69 to 102)	81.67 (65.36 to 99.25)	1 (1 to 1)	3 (3 to 4)	176.18 (101.94 to 258.21)	50 (43 to 61)	117 (90 to 147)	134.12 (70.2 to 198.45)
45 46 <sub>Mexico</sub> 47 48	25697 (21937 to 30082)	46570 (40040 to 53889)	81.22 (75.62 to 87.02)	157 (142 to 176)	519 (408 to 622)	229.87 (156.16 to 297.06)	9626 (8180 to 11411)	21132 (17386 to 25318)	119.55 (86.73 to 154.33)
49 Micronesia 50 (Federated 51 States of) 52	3 (2 to 4)	4 (3 to 5)	26.76 (16.02 to 38.96)	1 (0 to 1)	1 (0 to 1)	-23.01 (-59.09 to 31.38)	28 (16 to 49)	20 (10 to 38)	-27.22 (-62.97 to 22.93)
53 <sub>Monaco</sub> 54 55	43 (36 to 51)	59 (50 to 69)	37.31 (28.37 to 47.29) 142.14	0 (0 to 0)	0 (0 to 1)	37.96 (-4.38 to 94.10) 11.41	11 (8 to 14)	14 (11 to 18)	30.63 (10.51 to 53.62) 17.92
56 57 <sup>Mongolia</sup> 58	961 (801 to 1153)	2328 (1907 to 2810)	(124.80 to 161.08)	11 (6 to 15)	12 (9 to 16)	(-26.46 to 89.38)	690 (380 to 1073)	814 (620 to 1028)	(-26.45 to 100.76)
59 <sub>Montenegro</sub> 60	879 (744 to	1051 (890 to	19.54 (12.1	2 (1 to 2)	3 (2 to 3)	48.81 (1.77	191 (145 to	221 (165 to	15.74 (1.68

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3	1032)	1240)	to 27.53)			to 101.73)	247)	288)	to 30.37)
5 6 Morocco 7 8	3007 (2487 to 3582)	6614 (5488 to 7909)	119.98 (105.44 to 135.91)	31 (19 to 48)	59 (41 to 77)	91.82 (30.18 to 192.53)	1438 (989 to 2101)	2615 (1988 to 3373)	81.81 (30.04 to 139.60)
9 10Mozambique 11	487 (397 to 601)	1111 (897 to 1347)	128.31 (112.18 to 146.62)	52 (30 to 88)	107 (71 to 154)	107.07 (16.28 to 270.37)	2567 (1058 to 5668)	4503 (2907 to 7196)	75.44 (-18.50 to 319.21)
12 13 14 Myanmar 15	1024 (797 to 1272)	2062 (1656 to 2558)	101.31 (83.73 to 120.83)	60 (34 to 95)	59 (44 to 82)	-0.68 (-40.07 to 64.77)	2820 (1386 to 5128)	2258 (1680 to 3215)	-19.94 (-57.94 to 48.65)
16 17 18 <sup>Namibia</sup> 19	87 (72 to 108)	217 (175 to 268)	148.34 (130.13 to 167.81)	6 (4 to 8)	9 (6 to 13)	61.81 (0.64 to 190.79)	218 (129 to 344)	333 (223 to 498)	52.64 (-12.57 to 213.41)
20 21 22 <sup>Nauru</sup> 23	0 (0 to 0)	0 (0 to 0)	12.57 (3.45 to 21.62)	0 (0 to 0)	0 (0 to 0)	-34.79 (-63.12 to 6.11)	3 (1 to 6)	2 (1 to 4)	-34.16 (-60.95 to 18.41)
24 25 <sub>Nepal</sub> 26 27	2180 (1726 to 2758)	5036 (4049 to 6194)	131.04 (112.62 to 151.30)	93 (56 to 165)	115 (71 to 190)	23.09 (-15.11 to 93.10)	3780 (2183 to 5903)	3819 (2683 to 5781)	1.05 (-34.25 to 65.01)
28 29 <sub>Netherlands</sub> 30 31	24401 (22175 to 26704)	16251 (13975 to 18987)	-33.4 (-41.14 to -24.18)	278 (240 to 344)	782 (582 to 906)	180.66 (78.32 to 230.31)	8234 (6818 to 9979)	12100 (10246 to 13731)	46.95 (10.86 to 70.21)
32 33 <sup>New Zealand</sup>	5873 (5089 to 6670)	8600 (7850 to 9491)	46.45 (37.95 to 57.06)	20 (17 to 22)	31 (26 to 39)	58.14 (32.29 to 109.75)	1267 (976 to 1592)	1758 (1327 to 2254)	38.84 (26.73 to 54.82)
34 35 36 Nicaragua 37 38	500 (414 to 598)	1453 (1218 to 1720)	190.37 (167.53 to 212.17)	3 (2 to 3)	7 (6 to 9)	177.21 (99.51 to 267.74)	187 (149 to 245)	444 (340 to 555)	137.59 (85.21 to 192.36)
39 40 Niger 41	321 (256 to 395)	942 (760 to 1154)	193.63 (171.22 to 216.83)	27 (9 to 54)	55 (26 to 95)	106.00 (18.53 to 313.02)	1564 (379 to 3724)	2835 (1120 to 5521)	81.21 (-7.73 to 318.21)
42 43 44 <sup>Nigeria</sup> 45	5162 (4259 to 6269)	14578 (11955 to 17708)	182.41 (176.97 to 187.98)	314 (165 to 514)	560 (306 to 909)	78.53 (23.85 to 168.11)	15139 (7194 to 24017)	26794 (15017 to 42474)	76.98 (13.30 to 185.01)
46 47 48 <sup>Niue</sup> 49	0 (0 to 0)	0 (0 to 0)	-12.86 (-20.01 to -3.97)	0 (0 to 0)	0 (0 to 0)	-42.22 (-65.13 to -10.86)	1 (0 to 1)	0 (0 to 1)	-45.91 (-68.37 to -8.78)
50 <sub>North</sub> 51 <sub>Macedonia</sub> 52 Northern	2473 (2098 to 2927)	3374 (2855 to 3973)	36.41 (27.51 to 46.86)	4 (3 to 4)	5 (3 to 6)	37.22 (1.2 to 83.42) -44.77	490 (358 to 648)	635 (459 to 844)	29.55 (14.26 to 46.45) -57.52
54 Mariana 55 <sub>Islands</sub> 56	3 (2 to 3)	3 (3 to 4)	17.67 (3.72 to 33.96)	0 (0 to 0)	0 (0 to 0)	(-70.47 to 26.41)	12 (8 to 19)	5 (4 to 9)	(-77.38 to -4.80)
57 58 Norway 59 60	20686 (17395 to 24323)	33097 (28492 to 37859)	60.00 (50.85 to 68.77)	29 (26 to 41)	38 (32 to 55)	30.65 (17.07 to 54.59)	3551 (2585 to 4687)	5414 (3835 to 7244)	52.44 (44.12 to 61.59)

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- 3 4 5 Oman 6	431 (347 to 517)	1575 (1266 to 1924)	265.15 (237.03 to 297.09)	2 (1 to 3)	4 (3 to 5)	135.73 (37.95 to 331.56)	122 (85 to 178)	375 (271 to 496)	206.46 (111.98 to 320.55)
7 8 9 <sup>Pakistan</sup> 10	9984 (7995 to 12369)	26815 (21768 to 33849)	168.59 (154.72 to 184.98)	454 (240 to 866)	657 (447 to 993)	44.84 (-2.73 to 133.76)	16234 (9791 to 26748)	27286 (18727 to 38379)	68.08 (19.36 to 148.68)
11 12 <sub>Palau</sub> 13 14	1 (1 to 1)	1 (1 to 1)	58.71 (43.16 to 76.15)	0 (0 to 0)	0 (0 to 0)	23.28 (-26.34 to 101.05)	3 (2 to 7)	4 (2 to 6)	14.99 (-29.80 to 103.99)
15 16 <sub>Palestine</sub> 17 18	374 (305 to 450)	1351 (1104 to 1621)	261.47 (229.04 to 293.11)	3 (2 to 4)	4 (3 to 6)	49.80 (-14.64 to 127.75)	132 (92 to 195)	320 (235 to 443)	142.19 (82.43 to 220.08)
19 20 <sub>Panama</sub> 21 22	553 (471 to 638)	1338 (1131 to 1560)	141.92 (123.11 to 161.72)	7 (6 to 10)	25 (19 to 32)	239.99 (135.70 to 373.74)	436 (347 to 538)	1002 (763 to 1297)	129.97 (65.87 to 224.87)
23 24 <sup>Papua</sup> New 25 Guinea 26	116 (92 to 140)	285 (229 to 350)	145.64 (124.56 to 168.38)	13 (7 to 20)	25 (16 to 38)	95.85 (20.41 to 222.69)	661 (335 to 1140)	1258 (758 to 2034)	90.40 (5.88 to 270.52)
27 28 Paraguay 29 30	996 (853 to 1165)	1956 (1652 to 2324)	96.35 (82.38 to 111.71)	4 (4 to 5)	12 (8 to 16)	171.03 (73.55 to 302.03)	327 (263 to 404)	647 (481 to 831)	97.76 (55.83 to 147.82)
31 32 Peru 33	2566 (2121 to 3079)	5665 (4638 to 6822)	120.79 (105.66 to 138.38)	128 (74 to 194)	76 (54 to 105)	-40.28 (-66.32 to 19.96)	8234 (3972 to 13912)	3118 (2308 to 4194)	-62.13 (-79.74 to -11.96)
34 35 36 Philippines 37	2067 (1630 to 2519)	5073 (4044 to 6166)	145.40 (135.48 to 156.45)	98 (54 to 125)	117 (95 to 155)	19.59 (-15.39 to 149.06)	3743 (2419 to 4551)	4556 (3797 to 5981)	21.71 (-7.83 to 121.46)
38 39 40 Poland 41	177477 (149170 to 211629)	88307 (77909 to 99826)	-50.24 (-54.72 to -45.27)	180 (168 to 211)	361 (281 to 426)	99.98 (43.08 to 136.68)	30297 (21831 to 40254)	20081 (15602 to 25064)	-33.72 (-41.18 to -24.23)
42 43 44 <sup>Portugal</sup> 45	6035 (5365 to 6750)	9894 (8866 to 11003)	63.94 (50.98 to 79.42)	81 (72 to 90)	306 (158 to 363)	277.16 (96.34 to 355.45)	2425 (2073 to 2832)	5332 (3507 to 6256)	119.87 (37.89 to 153.53)
46 47 48 <sup>Puerto Rico</sup> 49	1123 (1058 to 1194)	1442 (1320 to 1565)	28.41 (21.63 to 35.32)	20 (15 to 22)	18 (13 to 28)	-9.54 (-38.39 to 73.14)	755 (589 to 869)	592 (456 to 801)	-21.63 (-40.46 to 23.39)
50 51 <sub>Qatar</sub> 52 53	154 (123 to 187)	1446 (1178 to 1746)	838.58 (770.76 to 916.51)	0 (0 to 1)	2 (1 to 3)	413.11 (169.07 to 853.64)	41 (29 to 57)	296 (205 to 412)	628.10 (423.39 to 857.49)
54 55 Republic of 56 Korea 57	17167 (15174 to 19498)	46956 (44197 to 49997)	173.52 (147.67 to 206.09)	313 (143 to 399)	234 (183 to 313)	-25.35 (-46.63 to 58.97)	9498 (6903 to 11454)	10451 (7829 to 13343)	10.04 (-17.52 to 63.35)
58 Republic of 59 <sub>Moldova</sub> 60	3098 (2561 to 3712)	3166 (2836 to 3521)	2.20 (-11.58 to 19.64)	17 (14 to 21)	18 (14 to 21)	4.75 (-16.20 to 31.59)	1046 (844 to 1266)	999 (820 to 1209)	-4.45 (-18.23 to

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1									
2 3 4 5 6 Romania 7	17947 (15104 to 21254)	17043 (15232 to 19020)	-5.04 (-15.24 to 7.37)	64 (55 to 76)	74 (59 to 93)	15.86 (-8.37 to 45.57)	5269 (4206 to 6540)	4364 (3404 to 5459)	13.21) -17.18 (-29.98 to -2.13)
8 9 Russian 10 Federation 11	167371 (141580 to 195591)	170565 (145182 to 199143)	1.91 (-0.13 to 4.04)	977 (726 to 1128)	1257 (1021 to 1464)	28.65 (6.46 to 62.61)	53401 (41640 to 64977)	56533 (46127 to 69324)	5.86 (-5.94 to 23.29)
12 13 14 Rwanda 15 16	288 (237 to 355)	726 (584 to 888)	152.30 (132.10 to 172.65)	34 (20 to 59)	42 (27 to 62)	21.96 (-36.82 to 143.44)	1761 (735 to 3717)	1838 (1153 to 3012)	4.34 (-55.16 to 173.20)
18 135 Saint Kitts and 18 Nevis 19 20	10 (8 to 12)	21 (17 to 26)	106.61 (90.32 to 126.13)	1 (1 to 1)	1 (1 to 1)	9.71 (-25.03 to 72.10)	25 (19 to 29)	28 (19 to 41)	14.61 (-24.18 to 78.38)
21 22 <sup>Saint Lucia</sup> 23	25 (21 to 31)	59 (48 to 72)	131.09 (113.96 to 149.59)	1 (1 to 1)	1 (1 to 2)	47.65 (10.86 to 116.72)	36 (29 to 41)	45 (36 to 56)	26.50 (-1.54 to 79.21)
24 <sub>Saint</sub> Vincent 25 26 and the 27 Grenadines	20 (16 to 24)	32 (26 to 39)	63.64 (48.19 to 80.82)	1 (1 to 1)	2 (1 to 2)	54.50 (13.27 to 112.91)	39 (32 to 45)	49 (40 to 62)	27.47 (-3.02 to 72.66)
28 29 <sub>Samoa</sub> 30 31	6 (5 to 8)	9 (7 to 10)	34.52 (23.82 to 45.98)	1 (1 to 1)	1 (1 to 1)	6.37 (-33.37 to 64.06)	31 (20 to 46)	30 (19 to 45)	-1.06 (-42.04 to 65.39)
32 33 <sub>San Marino</sub> 34 35	29 (25 to 35)	48 (41 to 57)	65.44 (55.11 to 76.39)	0 (0 to 0)	0 (0 to 0)	167.91 (65.76 to 328.84)	6 (4 to 8)	10 (8 to 14)	74.92 (47.44 to 111.54)
36 37 <sup>Sao</sup> Tome and 38 Principe 39	8 (6 to 10)	18 (15 to 23)	135.19 (118.79 to 152.91)	0 (0 to 1)	0 (0 to 1)	3.87 (-41.14 to 89.85)	15 (8 to 24)	16 (11 to 24)	4.71 (-42.23 to 108.14)
40 41Saudi Arabia 42 43	3748 (3112 to 4462)	13816 (11338 to 16751)	268.63 (237.42 to 301.72)	12 (7 to 20)	27 (18 to 38)	131.24 (9.23 to 337.69)	1012 (729 to 1405)	3181 (2284 to 4376)	214.41 (119.36 to 315.14)
44 45 Senegal 46 47	366 (298 to 449)	930 (756 to 1164)	153.93 (136.66 to 171.52)	23 (10 to 37)	37 (22 to 57)	61.95 (2.65 to 184.83)	1084 (420 to 1912)	1527 (911 to 2378)	40.90 (-20.02 to 185.33)
48 49 Serbia 50 51	12769 (10737 to 14873)	16638 (14322 to 19211)	30.30 (20.12 to 43.95)	49 (37 to 78)	113 (74 to 147)	128.93 (9.06 to 259.34)	3314 (2528 to 4479)	4741 (3595 to 5996)	43.04 (-2.81 to 78.90)
52 53 Seychelles 54 55	3 (2 to 4)	6 (5 to 8)	117.31 (99.80 to 136.88)	0 (0 to 0)	0 (0 to 0)	28.62 (-7.02 to 75.47)	5 (4 to 7)	7 (5 to 9)	31.52 (-0.75 to 71.15)
56 57 <sup>Sierra</sup> Leone 58	181 (149 to 220)	467 (379 to 582)	158.32 (138.65 to 178.83)	11 (4 to 19)	20 (10 to 32)	87.02 (3.04 to 331.6)	554 (164 to 1133)	981 (457 to 1656)	76.91 (-7.60 to 330.39)
59 <sub>Singapore</sub> 60	1615 (1305	3179 (2593	96.84 (78.98	4 (3 to 4)	5 (4 to 8)	39.94 (6.12	375 (279 to	612 (427 to	63.29 (34.14

1 2										
2 3 4 5	<u>011-i-</u>	to 1934) 9361 (8373	to 3962) 10674 (9737	to 116.81) 14.02 (8.30	31 (25 to	58 (41 to	to 150.34) 88.23 (-3.03	490) 2274 (1743	838) 2856 (2175	to 100.87) 25.60 (-5.11
6	Slovakia	to 10336)	to 11684)	to 20.14)	48)	76)	to 176.55)	to 2989)	to 3557)	to 53.77)
7 8	Slovenia	3775 (3318	4739 (4282	25.55 (17.98	10 (8 to 13)	18 (13 to	86.00 (28.56	781 (579 to	977 (726 to	25.10 (7.66
9	Sievenia	to 4289)	to 5219)	to 33.07)	10 (0 10 10)	25)	to 165.93)	1011)	1253)	to 43.50)
10	Solomon		17 (13 to	124.02			64.34 (-3.76	53 (24 to	86 (48 to	63.24 (-5.21
11 12	Islands	8 (6 to 9)	21)	(102.93 to	1 (1 to 2)	2 (1 to 3)	to 176.72)	101)	156)	to 190.03)
13				148.4)			100 57			
14 15	Somalia	237 (190 to	630 (502 to	165.38 (145.60 to	19 (7 to 40)	40 (21 to	109.57 (26.24 to	1021 (282 to	1986 (928 to	94.57 (2.46
16	Somana	293)	786)	187.38)	19 (7 10 40)	71)	263.84)	2543)	3988)	to 316.32)
17				122.12			200.01)			26.34
18 195	South Africa	2945 (2438	6542 (5423	(114.01 to	98 (69 to	166 (124 to	69.87 (20.49	4862 (3068	6143 (4966	(-18.56 to
20		to 3586)	to 7934)	131.25)	123)	196)	to 168.66)	to 7236)	to 7083)	117.23)
21 22		$240(202 t_{0})$	160 (292 to	<u>88 20 (72 80</u>		20/16 to	29.68	1159 (225 to	1215 (627 to	13.58
23 <sup>S</sup>	South Sudan	249 (202 to 307)	469 (383 to 576)	88.39 (73.80 to 103.53)	22 (9 to 43)	29 (16 to 61)	(-39.27 to	1158 (325 to 2801)	1315 (637 to 2625)	(-53.56 to
24 25		507)	576)	10 105.55)		01)	148.37)	2001)	2023)	178.43)
26		39276	77822	98.14 (91.73	278 (237 to	377 (303 to	35.79 (8.43	11347 (9316	17466	53.93 (36.17
27 28	Spain	(37463 to	(74030 to	to 104.75)	304)	600)	to 121.33)	to 13673)	(13535 to	to 79.47)
28 29		41127)	81685)	152.54			13.97		22106)	10.11
30	Sri Lanka	909 (734 to	2295 (2003	(124.22 to	19 (14 to	21 (15 to	(-25.92 to	813 (609 to	895 (684 to	(-20.92 to
31 32	Dir Zuinu	1119)	to 2637)	186.13)	24)	30)	74.18)	1032)	1147)	51.47)
33				180.28						, , , , , , , , , , , , , , , , , , , ,
34 35	Sudan	3315 (2684	9292 (7568	(157.81 to	21 (10 to	48 (28 to	123.91 (3.53	1310 (720 to	3003 (2102	129.31 (11.1
36		to 4060)	to 11371)	205.52)	44)	78)	to 380.84)	2866)	to 4130)	to 282.19)
37 38		79 (66 to	158 (129 to	98.73 (81.35			32.93 (-4.19	118 (85 to	138 (109 to	16.97
39	Suriname	96)	194)	to 117.62)	3 (2 to 3)	4 (3 to 5)	to 91.78)	146)	175)	(-14.68 to
40		·		,			$\mathbf{O}_{\mathbf{A}}$	,	,	66.50)
41 42	G 1	30612	40244	31.46 (23.94	107 (86 to	95 (77 to	-11.38	6158 (4631	7117 (5148	15.58 (4.65
43	Sweden	(26350 to 35136)	(34733 to 46000)	to 40.19)	119)	139)	(-27.36 to 46.41)	to 7936)	to 9548)	to 28.78)
44 45		55150)	14969				40.41)			
	Switzerland	10695 (9668	(13688 to	39.96 (33.88	73 (58 to	123 (97 to	69.01 (36.46	2817 (2268	3807 (2979	35.16 (21.15
47		to 11813)	16325)	to 46.34)	83)	160)	to 128.96)	to 3429)	to 4738)	to 56.09)
48 49	a · · ·	0040 (1010		116.26	00 (10	07 (26	57.25	1001 (7.11	1000 1100	51 50 <del>(5 5 1</del>
	Syrian Arab	2248 (1819	4862 (3940	(97.13 to	23 (13 to	37 (20 to	(-10.52 to	1091 (741 to	1653 (1195	51.58 (7.71
51 52	Republic	to 2734)	to 5871)	135.91)	35)	52)	184.61)	1432)	to 2195)	to 137.88)
53	Taiwan	2221 (1923	9064 (8139	308.12	101 (67 to	199 (152 to	97.46 (44.81	2623 (1919	4338 (3499	65.37 (31.64
54 ( 55	Province of	to 2557)	to 10153)	(279.81 to	113)	264)	to 288.02)	to 2947)	to 5416)	to 167.25)
56	China)			342.19)		•	11.10	•		0
57	Touilristor	2391 (1972	5519 (4623	130.78	21 (11 to	18 (13 to	-11.19	1691 (853 to	1646 (1219	-2.66
58 59	Tajikistan	to 2877)	to 6632)	(115.02 to 148.48)	34)	26)	(-54.29 to 82.80)	2831)	to 2185)	(-48.60 to 91.67)
60				1-10.10)			02.00)			21.07)

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3 4 5 Thailand 6	1734 (1327 to 2180)	3808 (3078 to 4630)	119.65 (96.59 to 151.17)	72 (52 to 95)	111 (80 to 149)	54.05 (-3.23 to 138.51)	2899 (2029 to 3946)	3272 (2453 to 4259)	12.87 (-26.29 to 71.96)
7 8 9 Timor-Leste 10	18 (14 to 23)	41 (33 to 50)	122.2 (104.08 to 146.48)	1 (1 to 3)	3 (2 to 5)	107.01 (24.75 to 246.34)	59 (29 to 102)	86 (48 to 138)	47.21 (-28.05 to 185.55)
11 12 13 14	190 (155 to 232)	514 (418 to 634)	170.07 (148.46 to 196.29)	9 (4 to 14)	21 (14 to 30)	142.31 (33.33 to 393.01)	457 (182 to 773)	940 (589 to 1321)	105.73 (15.73 to 366.27)
15 16 <sub>Tokelau</sub> 17 18	0 (0 to 0)	0 (0 to 0)	17.45 (9.66 to 26.52)	0 (0 to 0)	0 (0 to 0)	-38.14 (-61.51 to -1.52)	0 (0 to 1)	0 (0 to 0)	-39.66 (-63.93 to 8.06)
19 20 <sub>Tonga</sub> 21 22	4 (3 to 5)	4 (4 to 5)	14.32 (5.18 to 25.01)	1 (0 to 1)	1 (0 to 1)	0.57 (-36.36 to 55.61)	21 (14 to 30)	19 (13 to 27)	-11.27 (-43.54 to 36.78)
22 23Trinidad and 24 <sub>Tobago</sub> 25	275 (226 to 333)	476 (395 to 586)	73.31 (60.64 to 88.40)	3 (2 to 4)	5 (4 to 7)	67.08 (17.69 to 135.28)	143 (110 to 169)	215 (162 to 279)	49.93 (17.59 to 92.29)
26 27 Tunisia 28	2247 (1845 to 2720)	5382 (4413 to 6568)	139.49 (122.55 to 159.3)	7 (5 to 11)	16 (11 to 23)	124.51 (18.63 to 312.49)	569 (405 to 784)	1215 (890 to 1622)	113.58 (59.27 to 174.73)
29 30 31 <sup>Turkey</sup> 32	24930 (21910 to 28012)	93902 (80596 to 107925)	276.67 (231.04 to 325.07)	261 (159 to 401)	329 (250 to 471)	26.21 (-22.73 to 118.88)	13910 (9268 to 19352)	22488 (17253 to 28896)	61.67 (9.74 to 147.01)
33 34 35 <sup>Turkmenistan</sup> 36	1758 (1463 to 2085)	3806 (3155 to 4551)	116.48 (102.66 to 132.01)	10 (7 to 13)	14 (9 to 20)	45.23 (9.53 to 98.88)	765 (493 to 1049)	1120 (805 to 1438)	46.38 (13.41 to 91.33)
37 38 <sub>Tuvalu</sub> 39 40	0 (0 to 0)	0 (0 to 1)	27.01 (14.84 to 39.84)	0 (0 to 0)	0 (0 to 0)	-5.17 (-39.67 to 57.04)	3 (1 to 5)	2 (1 to 4)	-16.57 (-50.42 to 58.50)
41 42 <sub>Uganda</sub> 43 44	569 (462 to 701)	1697 (1381 to 2111)	198.27 (178.98 to 220.89)	48 (30 to 75)	102 (70 to 150)	114.15 (26.45 to 252.91)	2257 (1132 to 4612)	4600 (3084 to 7058)	103.84 (-2.52 to 318.38)
45 46 <sub>Ukraine</sub> 47 48	44470 (37197 to 53622)	42711 (36101 to 51042)	-3.95 (-10.23 to 3.42)	230 (174 to 306)	260 (210 to 315)	12.61 (-17.79 to 52.12)	13419 (10673 to 16857)	14197 (11469 to 17211)	5.80 (-13.37 to 26.77)
49 50 United Arab 51 Emirates 52	595 (477 to 725)	5742 (4546 to 7126)	864.58 (768.02 to 978.3)	1 (1 to 3)	13 (7 to 22)	939.61 (312.54 to 2260.01)	144 (93 to 219)	1401 (971 to 1965)	871.11 (531.13 to 1256.31)
53 United 54 55 Kingdom	150003 (132531 to 168508)	194529 (173985 to 215870)	29.68 (26.73 to 33.13)	856 (756 to 1056)	1793 (1533 to 1999)	109.50 (62.60 to 132.89)	37500 (30121 to 46024)	55171 (45323 to 66217)	47.12 (29.39 to 55.47)
56 57 United 58 Republic of 59 <sub>Tanzania</sub> 60	1121 (914 to 1369)	2891 (2330 to 3566)	157.88 (138.98 to 177.80)	86 (53 to 152)	181 (115 to 259)	111.26 (24.98 to 260.69)	4655 (2090 to 9955)	8565 (4988 to 14089)	83.97 (-7.81 to 290.41)

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<ul> <li>3</li> <li>4 United States</li> <li>5 of America</li> <li>6</li> </ul>	982982 (846833 to 1129783)	762890 (712357 to 813654)	-22.39 (-29.48 to -14.49)	2171 (1940 to 2662)	5910 (4622 to 6464)	172.17 (80.73 to 199.18)	186357 (137531 to 243644)	215289 (175991 to 256059)	15.53 (-1.97 to 33.87)
7 8 United States 9 <sub>Virgin</sub> Islands 10	32 (27 to 39)	47 (39 to 58)	46.61 (32.66 to 61.87)	1 (0 to 1)	1 (1 to 1)	11.78 (-24.49 to 72.41)	26 (19 to 32)	23 (18 to 29)	-9.33 (-33.27 to 25.88)
11 12 13 14	586 (485 to 711)	685 (564 to 830)	16.85 (7.20 to 26.83)	10 (9 to 14)	22 (19 to 26)	123.02 (68.94 to 165.97)	339 (290 to 426)	572 (496 to 648)	68.83 (35.57 to 94.94)
15 16 <sub>Uzbekistan</sub> 17 18	10505 (8847 to 12563)	23340 (19452 to 27952)	122.19 (107.43 to 140.58)	48 (31 to 59)	73 (58 to 93)	51.36 (12.53 to 153.54)	4299 (3006 to 5336)	6869 (5391 to 8500)	59.77 (27.87 to 109.54)
19 20 <sub>Vanuatu</sub> 21 22	4 (3 to 5)	9 (7 to 11)	115.45 (98.23 to 135.09)	1 (0 to 1)	2 (1 to 2)	77.85 (12.27 to 189.96)	33 (17 to 55)	57 (33 to 92)	71.58 (-1.00 to 187.82)
23 Venezuela 24 (Bolivarian 25 Republic of) 26	3817 (3268 to 4388)	8787 (7406 to 10382)	130.21 (113.08 to 147.54)	28 (19 to 32)	44 (31 to 59)	58.23 (11.55 to 165.19)	1676 (1316 to 1993)	2642 (2032 to 3372)	57.61 (25.64 to 101.69)
27 28 Viet Nam 29 30	4754 (3636 to 5967)	20278 (16050 to 25063)	326.50 (284.54 to 376.20)	221 (120 to 327)	177 (119 to 247)	-19.57 (-57.9 to 40.02)	6650 (4129 to 8928)	7419 (5510 to 9604)	11.56 (-26.71 to 73.67)
31 32 Yemen 33 34	1826 (1464 to 2237)	6284 (5044 to 7734)	244.20 (216.72 to 270.66)	14 (8 to 25)	44 (30 to 68)	217.58 (89.82 to 463.74)	772 (495 to 1411)	2423 (1790 to 3248)	213.69 (96.39 to 365.86)
35 36 Zambia 37	291 (236 to 350)	971 (790 to 1210)	233.83 (206.24 to 265.39)	35 (18 to 64)	55 (38 to 76)	57.07 (-21.84 to 226.50)	1941 (679 to 4527)	2548 (1621 to 3800)	31.27 (-46.88 to 283.23)
38 39 Zimbabwe 40	524 (430 to 644)	931 (757 to 1165)	77.84 (65.57 to 91.40)	22 (16 to 31)	43 (25 to 65)	98.08 (13.90 to 202.61)	1018 (652 to 1728)	1888 (1075 to 2968)	85.39 (11.43 to 204.97)
41 42	Abbrevia	tions: UI=u	incertainty ir	nterval.		3			

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Supplementary Table 5 Age-standardised prevalence, death and DALY rates for
inflammatory bower disease (IBD) by 204 countries or territories in 1990 and 2019,
and their temporal trends from 1990 to 2019

7	Age-stan	dardised prevale	ence rate	Age-s	tandardized dea	th rate	Age-sta	andardized DAL	Y rate		
8 9 Characteristics	per 100,000 population				100,000 popula	tion	per 1	per 100,000 population			
<sup>9</sup> Characteristics 10	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.		
11	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)		
12 13 <sub>Afghanistan</sub>	21.95 (17.75	23.69 (19.05	0.57 (0.40 to	0.44 (0.22 to	0.43 (0.26 to	0.01 (-0.06	15.26 (8.26	14.58 (9.58	0.03 (-0.06		
14	to 26.86)	to 29.24)	0.74)	0.78)	0.64)	to 0.08)	to 26.64)	to 20.47)	to 0.12)		
15	119.15	116.19	0.01 ( 0.06	1.65 (0.00 to	0.41 (0.27 to	5 17 ( 6 14	110.06	36.18 (25.65	-4.07 (-5.01		
16 17 <sup>Albania</sup>	(100.27 to	(97.53 to	0.01 (-0.06)	1.65 (0.90 to	0.41 (0.27 to	-5.17 (-6.14	(47.30 to				
18	140.7)	136.91)	to 0.09)	2.05)	0.61)	to -4.19)	143.55)	to 49.28)	to -3.12)		
19	34.69 (30.01	39.54 (32.16	0.68 (0.53 to	0.25 (0.17 to	0.17 (0.13 to	-1.14 (-1.23	11.17 (8.26	9.93 (7.45 to	-0.28 (-0.38		
20 <sup>Algeria</sup>	to 40.15)	to 48.88)	0.83)	0.37)	0.23)	to -1.04)	to 15.40)	12.97)	to -0.17)		
21 22 <sup>American</sup>	6.24 (5.14 to	6.14 (5.03 to	-0.22 (-0.35	1.54 (0.89 to	0.53 (0.37 to	-4.40 (-4.80	44.49 (26.51	15.67 (10.89	-4.23 (-4.59		
23 Samoa	7.41)	7.38)	to -0.09)	2.28)	0.90)	to -4.01)	to 63.51)	to 28.11)	to -3.86)		
24	108.82	112 21 (0/ 3	0.17 (0.11 to	0.70 (0.49 to	0.60 (0.41 to	0.02 ( 0.06	20.00 (22.66	20 68 (20 02	0.02 (-0.03		
25 26 <sup>Andorra</sup>	(91.32 to	112.31 (94.3	0.17 (0.11 to 0.22)	· ·	0.69 (0.41 to	0.03 (-0.06)	29.98 (22.66	29.68 (20.92 to 39.03)			
27	128.78)	to 132.64)	0.22)	1.00)	1.01)	to 0.13)	to 38.91)	to 39.03)	to 0.07)		
28	7.20 (5.93 to	8.85 (7.31 to	0.59 (0.48 to	0.73 (0.43 to	0.62 (0.45 to	-0.60 (-0.66	23.37 (11.91	18.19 (12.6	-0.89 (-0.95		
29 Angola 30	9.02)	10.88)	0.71)	1.16)	0.89)	to -0.54)	to 42.94)	to 26.15)	to -0.83)		
31 Antigua and	31.33 (26.25	31.79 (26.42	0.10 (0.04 to	0.95 (0.70 to	0.67 (0.53 to	-1.77 (-2.08	31.60 (24.03	22.35 (17.9	-1.66 (-1.90		
32 Barbuda	to 37.78)	to 38.6)	0.16)	1.12)	0.91)	to -1.46)	to 36.76)	to 28.99)	to -1.42)		
33 34 Argenting	15.07 (12.24	15.98 (13.09	0.21 (0.19 to	0.27 (0.24 to	0.27 (0.23 to	-0.10 (-0.25	9.25 (8.00 to	9.02 (7.72 to	-0.13 (-0.22		
34 Argentina 35	to 17.99)	to 19.42)	0.23)	0.30)	0.31)	to 0.04)	10.66)	10.63)	to -0.05)		
36	81.15 (67.51	86.67 (72.86	0.29 (0.26 to	0.25 (0.19 to	0.28 (0.21 to	0.72 (0.36 to	19.99 (15.55	20.5 (15.81	0.20 (0.05 to		
37 <sup>Armenia</sup>	to 95.76)	to 104.56)	0.32)	0.30)	0.34)	1.09)	to 25.21)	to 26.35)	0.36)		
38 39	98.73 (82.47	154.35	1.00 (0.72 to	0.54 (0.47 to	0.78 (0.56 to	2.23 (1.81 to	24.61 (19.22	35.58 (27.28	1.20 (0.98 to		
40 Australia	to 116.23)	(134.91 to	1.00 (0.72 to	0.34 (0.47 to	0.78 (0.36 to	2.23 (1.81 to	to 31.12)	to 45.33)	1.20 (0.98 to		
41	l0 110.23)	175.51)	1.27)	0.00)	0.91)	2.00)	10 31.12)	10 45.55)	1.41)		
42 43	277.06	291.88	0.19 (-0.09	0.97 (0.77 to	0.52 (0.43 to	-1.59 (-2.15	61.71 (48.41	54.31 (39.35	-0.39 (-0.65		
44 Austria	(243.01 to	(260.14 to	to 0.46)	1.13)	0.32 (0.43 to	-1.39 (-2.13 to -1.03)	to 77.45)	to 71.37)	-0.39 (-0.83 to -0.12)		
45	307.67)	327.43)	10 0.40)	1.13)	0.01)	10 -1.03)	10 //.45)	10 /1.37)	10 - 0.12		
46 47 Azerbaijan	76.23 (63.23	81.93 (68.62	0.35 (0.20 to	0.22 (0.16 to	0.16 (0.11 to	-1.09 (-1.19	17.65 (13.27	16.2 (11.65	-0.36 (-0.44		
47 Azerbaijan 48	to 90.47)	to 99.02)	0.49)	0.28)	0.23)	to -1.00)	to 23.02)	to 21.65)	to -0.27)		
49 Debaura	32.77 (27.60	28.72 (23.64	-0.27 (-0.39	0.59 (0.50 to	0.49 (0.39 to	-0.66 (-0.78	23.15 (19.78	19.04 (15.33	-0.72 (-0.81		
50	to 39.08)	to 35.44)	to -0.15)	0.68)	0.62)	to -0.53)	to 26.78)	to 23.86)	to -0.63)		
51 52 <sub>Bahrain</sub>	42.17 (36.27	44.05 (36.4	0.35 (0.18 to	0.26 (0.20 to	0.17 (0.13 to	-1.34 (-1.69	11.98 (9.36	10.05 (7.4 to	-0.53 (-0.63		
53	to 48.42)	to 53.11)	0.51)	0.33)	0.22)	to -0.99)	to 15.18)	13.28)	to -0.43)		
54 55 Bangladesh	17.19 (13.90	21.62 (17.31	0.65 (0.53 to	1.00 (0.64 to	0.56 (0.35 to	-2.14 (-2.39	31.40 (20.47	18.1 (12.11	-2.03 (-2.15		
55 Bangladesh	to 21.66)	to 27)	0.77)	1.64)	0.83)	to -1.89)	to 45.16)	to 25.27)	to -1.92)		
57 Barbados	70.62 (59.14	69.57 (58.9	0.04 (-0.02	0.42 (0.36 to	0.38 (0.30 to	-0.41 (-0.57	22.21 (18.13	20.02 (15.56	-0.42 (-0.48		
58	to 84.46)	to 83.59)	to 0.09)	0.48)	0.48)	to -0.25)	to 27.15)	to 25.32)	to -0.36)		
59 Belarus 60	82.25 (69.99	87.85 (73.61	0.38 (0.27 to	0.36 (0.26 to	0.38 (0.28 to	0.24 (0.09 to	22.33 (16.76	23.25 (17.89	0.17 (0.09 to		

2										
3 4		to 96.97)	to 104.11)	0.48)	0.48)	0.50)	0.39)	to 28.89)	to 29.87)	0.25)
5	D 1 '	83.42 (76.75	143.07	1.68 (1.42 to	0.76 (0.67 to	0.97 (0.76 to	0.24 (-0.90	25.98 (21.36	36.56 (28.88	0.82 (0.35 to
6 7	Belgium	to 90.48)	(123.44 to	1.94)	0.90)	1.12)	to 1.40)	to 31.07)	to 45.93)	1.28)
8		22 90 (19 99	164.68)	0.25 (0.25 +-	0.70 (0.49 +-	0 (1 (0 50 +-	1 14 ( 1 52	26 21 (10 11	21.00 (10.02	1 22 ( 1 40
9	Belize	22.80 (18.88	24.31 (20.10	0.35 (0.25 to	0.70 (0.48 to 0.90)	0.61 (0.50 to 0.80)	-1.14 (-1.52	26.21 (19.11	21.80 (18.03 to 27.26)	-1.22 (-1.49
10 11		to 28.09)	to 29.68)	0.45)	,	,	to -0.76)	to 32.42)	· · · · · · · · · · · · · · · · · · ·	to -0.95)
12	Benin	7.48 (6.20 to 9.10)	8.88 (7.27 to 10.87)	0.58 (0.47 to 0.69)	0.48 (0.26 to	0.45 (0.30 to 0.65)	-0.42 (-0.64	17.20 (8.03	15.67 (9.98	-0.50 (-0.70
13		9.10) 34.26 (28.75	34.27 (28.46	0.09) 0.17 (0.09 to	0.86) 0.89 (0.66 to	0.03) 0.36 (0.28 to	to -0.20) -3.73 (-4.07	to 28.30) 28.26 (22.38	to 22.61) 14.3 (11.3 to	to -0.30) -2.73 (-3.00
14 15	Bermuda	to 41.82)	to 40.73)	0.17 (0.09 to	1.08)	0.50 (0.28 to	-3.73 (-4.07 to -3.40)	to 33.89)	14.3 (11.3 to 18.41)	-2.73 (-3.00 to -2.46)
16		16.74 (13.31	22.23 (18.11	0.23) 1.24 (1.11 to	0.68 (0.35 to	0.55 (0.34 to	-0.84 (-0.97	21.23 (11.26	15.82 (10.39	-1.18 (-1.27
17	Bhutan	to 21.03)	to 27.62)	1.24 (1.11 to	1.53)	1.23)	-0.84 (-0.97 to -0.72)	to 43.14)	to 31.52)	to -1.10)
18 19	Bolivia	10 21.03)	10 27.02)	1.56)	1.55)	1.23)	10 -0.72)	10 43.14)	10 51.52)	10 -1.10)
	Plurinational	13.46 (11.31	13.54 (11.36	0.05 (0.00 to	0.50 (0.27 to	0.40 (0.30 to	-0.83 (-0.91	22.17 (10.30	12.73 (9.53	-2.04 (-2.15
21	State of)	to 16.36)	to 16.33)	0.10)	0.79)	0.52)	to -0.75)	to 41.41)	to 16.38)	to -1.94)
22	State Of	102.41	122.38							
23 24	Bosnia and	(88.37 to	(107.08 to	0.58 (0.55 to	0.46 (0.33 to	0.45 (0.23 to	-0.20 (-0.52	27.68 (21.43	29.74 (21.21	0.14 (-0.01
	Herzegovina	118.99)	140.67)	0.61)	0.58)	0.61)	to 0.12)	to 35.18)	to 38.84)	to 0.28)
26 27		8.58 (7.14 to	10.89 (8.88	0.60 (0.44 to	0.70 (0.48 to	0.64 (0.43 to	-0.77 (-1.15	20.94 (14.53	20.3 (13.14	-0.41 (-0.71
27	Botswana	10.52)	to 13.6)	0.76)	1.00)	0.89)	to -0.39)	to 29.34)	to 30.81)	to -0.11)
29		65.87 (57.91	47.78 (41.6	-0.87 (-1.09	0.48 (0.42 to	0.45 (0.41 to	0.01 (-0.16	23.70 (20.23	19.51 (16.72	-0.44 (-0.62
30 31	Brazil	to 74.92)	to 54.51)	to -0.65)	0.52)	0.52)	to 0.19)	to 27.67)	to 22.74)	to -0.27)
32	Brunei	53.76 (43.58	57.28 (46.33	0.25 (0.24 to	1.52 (1.08 to	1.48 (0.97 to	0.09 (-0.02	36.51 (27.84	32.76 (26.62	-0.25 (-0.33
33	Darussalam	to 66.16)	to 70.04)	0.27)	2.01)	1.89)	to 0.20)	to 47.59)	to 39.71)	to -0.18)
34 35		127.47	120.16							
35 36	Bulgaria	(108.71 to	(101.94 to	-0.16 (-0.29	0.26 (0.23 to	0.33 (0.25 to	1.13 (0.73 to	28.31 (21.41	27.62 (20.56	0.00 (-0.21
37		149.68)	142.65)	to -0.03)	0.31)	0.41)	1.54)	to 36.54)	to 35.57)	to 0.21)
38		6.79 (5.57 to	7.81 (6.46 to	0.59 (0.41 to	0.61 (0.37 to	0.67 (0.38 to	0.56 (0.28 to	21.41 (10.66	22.52 (12.05	0.38 (0.15 to
39 <u>1</u> 40	Burkina Faso	8.47)	9.56)	0.77)	0.89)	1.00)	0.85)	to 33.67)	to 34.80)	0.62)
41	יד ד	6.12 (5.03 to	6.13 (5.06 to	-0.09 (-0.19	0.69 (0.45 to	0.73 (0.46 to	0.15 (-0.07	22.15 (14.22	20.85 (13.56	-0.20 (-0.42
42	Burundi	7.50)	7.50)	to 0.01)	1.02)	1.16)	to 0.37)	to 36.56)	to 32.18)	to 0.03)
43 44	Cabo Verde	10.12 (8.33	12.18 (9.88	0.76 (0.65 to	0.33 (0.20 to	0.25 (0.19 to	-2.05 (-2.56	12.86 (8.37	8.69 (6.98 to	-2.12 (-2.50
45	Cabo verde	to 12.38)	to 14.93)	0.88)	0.46)	0.33)	to -1.54)	to 17.33)	10.77)	to -1.74)
46	Cambodia	3.02 (2.34 to	3.77 (3.01 to	0.65 (0.57 to	0.50 (0.27 to	0.35 (0.23 to	-1.44 (-1.54	14.51 (8.27	8.98 (6.42 to	-1.86 (-1.96
47 48	Calliboula	3.74)	4.61)	0.72)	0.71)	0.45)	to -1.34)	to 21.45)	11.33)	to -1.77)
49	Cameroon	8.34 (6.88 to	10.13 (8.33	0.79 (0.68 to	0.54 (0.29 to	0.38 (0.21 to	-1.69 (-1.94	18.12 (9.17	13.36 (7.77	-1.43 (-1.66
50	Cameroon	10.38)	to 12.46)	0.90)	0.88)	0.59)	to -1.43)	to 27.57)	to 21.03)	to -1.20)
51 52		382.53	357.73	0.13 (-0.03	0.87 (0.77 to	0.56 (0.46 to	-2.43 (-3.11	74.34 (56.49	64.91 (46.59	-0.31 (-0.41
53	Canada	(367.54 to	(323.05 to	to 0.28)	0.97)	0.82)	to -1.75)	to 95.45)	to 85.11)	to -0.21)
54		397.57)	393.88)		5.277	0.02)		10 <i>J</i> J. TJ <i>J</i>		.0 0.21)
55 56	entral African	6.56 (5.39 to	6.92 (5.75 to	0.16 (0.14 to	0.86 (0.55 to	0.86 (0.53 to	0.02 (-0.06	26.29 (16.24	25.47 (14.87	-0.07 (-0.13
57	Republic	8.20)	8.49)	0.18)	1.38)	1.36)	to 0.10)	to 42.90)	to 41.50)	to 0.00)
58	Chad	6.92 (5.73 to	8.10 (6.65 to	0.68 (0.57 to	0.58 (0.32 to	0.58 (0.39 to	-0.24 (-0.45	20.08 (9.86	19.16 (11.97	-0.36 (-0.55
59 60		8.53)	9.90)	0.80)	0.98)	0.84)	to -0.04)	to 32.61)	to 27.44)	to -0.16)
00										

ray	010170					pen				
1 2										
3	<i>c</i> t 11	30.30 (25.82	31.66 (27.25	0.29 (-0.09	0.46 (0.37 to	0.30 (0.26 to	-1.75 (-2.10	16.52 (13.59	11.96 (9.91	
4 5	Chile	to 35.36)	to 36.7)	to 0.67)	0.51)	0.38)	to -1.40)	to 19.03)	to 14.48)	
6	<i></i>	22.85 (18.98	47.06 (40.05	2.80 (2.41 to	0.86 (0.59 to	0.30 (0.24 to	-4.11 (-4.50	24.47 (17.88	13.1 (10.29	
7	China	to 27.15)	to 54.99)	3.19)	1.16)	0.35)	to -3.71)	to 30.19)	to 16.31)	
8 9	a 1 1 1	29.55 (24.81	29.36 (24.89	-0.04 (-0.07	0.28 (0.25 to	0.29 (0.22 to	0.75 (0.38 to	12.89 (10.91	12.53 (9.75	
10	Colombia	to 34.95)	to 34.88)	to -0.01)	0.31)	0.38)	1.12)	to 15.21)	to 15.57)	
11	G	7.33 (6.01 to	7.78 (6.38 to	0.36 (0.24 to	0.83 (0.43 to	0.75 (0.48 to	-0.51 (-0.67	23.44 (10.67	20.58 (13.10	
12 13	Comoros	9.00)	9.69)	0.48)	1.44)	1.19)	to -0.36)	to 39.49)	to 30.54)	
14	C	9.67 (7.93 to	10.38 (8.57	0.30 (0.16 to	0.79 (0.56 to	0.66 (0.47 to	-0.58 (-0.75	23.58 (16.35	18.36 (13.15	
15	Congo	11.87)	to 12.74)	0.45)	1.16)	0.93)	to -0.41)	to 34.61)	to 25.90)	
16	<b>1</b> - <b>T</b> - <b>1 d</b> -	6.37 (5.18 to	6.17 (5.09 to	-0.21 (-0.35	1.64 (1.17 to	0.81 (0.53 to	-2.70 (-2.90	50.74 (35.37	24.94 (15.58	
170	ook Islands	7.65)	7.51)	to -0.06)	2.20)	1.11)	to -2.50)	to 72.08)	to 36.18)	
19	C D	30.77 (25.88	31.40 (26.47	0.04 (0.03 to	0.14 (0.12 to	0.20 (0.14 to	1.04 (0.82 to	8.60 (6.81 to	10.14 (7.74	
	Costa Rica	to 36.60)	to 37.15)	0.05)	0.16)	0.26)	1.26)	10.81)	to 12.91)	
21 22c	ôte d'Ivoire	8.08 (6.58 to	8.70 (7.15 to	0.43 (0.34 to	0.46 (0.23 to	0.40 (0.26 to	-0.71 (-0.97	15.45 (7.59	13.59 (8.56	
23	de d'ivoire	9.97)	10.96)	0.52)	0.80)	0.58)	to -0.45)	to 24.88)	to 19.48)	
24		166.42	203.79	0.64 (0.57 to	0.28 (0.24 to	0.41 (0.30 to	1.79 (1.42 to	33.08 (24.90	41.30 (30.43	
25 26	Croatia	(155.48 to	(188.71 to	0.04 (0.37 to						
27		178.41)	220.14)	0.70)	0.42)	0.52)	2.17)	to 42.82)	to 53.17)	
28	Cuba	30.31 (25.30	29.25 (23.94	-0.01 (-0.07	0.35 (0.23 to	0.23 (0.18 to	-2.04 (-2.48	14.22 (10.70	10.45 (8.37	
29 30	Cuba	to 36.52)	to 35.26)	to 0.06)	0.42)	0.29)	to -1.60)	to 16.97)	to 12.94)	
31	Cyprus	42.09 (35.82	58.44 (53.02	0.98 (0.85 to	2.09 (1.24 to	1.00 (0.76 to	-3.13 (-3.45	36.43 (25.10	22.06 (17.95	
32	Cyprus	to 49.01)	to 63.85)	1.11)	3.02)	1.32)	to -2.81)	to 47.83)	to 26.41)	
33			152.02							

0.54 (0.49 to

0.63)

0.57 (0.33 to

0.82)

0.71 (0.50 to

1.02)

0.53 (0.48 to

0.62)

0.60 (0.37 to

1.07)

1.01 (0.79 to

1.23)

0.24 (0.19 to

0.31)

0.23 (0.18 to

0.31)

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0.56 (0.42 to

0.69)

0.41 (0.28 to

0.59)

0.57 (0.40 to

0.82)

0.59 (0.50 to

0.68)

0.54 (0.36 to

0.89)

0.76 (0.57 to

1.02)

0.24 (0.17 to

0.32)

0.23 (0.17 to

0.30)

0.80 (0.45 to

1.15)

-1.10 (-1.20

to -1.00)

-0.78 (-0.91

to -0.64)

0.01 (-0.61

to 0.63)

-0.56 (-0.67

to -0.45)

-1.20 (-1.28

to -1.12)

0.09 (-0.13

to 0.32)

0.55 (-0.03

to 1.13)

26.65 (21.98

to 32.43)

17.24 (9.70

to 27.63)

21.69 (14.31

to 32.28)

46.68 (35.05

to 59.60)

18.05 (10.87

to 32.37)

34.22 (27.47

to 41.24)

12.08 (9.46

to 15.94)

10.90 (8.22

to 13.94)

35.40 (27.15

to 44.74)

11.10 (8.17

to 14.58)

17.22 (12.20

to 24.09)

45.17 (34.12

to 58.06)

15.83 (10.31

to 24.84)

26 (20.19 to

34.33)

10.73 (7.96

to 13.99)

9.02 (6.84 to

11.09)

(139.69 to

164.49)

15.61 (12.96

to 18.71)

7.80 (6.41 to

9.73)

227.82

(208.42 to

250.75)

9.07 (7.45 to

11.07)

27.29 (22.61

to 33.47)

24.19 (19.90

to 29.50)

19.97 (17.98

to 22.11)

1.52 (1.33 to

1.71)

-0.13 (-0.21

to -0.06)

-0.45 (-0.71

to -0.20)

0.47 (0.29 to

0.65)

1.24 (1.04 to

1.45)

-0.12 (-0.18

to -0.07)

0.16 (0.01 to

0.32)

0.49 (0.39 to

0.59)

85.23 (71.89

to 102.44)

15.93 (13.23

to 19.03)

8.50 (6.93 to

10.44)

232.13

(210.74 to

255.89)

7.12 (5.93 to

8.73)

29.23 (24.60

to 35.45)

25.16 (20.80

to 30.54)

17.02 (15.04

to 19.21)

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Czechia

Democratic

People's

Korea

Democratic 43 44<sup>Republic of the</sup>

Congo

Denmark

Djibouti

Dominica

Dominican

Republic

Ecuador

40 Republic of

-1.10 (-1.28 to -0.91) -2.36 (-2.54 to -2.18) 0.36 (0.12 to 0.60) -0.63 (-0.84

to -0.41)

-0.82 (-0.99 to -0.66) -2.70 (-2.88 to -2.51) 0.58 (0.47 to 0.69) -0.63 (-0.86 to -0.40)

0.79 (0.65 to 0.93)

-1.38 (-1.64 to -1.12) -2.26 (-2.48

to -2.03)

0.98 (0.90 to

1.06)

-1.31 (-1.41

to -1.21)

-0.82 (-0.97

to -0.66)

0.13 (-0.02

to 0.29)

-0.67 (-0.82

to -0.53)

-1.17 (-1.27

to -1.07)

-0.27 (-0.50

to -0.04)

-0.33 (-0.74

to 0.08)

2										
3		39.84 (33.94	44.48 (36.34	0.26 (0.20 to	0.22 (0.13 to	0.21 (0.12 to	0.32 (0.07 to	11.25 (7.91	11.49 (8.21	0.19 (0.10 to
4 5	Egypt	to 46.00)	to 55.00)	0.32)	0.47)	0.35)	0.56)	to 16.51)	to 15.51)	0.27)
6		23.89 (19.87	24.71 (20.64	0.12 (0.05 to	0.36 (0.23 to	0.14 (0.11 to	-3.87 (-4.22	15.07 (11.16	7.25 (5.45 to	-2.87 (-3.18
7	El Salvador	to 28.45)	to 29.14)	0.19)	0.45)	0.20)	to -3.52)	to 18.78)	9.54)	to -2.56)
8 9	Equatorial	7.11 (5.84 to	10.89 (9.04	1.66 (1.48 to	0.76 (0.44 to	0.54 (0.33 to	-1.45 (-1.60	23.13 (13.07	14.77 (9.26	-1.89 (-2.04
9 10	Guinea	8.80)	to 13.36)	1.85)	1.28)	0.86)	to -1.30)	to 37.98)	to 22.66)	to -1.73)
11		6.35 (5.28 to	6.98 (5.79 to	0.26 (0.21 to	0.61 (0.39 to	0.77 (0.52 to	0.71 (0.52 to	20.05 (11.19	22.27 (15.26	0.34 (0.20 to
12	Eritrea	7.85)	8.43)	0.32)	0.96)	1.12)	0.89)	to 34.57)	to 32.30)	0.49)
13 14			103.71			,	,			
15	Estonia	71.59 (62.77	(90.72 to	1.12 (0.91 to	0.55 (0.46 to	0.34 (0.26 to	-2.35 (-2.68	28.55 (23.60	24.50 (18.49	-1.07 (-1.32
16		to 81.41)	118.15)	1.32)	0.61)	0.47)	to -2.02)	to 33.59)	to 31.62)	to -0.81)
17 10		8.30 (6.84 to	9.49 (7.76 to	0.49 (0.39 to	0.55 (0.33 to	0.60 (0.42 to	0.53 (0.14 to	17.33 (9.97	17.93 (12.43	0.38 (0.14 to
18 19	Eswatini	10.21)	11.68)	0.58)	0.83)	0.83)	0.91)	to 26.06)	to 25.37)	0.63)
20		5.88 (4.90 to	6.78 (5.64 to	0.53 (0.48 to	0.84 (0.59 to	0.72 (0.42 to	-0.67 (-0.82	26.74 (17.05	19.04 (11.93	-1.33 (-1.48
21	Ethiopia	7.15)	8.29)	0.59)	1.34)	1.07)	to -0.52)	to 45.16)	to 28.10)	to -1.18)
22 23		4.78 (3.90 to	4.70 (3.85 to	-0.12 (-0.34	0.35 (0.26 to	0.26 (0.19 to	-1.16 (-1.28	10.67 (8.31	8.17 (5.94 to	-1.08 (-1.21
24	Fiji	5.75)	5.71)	to 0.09)	0.45)	0.34)	to -1.03)	to 13.70)	10.77)	to -0.95)
25		162.00	286.76							
26 27	Finland	(150.44 to	(256.44 to	1.86 (1.78 to	0.47 (0.35 to	0.29 (0.25 to	-2.22 (-2.47	33.34 (25.19	47.57 (33.68	1.06 (0.98 to
27		173.8)	318.38)	1.94)	0.55)	0.34)	to -1.96)	to 43.04)	to 63.99)	1.14)
29		1,610)	136.71							
30	France	96.03 (87.62	(123.31 to	1.43 (1.34 to	1.08 (0.93 to	1.21 (0.73 to	0.74 (0.46 to	31.92 (26.78	39.44 (31.13	1.07 (0.94 to
31 32	1 141100	to 104.59)	151.14)	1.53)	1.20)	1.42)	1.02)	to 37.48)	to 48.47)	1.20)
33		9.49 (7.90 to	11.27 (9.27	0.53 (0.51 to	0.61 (0.41 to	0.53 (0.38 to	-0.49 (-0.70	18.69 (12.11	15.27 (10.62	-0.71 (-0.88
34	Gabon	11.62)	to 13.92)	0.56)	0.96)	0.76)	to -0.28)	to 28.60)	to 21.51)	to -0.54)
35 36		8.70 (7.11 to	8.81 (7.23 to	-0.10 (-0.21	0.58 (0.34 to	0.44 (0.29 to	-1.52 (-1.81	19.12 (10.73	14.25 (9.59	-1.56 (-1.85
37	Gambia	10.56)	10.96)	to 0.01)	0.92)	0.60)	to -1.24)	to 31.19)	to 19.10)	to -1.28)
38		84.45 (71.53	87.97 (73.75		0.29 (0.18 to	0.29 (0.19 to	0.18 (-1.12	20.37 (15.24	20.25 (15.35	0.02 (-0.38
39	Georgia	to 99.72)	to 104.83)	0.22)	0.39)	0.37)	to 1.50)	to 26.41)	to 26.28)	to 0.41)
40 41		104.26	214.93	0.22)	0.07)	0.57)	101.50)	10 20.11)	10 20.20)	10 0.11)
42	Germany	(89.74 to	(188.62 to	1.09 (0.54 to	0.96 (0.79 to	1.94 (1.46 to	3.73 (3.26 to	35.51 (28.44	64.06 (51.49	1.80 (1.57 to
43	Germany	121.91)	243.64)	1.64)	1.60)	2.20)	4.20)	to 47.28)	to 77.71)	2.02)
44 45		10.54 (8.69	12.26 (10.11	0.73 (0.63 to	0.70 (0.35 to	0.55 (0.31 to	-0.97 (-1.23	24.11 (11.81	18.5 (10.85	-1.02 (-1.27
46	Ghana	to 12.71)	to 14.88)	0.83)	1.24)	0.82)	to -0.70)	to 39.44)	to 26.95)	to -0.77)
47		97.92 (82.43	78.66 (70.88	-0.98 (-1.20	0.26 (0.22 to	0.02) 0.23 (0.19 to	-0.36 (-0.92	19.2 (14.17	15.88 (11.92	-0.78 (-0.85
48	Greece	to 113.83)	to 87.04)	to -0.75)	0.20 (0.22 to	0.23 (0.17 to	to 0.20)	to 25.49)	to 20.55)	to -0.71)
49 50		144.67	163.39	10 -0.75)	0.50)	0.27)	10 0.20)	10 23.49)	10 20.55)	10 -0.71)
51	Greenland	(122.01 to	(138.74 to	0.34 (0.27 to	0.57 (0.45 to	0.74 (0.38 to	1.07 (0.80 to	34.12 (26.01	38.3 (28.36	0.36 (0.24 to
52	Oreemanu	170.01)	188.49)	0.40)	0.71)	0.96)	1.34)	to 44.17)	to 50.15)	0.47)
53 54				0.02 ( 0.05	1.24(1.06 to	1.24(1.02 to	055(069	11 27 (26 59	20 12 (22 50	064(072
55	Grenada	24.13 (19.74	24.31 (20.03	0.03 (-0.05	1.34 (1.06 to	1.24 (1.03 to	-0.55 (-0.68	44.27 (36.58	38.43 (32.58	-0.64 (-0.73
56		to 29.02)	to 30.13)	to 0.12)	1.62)	1.52)	to -0.41)	to 52.74)	to 46.61)	to -0.56)
57	Guam	6.83 (5.65 to	6.54 (5.35 to	-0.18 (-0.35	0.33 (0.26 to	0.16 (0.12 to	-3.00(-3.55)	9.01 (7.19 to	5.39 (4.11 to	-2.12 (-2.65
58 59		8.11)	7.82)	to -0.01)	0.42)	0.23)	to -2.45)	11.32)	7.68)	to -1.59)
60	Guatemala	21.60 (18.10	23.54 (19.84	0.29 (0.25 to	0.25 (0.18 to	0.29 (0.22 to	1.32 (0.72 to	11.81 (8.36	11.99 (9.52	0.71 (0.18 to

1										
2 3		to 26.13)	to 28.11)	0.32)	0.38)	0.37)	1.92)	to 18.2)	to 14.91)	1.24)
4		7.53 (6.18 to	8.61 (7.06 to	0.61 (0.49 to	0.43 (0.18 to	0.40 (0.21 to	-0.36 (-0.50	16.9 (6.31 to	14.41 (7.36	-0.58 (-0.70
5 6	Guinea	9.35)	10.53)	0.74)	0.86)	0.60)	to -0.22)	29.14)	to 21.95)	to -0.47)
7		7.32 (5.99 to	8.43 (6.92 to	0.63 (0.50 to	0.75 (0.36 to	0.61 (0.4 to	-0.81 (-0.93	26.39 (11.34	20.54 (12.76	-0.94 (-1.07
	uinea-Bissau	9.06)	10.32)	0.76)	1.18)	0.85)	to -0.68)	to 44.49)	to 28.9)	to -0.80)
9 10		23.56 (19.43	22.95 (18.93	0.06 (-0.03	1.19 (0.97 to	1.02 (0.76 to	-0.53 (-0.70	40.69 (32.87	35.43 (26.51	-0.46 (-0.59
11	Guyana	to 28.53)	to 28.26)	to 0.15)	1.41)	1.33)	to -0.35)	to 48.37)	to 46.07)	to -0.32)
12		20.11 (16.54	19.43 (16.14	0.07 (-0.03	1.41 (0.74 to	1.08 (0.61 to	-0.77 (-0.89	52.02 (22.41	36.86 (19.94	-0.94 (-1.12
13 14	Haiti	to 24.88)	to 24.31)	to 0.17)	2.12)	1.59)	to -0.65)	to 92.43)	to 54.22)	to -0.77)
15		22.83 (18.97	23.93 (19.84	0.18 (0.14 to	0.72 (0.46 to	0.83 (0.51 to	0.87 (0.73 to	28.54 (19.06	24.37 (15.88	-0.38 (-0.43
10	Honduras	to 27.11)	to 28.49)	0.23)	0.99)	1.15)	1.02)	to 38.67)	to 32.67)	to -0.32)
17 18		199.20	332.82		0 (1 (0 50 )	0.54 (0.45)	0.60 ( 1.04	10.00 (00.01		1.15 (0.05)
19	Hungary	(181.71 to	(309.79 to	2.13 (1.78 to	0.64 (0.58 to	0.56 (0.45 to	-0.62 (-1.04	48.33 (38.31	64.34 (47.69	1.15 (0.85 to
20		219.68)	356.72)	2.48)	0.82)	0.71)	to -0.20)	to 59.55)	to 82.55)	1.46)
21 22		136.42	210.18	0.04 (0.50 )	0 (7 (0 57 )	0.65 (0.51.)	0.14 ( 0.01	22.40 (26.24	40.00 (01.00	0.47 (0.22)
23	Iceland	(115.41 to	(180.43 to	0.84 (0.59 to	0.67 (0.57 to	0.65 (0.51 to	0.14 (-0.01	33.49 (26.34	42.38 (31.83	0.47 (0.33 to
24		161.21)	243.51)	1.09)	0.78)	0.75)	to 0.29)	to 42.36)	to 54.83)	0.62)
25 26	India	20.68 (16.76	20.34 (16.57	0.18 (-0.03	0.63 (0.43 to	0.40 (0.29 to	-1.93 (-2.11	20.11 (13.58	13.04 (9.44	-1.73 (-1.86
27	mula	to 25.67)	to 24.97)	to 0.38)	0.91)	0.53)	to -1.74)	to 26.72)	to 16.5)	to -1.61)
28	Indonesia	3.37 (2.70 to	4.16 (3.37 to	0.74 (0.60 to	0.77 (0.37 to	0.55 (0.33 to	-1.42 (-1.56	19.48 (11.70	11.66 (8.16	-2.04 (-2.17
29 30	Indonesia	4.07)	5.00)	0.88)	1.04)	0.70)	to -1.29)	to 24.6)	to 14.98)	to -1.91)
31 <sup>I1</sup>	ran (Islamic	41.07 (33.51	44.80 (36.70	0.29 (0.02 to	0.22 (0.12 to	0.19 (0.08 to	-0.11 (-0.64	11.09 (8.34	11.03 (7.60	0.12 (-0.02
	Republic of)	to 50.84)	to 55.07)	0.57)	0.34)	0.24)	to 0.42)	to 14.22)	to 14.22)	to 0.25)
33 34	Iraq	19.71 (16.52	28.11 (23.22	1.43 (1.27 to	0.29 (0.20 to	0.19 (0.15 to	-1.58 (-1.76	13.75 (9.61	10.42 (8.08	-0.96 (-1.14
35	naq	to 23.39)	to 34.20)	1.59)	0.42)	0.27)	to -1.39)	to 19.18)	to 13.32)	to -0.78)
36	Ireland	90.59 (75.89	97.87 (84.83	0.42 (0.35 to	0.87 (0.76 to	0.66 (0.53 to	-1.61 (-2.56	29.44 (24.40	25.50 (20.1	-0.80 (-1.30
37 38	netand	to 107.72)	to 112.53)	0.49)	0.96)	0.84)	to -0.66)	to 35.63)	to 32.09)	to -0.30)
39	Israel	70.49 (59.79	70.21 (62.42	-0.08 (-0.20	0.47 (0.41 to	0.38 (0.32 to	-1.01 (-1.36	21.15 (17.17	18.50 (14.69	-0.65 (-0.76
40	101001	to 83.85)	to 78.72)	to 0.05)	0.53)	0.51)	to -0.66)	to 26.12)	to 23.20)	to -0.54)
41		261.58	227.51	-0.24 (-0.43	0.44 (0.39 to	0.76 (0.55 to	2.55 (2.03 to	49.44 (36.73	46.95 (35.41	0.17 (0.00 to
42 43	Italy	(226.94 to	(200.83 to	to -0.05)	0.70)	0.85)	3.06)	to 63.71)	to 59.78)	0.34)
44		297.14)	254.27)						,	
45	Jamaica	29.63 (24.88	29.42 (24.46	0.15 (0.05 to	0.30 (0.23 to	0.24 (0.17 to	-1.45 (-1.78	14.86 (11.53	11.50 (8.84	-1.28 (-1.50
46 47		to 35.60)	to 35.27)	0.25)	0.35)	0.33)	to -1.12)	to 17.70)	to 14.50)	to -1.06)
48		151.17	291.90	1.48 (1.08 to	0.25 (0.18 to	0.11 (0.09 to	-2.39 (-2.83	27.14 (19.46	46.58 (31.41	1.21 (0.88 to
49	Japan	(125.74 to	(251.75 to	1.88)	0.27)	0.16)	to -1.95)	to 36.26)	to 63.54)	1.54)
50 51		179.69)	336.57)							
52		69.20 (60.07	113.51	2.51 (2.23 to	0.43 (0.30 to	0.23 (0.18 to	-2.62 (-2.98	20.68 (15.47	22.01 (16.06	0.46 (0.34 to
53	Jordan	to 79.85)	(95.78 to	2.79)	0.59)	0.30)	to -2.26)	to 26.15)	to 29.65)	0.58)
54 55		00.02 (67.16	133.87)	0.10 (0.05)	0.57 (0.41 )	0.46 (0.27)	1.04 ( 1.40	20.22 (24.04	04 07 (01 70	0.74 ( 1.02
56 I	Kazakhstan	80.02 (67.16	81.77 (68.13	0.12 (0.06 to	0.57 (0.41 to	0.46 (0.37 to	-1.26 (-1.68	30.23 (24.06	26.97 (21.78	-0.74 (-1.02
57		to 96.26)	to 97.46)	0.18)	0.72)	0.56)	to -0.85)	to 37.42)	to 33.61)	to -0.45)
58 59	Kenya	6.80 (5.68 to	8.33 (6.99 to	0.31 (0.19 to	0.81 (0.43 to	0.84 (0.50 to	0.31 (0.22 to	21.25 (13.20	21.31 (13.76	0.26 (0.16 to
60		8.23)	10.12)	0.42)	1.44)	1.26)	0.40)	to 36.93)	to 30.78)	0.36)

2									
3	4.05 (3.25 to	3.55 (2.90 to	-0.69 (-0.88	1.81 (0.99 to	1.08 (0.68 to	-2.13 (-2.29	53.42 (24.47	31.83 (17.58	-2.07 (-2.20
4 Kiribati 5	4.96)	4.32)	to -0.51)	2.71)	1.67)	to -1.98)	to 92.59)	to 55.40)	to -1.93)
6	55.67 (51.70	54.34 (45.07	0.09 (-0.06	0.19 (0.14 to	0.15 (0.12 to	-0.66 (-1.06	13.39 (10.47	11.73 (8.74	-0.33 (-0.50
7 <sup>Kuwait</sup>	to 60.02)	to 65.64)	to 0.25)	0.22)	0.20)	to -0.25)	to 16.77)	to 15.53)	to -0.15)
8 9 <sub>Kyrgyzstan</sub>	73.48 (61.75	73.31 (61.61	-0.03 (-0.10	0.42 (0.29 to	0.19 (0.16 to	-3.52 (-3.86	28 (21.04 to	17.37 (13.34	-2.11 (-2.28
9 <sub>Kyrgyzstan</sub> 10	to 87.12)	to 87.09)	to 0.04)	0.50)	0.25)	to -3.19)	34.06)	to 22.37)	to -1.94)
11 <sub>Lao</sub> People's	2.98 (2.32 to	3.67 (2.95 to	0.79 (0.74 to	0.45 (0.22 to	0.26 (0.14 to	-2.40 (-2.60	13.04 (6.62	6.97 (4.13 to	-2.47 (-2.65
12 13 Democratic	3.69)	4.55)	0.79 (0.74 to	0.43 (0.22 to	0.20 (0.14 to	-2.40 (-2.00 to -2.19)	to 19.19)	11.24)	-2.47 (-2.03 to -2.30)
14 Republic	5.09)	4.55)	0.85)	0.72)	0.41)	10 -2.19)	10 19.19)	11.24)	10 -2.30)
15	103.47	123.78	0.42 (0.33 to	0.34 (0.29 to	0.37 (0.30 to	0.22 (-0.08	25.74 (20.10	28.66 (21.84	0.14 (-0.02
16 <sub>Latvia</sub> 17	(89.32 to	(108.48 to	0.42 (0.55 to	0.42)	0.48)	to 0.51)	to 32.35)	to 36.61)	to 0.29)
18	119.13)	139.23)	0.50)	0.42)	0.40)	10 0.51)	(0.52.55)	10 50.01)	10 0.27)
19 20 Lebanon	33.16 (27.13	46.20 (37.84	1.23 (1.00 to	0.14 (0.10 to	0.15 (0.08 to	0.32 (0.10 to	8.48 (6.32 to	10.18 (7.34	0.79 (0.65 to
20 <sup>Lebanon</sup> 21	to 41.07)	to 56.68)	1.47)	0.21)	0.23)	0.55)	11.24)	to 13.75)	0.93)
22 Lesotho	7.67 (6.36 to	8.77 (7.23 to	0.48 (0.40 to	0.55 (0.36 to	0.69 (0.48 to	1.08 (0.85 to	16.56 (10.77	20.29 (13.61	1.06 (0.87 to
23	9.34)	10.83)	0.57)	0.8)	0.98)	1.31)	to 23.28)	to 29.06)	1.26)
24 25 Liberia	7.84 (6.42 to	8.46 (6.99 to	0.57 (0.33 to	0.52 (0.23 to	0.42 (0.26 to	-0.84 (-1.09	19.69 (7.54	13.96 (8.48	-1.16 (-1.44
26	9.75)	10.34)	0.80)	0.92)	0.62)	to -0.60)	to 32.92)	to 21.59)	to -0.88)
27 <sub>Libva</sub>	23.56 (19.39	25.77 (21.21	0.56 (0.29 to	0.21 (0.13 to	0.22 (0.15 to	0.11 (-0.02	8.88 (6.41 to	9.05 (6.69 to	0.21 (0.11 to
28 29	to 28.73)	to 31.41)	0.84)	0.37)	0.31)	to 0.24)	12.85)	11.82)	0.31)
30	109.21 (95.7	133.41	0.84 (0.76 to	0.32 (0.24 to	0.33 (0.26 to	0.13 (-0.20	25.36 (19.61	28.75 (21.98	0.49 (0.33 to
T '/1 '		(100.04)							
31 <sup>Lithuania</sup>	to 123.65)	(123.84 to	0.92)	0.37)	0.42)	to 0.47)	to 31.92)	to 36.27)	0.65)
32	to 123.65)	142.65)	0.92)	0.37)	0.42)	to 0.47)	to 31.92)	to 36.27)	0.65)
32 33 34	166.34	142.65) 187.63	0.92) 0.37 (0.22 to	0.37) 0.96 (0.84 to	0.42) 0.97 (0.72 to	to 0.47) 0.55 (0.30 to	to 31.92) 42.53 (33.57	to 36.27) 43.90 (33.95	0.65) 0.27 (0.15 to
32 33 34 35 <sup>Luxembourg</sup>	166.34 (145.24 to	142.65) 187.63 (163.86 to			4.				
32 33 34 35 <sup>Luxembourg</sup> 36	166.34 (145.24 to 189.85)	142.65) 187.63 (163.86 to 213.76)	0.37 (0.22 to 0.53)	0.96 (0.84 to 1.10)	0.97 (0.72 to 1.16)	0.55 (0.30 to 0.80)	42.53 (33.57 to 52.29)	43.90 (33.95 to 55.68)	0.27 (0.15 to 0.38)
32 33 34 35 <sup>Luxembourg</sup>	166.34 (145.24 to 189.85) 6.62 (5.44 to	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to	0.37 (0.22 to 0.53) 0.38 (0.29 to	0.96 (0.84 to 1.10) 0.53 (0.32 to	0.97 (0.72 to 1.16) 0.59 (0.40 to	0.55 (0.30 to 0.80) 0.45 (0.34 to	42.53 (33.57 to 52.29) 17.91 (8.95	43.90 (33.95 to 55.68) 16.98 (11.97	0.27 (0.15 to 0.38) -0.03 (-0.18
32 33 34 35 Luxembourg 36 37 38 Madagascar 39	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22)	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13)
32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 Malawi	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02
32 33 34 35 <sup>Luxembourg</sup> 36 37 38 Madagascar 39	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05)	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69)
32 33 34 35 <sup>Luxembourg</sup> 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73
32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05)	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35)
32 33 34 35 <sup>Luxembourg</sup> 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56) 4.94 (3.96 to	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68
32 32 33 34 35 20 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98)	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56) 4.94 (3.96 to 5.96)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32)
32 32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47 48 Mala	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56) 4.94 (3.96 to 5.96) 8.08 (6.68 to	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80
32 32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 41 42 43 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47 40	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to 8.93)	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56) 4.94 (3.96 to 5.96) 8.08 (6.68 to 9.79)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48)
32 32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47 48 Mali 49 50 51 Malta	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to 8.93) 66.69 (57.4	142.65) 187.63 (163.86 to) 213.76) 7.25 (5.99 to) 9.04) 6.33 (5.28 to) 7.8) 6.56 (5.71 to) 7.56) 4.94 (3.96 to) 5.96) 8.08 (6.68 to) 9.79) 72.00 (63.55)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79) 0.11 (0.05 to	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89) 0.54 (0.48 to	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71) 0.62 (0.48 to	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10) 0.78 (0.57 to	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36) 20.61 (16.77	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83) 22.28 (18.12	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48) 0.40 (0.30 to
32 32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47 48 Mali 49 50 51 Malta 52	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to 8.93) 66.69 (57.4 to 76.82)	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56) 4.94 (3.96 to 5.96) 8.08 (6.68 to 9.79) 72.00 (63.55 to 81.87)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79) 0.11 (0.05 to 0.17)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89) 0.54 (0.48 to 0.62)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71) 0.62 (0.48 to 0.74)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10) 0.78 (0.57 to 0.99)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36) 20.61 (16.77 to 24.94)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83) 22.28 (18.12 to 27.35)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48) 0.40 (0.30 to 0.50)
32 33 34 35 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 43 44 45 46 41 42 43 Malaysia 44 45 46 40 50 51 Malta 52 53 Marshall	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to 8.93) 66.69 (57.4 to 76.82) 4.22 (3.40 to	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56) 4.94 (3.96 to 5.96) 8.08 (6.68 to 9.79) 72.00 (63.55 to 81.87) 4.10 (3.35 to	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79) 0.11 (0.05 to 0.17) -0.25 (-0.43	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89) 0.54 (0.48 to 0.62) 1.32 (0.84 to	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71) 0.62 (0.48 to 0.74) 0.83 (0.50 to	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10) 0.78 (0.57 to 0.99) -1.90 (-2.04	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36) 20.61 (16.77 to 24.94) 38.63 (23.47	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83) 22.28 (18.12 to 27.35) 24.94 (14.63	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48) 0.40 (0.30 to 0.50) -1.80 (-1.93
32 33 34 35 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47 48 Mali 49 50 51 Malta 52 53 Marshall 54 Islands 55	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to 8.93) 66.69 (57.4 to 76.82)	142.65) 187.63 (163.86 to 213.76) 7.25 (5.99 to 9.04) 6.33 (5.28 to 7.8) 6.56 (5.71 to 7.56) 4.94 (3.96 to 5.96) 8.08 (6.68 to 9.79) 72.00 (63.55 to 81.87)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79) 0.11 (0.05 to 0.17)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89) 0.54 (0.48 to 0.62)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71) 0.62 (0.48 to 0.74)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10) 0.78 (0.57 to 0.99)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36) 20.61 (16.77 to 24.94)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83) 22.28 (18.12 to 27.35)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48) 0.40 (0.30 to 0.50) -1.80 (-1.93 to -1.68)
32 32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47 48 Mali 49 50 51 Malta 52 53 Marshall 54 Islands 55 56 Mauritania	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to 8.93) 66.69 (57.4 to 76.82) 4.22 (3.40 to 5.11) 8.95 (7.32 to	142.65) 187.63 (163.86 to) 213.76) 7.25 (5.99 to) 9.04) 6.33 (5.28 to) 7.8) 6.56 (5.71 to) 7.56) 4.94 (3.96 to) 5.96) 8.08 (6.68 to) 9.79) 72.00 (63.55) to $81.87)$ 4.10 (3.35 to) 4.93) 11.87 (9.73)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79) 0.11 (0.05 to 0.17) -0.25 (-0.43 to -0.08)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89) 0.54 (0.48 to 0.62) 1.32 (0.84 to 1.88) 0.68 (0.41 to	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71) 0.62 (0.48 to 0.74) 0.83 (0.50 to 1.31) 0.41 (0.28 to	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10) 0.78 (0.57 to 0.99) -1.90 (-2.04 to -1.76)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36) 20.61 (16.77 to 24.94) 38.63 (23.47 to 58.16)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83) 22.28 (18.12 to 27.35) 24.94 (14.63 to 40.72)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48) 0.40 (0.30 to 0.50) -1.80 (-1.93 to -1.68) -1.97 (-2.14
32 32 33 34 35 Luxembourg 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 46 Maldives 47 48 Mali 49 50 51 Malta 52 53 Marshall 54 Islands 55 56 Mauritania 57 58	166.34 (145.24 to 189.85) 6.62 (5.44 to 8.22) 5.73 (4.70 to 7.05) 4.33 (3.64 to 5.05) 4.10 (3.25 to 4.98) 7.19 (5.85 to 8.93) 66.69 (57.4 to 76.82) 4.22 (3.40 to 5.11)	142.65) 187.63 (163.86 to) 213.76) 7.25 (5.99 to) 9.04) 6.33 (5.28 to) 7.8) 6.56 (5.71 to) 7.56) 4.94 (3.96 to) 5.96) 8.08 (6.68 to) 9.79) 72.00 (63.55) to 81.87) 4.10 (3.35 to) 4.93)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79) 0.11 (0.05 to 0.17) -0.25 (-0.43 to -0.08) 0.85 (0.70 to	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89) 0.54 (0.48 to 0.62) 1.32 (0.84 to 1.88)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71) 0.62 (0.48 to 0.74) 0.83 (0.50 to 1.31)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10) 0.78 (0.57 to 0.99) -1.90 (-2.04 to -1.76) -2.01 (-2.18	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36) 20.61 (16.77 to 24.94) 38.63 (23.47 to 58.16) 22.06 (12.99	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83) 22.28 (18.12 to 27.35) 24.94 (14.63 to 40.72) 13.42 (9.08	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48) 0.40 (0.30 to 0.50) -1.80 (-1.93 to -1.68) -1.97 (-2.14 to -1.80)
32 33 34 35 36 37 38 Madagascar 39 40 Malawi 41 42 43 Malaysia 44 45 Maldives 46 Maldives 47 48 Mali 49 50 51 Malta 50 51 Malta 52 53 Marshall 54 Islands 55 56 Mauritania 57	166.34 $(145.24 to)$ $189.85)$ $6.62 (5.44 to)$ $8.22)$ $5.73 (4.70 to)$ $7.05)$ $4.33 (3.64 to)$ $5.05)$ $4.10 (3.25 to)$ $4.98)$ $7.19 (5.85 to)$ $8.93)$ $66.69 (57.4)$ $to 76.82)$ $4.22 (3.40 to)$ $5.11)$ $8.95 (7.32 to)$ $10.94)$	142.65) 187.63 (163.86 to) 213.76) 7.25 (5.99 to) 9.04) 6.33 (5.28 to) 7.8) 6.56 (5.71 to) 7.56) 4.94 (3.96 to) 5.96) 8.08 (6.68 to) 9.79) 72.00 (63.55) to 81.87) 4.10 (3.35 to) 4.93) 11.87 (9.73) to 14.62)	0.37 (0.22 to 0.53) 0.38 (0.29 to 0.48) 0.44 (0.40 to 0.48) 1.38 (1.19 to 1.57) 0.74 (0.68 to 0.80) 0.63 (0.48 to 0.79) 0.11 (0.05 to 0.17) -0.25 (-0.43 to -0.08) 0.85 (0.70 to 0.99)	0.96 (0.84 to 1.10) 0.53 (0.32 to 0.88) 0.71 (0.49 to 1.02) 0.18 (0.14 to 0.22) 0.53 (0.32 to 0.81) 0.49 (0.20 to 0.89) 0.54 (0.48 to 0.62) 1.32 (0.84 to 1.88) 0.68 (0.41 to 0.99)	0.97 (0.72 to 1.16) 0.59 (0.40 to 0.88) 0.67 (0.46 to 0.97) 0.17 (0.12 to 0.23) 0.30 (0.23 to 0.40) 0.47 (0.26 to 0.71) 0.62 (0.48 to 0.74) 0.83 (0.50 to 1.31) 0.41 (0.28 to 0.57)	0.55 (0.30 to 0.80) 0.45 (0.34 to 0.56) -0.26 (-0.39 to -0.12) -0.75 (-1.06 to -0.43) -2.37 (-2.52 to -2.22) -0.28 (-0.46 to -0.10) 0.78 (0.57 to 0.99) -1.90 (-2.04 to -1.76) -2.01 (-2.18 to -1.84)	42.53 (33.57 to 52.29) 17.91 (8.95 to 28.15) 24.10 (13.49 to 42.83) 5.01 (4.15 to 6.10) 13.21 (8.16 to 20.38) 19.25 (6.81 to 33.36) 20.61 (16.77 to 24.94) 38.63 (23.47 to 58.16) 22.06 (12.99 to 31.74)	43.90 (33.95 to 55.68) 16.98 (11.97 to 24.64) 19.08 (13.47 to 26.73) 4.92 (3.71 to 6.26) 7.20 (5.69 to 9.23) 16.53 (8.45 to 26.83) 22.28 (18.12 to 27.35) 24.94 (14.63 to 40.72) 13.42 (9.08 to 18.70)	0.27 (0.15 to 0.38) -0.03 (-0.18 to 0.13) -0.85 (-1.02 to -0.69) -0.54 (-0.73 to -0.35) -2.50 (-2.68 to -2.32) -0.64 (-0.80 to -0.48) 0.40 (0.30 to 0.50) -1.80 (-1.93 to -1.68) -1.97 (-2.14

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36.92 (31.76	-0.82 (-0.97	0.34 (0.31 to	0.45 (0.36 to	1.68 (1.33 to	16.08 (13.61	17.13 (14.12	0.68 (0.41 to

2 3									
4 Mexico	47.30 (40.55	36.92 (31.76	-0.82 (-0.97	0.34 (0.31 to	0.45 (0.36 to	1.68 (1.33 to	16.08 (13.61	17.13 (14.12	0.68 (0.41 to
5	to 55.27)	to 42.73)	to -0.67)	0.39)	0.54)	2.02)	to 19.12)	to 20.45)	0.96)
6 Micronesia	4.44 (3.61 to	4.11 (3.40 to	-0.45 (-0.62	1.36 (0.88 to	0.80 (0.48 to	-2.09 (-2.29	40.59 (25.23	23.88 (12.56	-2.07 (-2.24
7 (Federated 8	5.35)	4.96)	to -0.27)	1.97)	1.32)	to -1.88)	to 65.57)	to 43.11)	to -1.89)
9 States of)	/		,		,	····/	,	,	,
10	102.48	110.59	0.31 (0.29 to	0.38 (0.27 to	0.36 (0.27 to	-0.07 (-0.15	22.98 (17.18	23.10 (17.08	0.08 (0.06 to
11 Monaco 12	(86.41 to	(93.15 to	0.33)	0.50)	0.47)	to 0.01)	to 30.02)	to 29.93)	0.10)
12	120.82)	130.73)	0.000)	0.00)	0.1.7)		(0 20102)		0110)
14 Mongolia	68.37 (56.95	69.72 (57.44	0.02 (0.01 to	0.73 (0.47 to	0.45 (0.33 to	-2.10 (-2.26	38.19 (25.22	24.75 (19.13	-1.88 (-2.00
15	to 82.11)	to 83.84)	0.04)	1.01)	0.61)	to -1.94)	to 51.55)	to 31.11)	to -1.75)
16 17	135.02	133.80	0.02 (0.00 to	0.29 (0.23 to	0.30 (0.23 to	0.27 (0.08 to	29.84 (22.66	28.38 (20.94	-0.08 (-0.14
18 <sup>Montenegro</sup>	(114.64 to	(112.95 to	0.05)	0.37)	0.37)	0.46)	to 38.5)	to 37.02)	to -0.02)
19	158.46)	156.37)	0.05)	0.37)	0.57)	0.40)	10 50.57	10 37.02)	10 0.02)
20 21 Morocco	15.56 (13.00	17.60 (14.69	0.60 (0.47 to	0.23 (0.14 to	0.21 (0.15 to	-0.17 (-0.38	8.23 (5.69 to	7.60 (5.86 to	-0.09 (-0.21
22	to 18.49)	to 21.00)	0.72)	0.38)	0.28)	to 0.04)	11.59)	9.68)	to 0.02)
23 24 <sup>Mozambique</sup>	5.71 (4.71 to	6.30 (5.22 to	0.38 (0.33 to	0.69 (0.45 to	0.84 (0.58 to	0.94 (0.77 to	22.30 (13.46	24.35 (16.57	0.62 (0.41 to
	7.03)	7.69)	0.43)	1.04)	1.20)	1.12)	to 36.57)	to 34.27)	0.84)
25 26 <sub>Myanmar</sub>	3.09 (2.42 to	3.71 (3.00 to	0.72 (0.63 to	0.22 (0.13 to	0.13 (0.1 to	-1.95 (-2.07	7.97 (4.53 to	4.34 (3.28 to	-2.29 (-2.41
27	3.79)	4.59)	0.81)	0.31)	0.17)	to -1.83)	12.88)	6.04)	to -2.17)
28 20 Namibia	9.39 (7.72 to	11.47 (9.48	0.66 (0.54 to	0.72 (0.50 to	0.63 (0.45 to	-0.61 (-0.80	21.26 (13.8	18.09 (12.71	-0.52 (-0.63
29 <sup>Namibia</sup> 30	11.59)	to 14.12)	0.77)	1.00)	0.87)	to -0.41)	to 28.84)	to 26.34)	to -0.41)
31 <sub>Nauru</sub>	5.33 (4.35 to	5.02 (4.11 to	-0.61 (-0.94	1.37 (0.82 to	0.92 (0.54 to	-1.85 (-2.09	42.03 (22.9	27.18 (13.97	-1.87 (-2.08
32	6.41)	6.11)	to -0.28)	2.13)	1.45)	to -1.61)	to 73.19)	to 47.82)	to -1.65)
33 34 Nepal	16.18 (12.92	18.72 (15.04	0.55 (0.50 to	0.98 (0.57 to	0.59 (0.36 to	-1.88 (-2.06	28.52 (18.28	15.65 (10.93	-2.15 (-2.36
34 Nepal 35	to 20.54)	to 23.18)	0.59)	1.86)	0.98)	to -1.69)	to 47.84)	to 23.88)	to -1.94)
36	142.28	72 64 (62 08	2 10 ( 2 78	1.43 (1.24 to	2.08 (1.58 to	1.35 (0.87 to	47.17 (39.07	41 11 (25 20	-0.50 (-0.93
37 Netherlands	(129.20 to	73.64 (63.08	-2.19 (-2.78			,	× ×	41.11 (35.20	
38 39	155.78)	to 85.72)	to -1.60)	1.75)	2.40)	1.84)	to 56.59)	to 47.09)	to -0.06)
40	160.29	168.32	0.20 (0.15 to	0.52 (0.45 to	0.38(0.32) to	1.70 ( 2.05	34.31 (26.39	21 09 (22 24	-0.32 (-0.42
41New Zealand	(139.19 to	(152.62 to		0.53 (0.45 to	0.38 (0.32 to	-1.70 (-2.05		31.98 (23.24	
42	182.59)	186.95)	0.26)	0.59)	0.46)	to -1.34)	to 43.21)	to 41.73)	to -0.22)
43 44 <sub>Nicaragua</sub>	23.25 (19.28	26.41 (22.30	0.20 (0.10 to	0.15 (0.12 to	0.17 (0.13 to	0.48 (0.30 to	7.80 (6.25 to	8.26 (6.41 to	0.12 (-0.02
45	to 27.88)	to 31.28)	0.31)	0.18)	0.21)	0.67)	9.75)	10.34)	to 0.25)
46	7.12 (5.75 to	7.75 (6.26 to	0.37 (0.26 to	0.58 (0.28 to	0.5 (0.29 to	-0.71 (-0.92	21.59 (8.82	17.16 (9.15	-1.08 (-1.30
47 Niger 48	8.74)	9.48)	0.48)	0.99)	0.79)	to -0.51)	to 38.22)	to 26.85)	to -0.86)
49	8.88 (7.36 to	11.03 (9.13	0.98 (0.83 to	0.57 (0.28 to	0.52 (0.28 to	-0.11 (-0.21	19.98 (11.19	17.08 (10.24	-0.43 (-0.51
50 Nigeria	10.86)	to 13.41)	1.14)	0.97)	0.83)	to -0.02)	to 32.55)	to 26.72)	to -0.35)
51 52 N	5.82 (4.77 to	5.53 (4.56 to	-0.24 (-0.39	0.96 (0.67 to	0.63 (0.38 to	-1.75 (-1.86	29.80 (19.61	19.00 (10.29	-1.92 (-2.07
52 Niue 53	7.03)	6.74)	to -0.08)	1.38)	0.91)	to -1.63)	to 46.61)	to 29.66)	to -1.78)
54	119.00	122.13	0.14 (0.10)	0.00 (0.15)	0.10 /0.10	0.01 / 0.05	00.01/17.55	00.00 (1.5.05	0.00 / 0.01
55 North	(100.79 to	(103.27 to	0.14 (0.12 to	0.20 (0.15 to	0.18 (0.13 to	-0.21 (-0.36	23.91 (17.63	23.32 (16.99	0.00 (-0.04
56 Macedonia 57	140.81)	143.78)	0.17)	0.25)	0.23)	to -0.07)	to 31.43)	to 31.08)	to 0.05)
58 Northern	6.60 (5.47 to	5.79 (4.80 to	-0.61 (-0.80	1.28 (0.85 to	0.38 (0.26 to	-4.76 (-5.32	34.73 (23.54	11.56 (7.82	-4.28 (-4.78
59 Mariana	7.98)	6.96)	to -0.42)	1.82)	0.73)	to -4.19)	to 50.03)	to 20.63)	to -3.78)
60									

1 2									
2 3 Islands									
4	406.73	498.95							
5 6 Norway	(342.53 to	(429.41 to	0.38 (0.24 to	0.43 (0.39 to	0.38 (0.32 to	-0.86 (-1.19	69.15 (49.57	80.37 (56.25	0.17 (0.01 to
7	478.15)	570.55)	0.52)	0.58)	0.52)	to -0.53)	to 92.09)	to 108.56)	0.33)
8	32.04 (26.30	33.81 (27.79	0.24 (0.08 to	0.23 (0.12 to	0.23 (0.15 to	0.58 (0.34 to	10.5 (7.14 to	9.96 (7.66 to	0.17 (0.00 to
9 <sub>Oman</sub> 10	to 38.55)	to 40.80)	0.40)	0.39)	0.34)	0.82)	15.11)	12.72)	0.35)
11	13.75 (11.11	16.77 (13.78	0.77 (0.72 to	0.78 (0.39 to	0.62 (0.41 to	-0.87 (-0.93	21.52 (12.69	17.80 (12.91	-0.71 (-0.77
12 Pakistan	to 17.15)	to 21.25)	0.81)	1.57)	0.99)	to -0.80)	to 38.34)	to 25.37)	to -0.66)
13 14 <sub>Dalay</sub>	5.62 (4.60 to	5.22 (4.30 to	-0.40 (-0.56	0.88 (0.53 to	0.62 (0.29 to	-1.36 (-1.47	26.21 (13.51	19.34 (8.32	-1.21 (-1.31
15	6.79)	6.32)	to -0.24)	1.46)	0.97)	to -1.24)	to 47.84)	to 32.27)	to -1.10)
16 17 DI (	31.49 (25.86	35.42 (29.15	0.71 (0.52 to	0.33 (0.23 to	0.20 (0.15 to	-2.83 (-3.48	11.67 (8.60	9.47 (7.18 to	-1.16 (-1.42
<ol> <li>Palestine</li> <li>18</li> </ol>	to 38.19)	to 42.61)	0.90)	0.50)	0.29)	to -2.18)	to 16.06)	12.75)	to -0.90)
19	30.64 (26.19	31.9 (26.95	0.09 (0.04 to	0.40 (0.33 to	0.59 (0.45 to	2.20 (1.67 to	19.61 (16.04	24.28 (18.4	1.57 (1.10 to
20 Panama	to 35.44)	to 37.19)	0.14)	0.57)	0.76)	2.73)	to 24.02)	to 31.52)	2.05)
21 22 <sup>Papua New</sup>	4.05 (3.24 to	3.65 (2.96 to	-0.52 (-0.69	0.54 (0.31 to	0.42 (0.27 to	-1.02 (-1.10	19.34 (11.2	14.68 (9.5 to	-1.09 (-1.18
23 Guinea	4.88)	4.45)	to -0.35)	0.80)	0.63)	to -0.93)	to 29.45)	21.87)	to -1.00)
24 25 Paraguay	35.78 (30.69	30.96 (26.24	-0.62 (-0.73	0.16 (0.13 to	0.21 (0.15 to	1.35 (1.08 to	10.62 (8.39	10.30 (7.70	0.12 (-0.06
26	to 41.49)	to 36.59)	to -0.50)	0.21)	0.28)	1.63)	to 13.36)	to 13.16)	to 0.29)
27 <sub>Peru</sub>	17.18 (14.20	16.74 (13.74	-0.14 (-0.17	0.69 (0.47 to	0.23 (0.16 to	-4.20 (-4.68	34.79 (19.65	9.31 (6.89 to	-5.08 (-5.69
28 29	to 20.56)	to 20.14)	to -0.10)	0.93)	0.32)	to -3.72)	to 53.77)	12.58)	to -4.47)
30 Philippines	4.47 (3.59 to	4.96 (4.02 to	0.35 (0.25 to	0.35 (0.16 to	0.16 (0.13 to	-3.25 (-3.54	8.94 (5.36 to	4.87 (4.06 to	-2.61 (-2.86
	<b>5 20</b> )								
31	5.38)	6.00)	0.46)	0.46)	0.20)	to -2.95)	11.07)	6.26)	to -2.35)
32	418.60	177.25	0.46) -3.73 (-4.52	0.46) 0.44 (0.41 to	0.20) 0.53 (0.42 to	to -2.95) 0.82 (0.68 to	11.07) 72.05 (51.85	6.26) 38.44 (29.32	to -2.35) -2.70 (-3.28
	418.60 (351.62 to	177.25 (157.39 to							
32 33 <sub>Poland</sub> 34 35	418.60 (351.62 to 498.71)	177.25 (157.39 to 199.48)	-3.73 (-4.52 to -2.94)	0.44 (0.41 to 0.51)	0.53 (0.42 to 0.62)	0.82 (0.68 to 0.96)	72.05 (51.85 to 95.72)	38.44 (29.32 to 49.04)	-2.70 (-3.28 to -2.11)
32 33 Poland 34 35 36 Portugal	418.60 (351.62 to 498.71) 52.37 (46.30	177.25 (157.39 to 199.48) 74.24 (66.91	-3.73 (-4.52 to -2.94) 0.72 (0.46 to	0.44 (0.41 to 0.51) 0.69 (0.60 to	0.53 (0.42 to 0.62) 1.06 (0.57 to	0.82 (0.68 to 0.96) 2.38 (1.99 to	72.05 (51.85 to 95.72) 20.51 (17.46	38.44 (29.32 to 49.04) 27.82 (20.23	-2.70 (-3.28 to -2.11) 1.24 (1.07 to
32 33 Poland 34 35 36	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44)	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99)	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41)
32 33 Poland 34 35 36 Portugal 37 38 39 Puerto Rico	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09
32 33 Poland 34 35 36 Portugal 37 38 39 Puerto Rico 40	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59)	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04)	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29)
32 33 Poland 34 35 36 Portugal 37 38 39 Puerto Rico	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12
32 33 Poland 34 35 36 Portugal 37 38 39 Puerto Rico 40 41 42 Qatar 43	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66)	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64)	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37)
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79)	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to 1.61)	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23)
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldown	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldova	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to 1.61) 0.47 (0.09 to	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23)
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldown	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09)	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to 1.61) 0.47 (0.09 to 0.85) 0.37 (0.16 to	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52 to 0.13)
32 33 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldova 49 S0 Romania 51 Russian	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49) 70.01 (58.65	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09) 70.93 (63.66	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to 1.61) 0.47 (0.09 to 0.85)	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47) 0.27 (0.23 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39) 0.23 (0.18 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25) -0.65 (-1.01	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69) 21.99 (17.23	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12) 17.97 (13.92	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52 to 0.13) -0.63 (-0.89
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldova 49 Romania 51	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49) 70.01 (58.65 to 82.51)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09) 70.93 (63.66 to 79.55)	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to 1.61) 0.47 (0.09 to 0.85) 0.37 (0.16 to 0.59)	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47) 0.27 (0.23 to 0.31)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39) 0.23 (0.18 to 0.28)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25) -0.65 (-1.01 to -0.29)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69) 21.99 (17.23 to 27.18)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12) 17.97 (13.92 to 22.6)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52 to 0.13) -0.63 (-0.89 to -0.37)
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldova 49 Romania 51 Russian 51 Federation 54 Portugal	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49) 70.01 (58.65 to 82.51) 95.59 (81.25	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09) 70.93 (63.66 to 79.55) 85.89 (72.98	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to 1.61) 0.47 (0.09 to 0.85) 0.37 (0.16 to 0.59) -0.12 (-0.25	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47) 0.27 (0.23 to 0.31) 0.57 (0.42 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39) 0.23 (0.18 to 0.28) 0.56 (0.46 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25) -0.65 (-1.01 to -0.29) -0.40 (-0.74	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69) 21.99 (17.23 to 27.18) 30.76 (24.06	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12) 17.97 (13.92 to 22.6) 28.04 (22.97	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52 to 0.13) -0.63 (-0.89 to -0.37) -0.52 (-0.70
32 33 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldova 49 S0 Romania 51 Russian 52 Federation 54 Rwanda	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49) 70.01 (58.65 to 82.51) 95.59 (81.25 to 111.84)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09) 70.93 (63.66 to 79.55) 85.89 (72.98 to 100.35)	$\begin{array}{c} -3.73 \ (-4.52 \\ \text{to} \ -2.94) \\ 0.72 \ (0.46 \ \text{to} \\ 0.99) \\ 0.00 \ (-0.04 \\ \text{to} \ 0.04) \\ 0.53 \ (0.42 \ \text{to} \\ 0.64) \\ 1.25 \ (0.89 \ \text{to} \\ 1.61) \\ 0.47 \ (0.09 \ \text{to} \\ 0.85) \\ 0.37 \ (0.16 \ \text{to} \\ 0.59) \\ -0.12 \ (-0.25 \\ \text{to} \ 0.00) \end{array}$	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47) 0.27 (0.23 to 0.31) 0.57 (0.42 to 0.66)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39) 0.23 (0.18 to 0.28) 0.56 (0.46 to 0.66)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25) -0.65 (-1.01 to -0.29) -0.40 (-0.74 to -0.06)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69) 21.99 (17.23 to 27.18) 30.76 (24.06 to 37.42)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12) 17.97 (13.92 to 22.6) 28.04 (22.97 to 34.48)	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52 to 0.13) -0.63 (-0.89 to -0.37) -0.52 (-0.70 to -0.35)
32 33 Poland 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldova 49 Romania 51 Russian 51 Federation 54 Portugal	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49) 70.01 (58.65 to 82.51) 95.59 (81.25 to 111.84) 6.69 (5.55 to	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09) 70.93 (63.66 to 79.55) 85.89 (72.98 to 100.35) 7.89 (6.47 to	-3.73 (-4.52 to -2.94) 0.72 (0.46 to 0.99) 0.00 (-0.04 to 0.04) 0.53 (0.42 to 0.64) 1.25 (0.89 to 1.61) 0.47 (0.09 to 0.85) 0.37 (0.16 to 0.59) -0.12 (-0.25 to 0.00) 0.57 (0.40 to	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47) 0.27 (0.23 to 0.31) 0.57 (0.42 to 0.66) 0.92 (0.61 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39) 0.23 (0.18 to 0.28) 0.56 (0.46 to 0.66) 0.65 (0.42 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25) -0.65 (-1.01 to -0.29) -0.40 (-0.74 to -0.06) -1.79 (-2.06	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69) 21.99 (17.23 to 27.18) 30.76 (24.06 to 37.42) 29.08 (17.93	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12) 17.97 (13.92 to 22.6) 28.04 (22.97 to 34.48) 19.33 (12.66	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52 to 0.13) -0.63 (-0.89 to -0.37) -0.52 (-0.70 to -0.35) -1.92 (-2.15
$\begin{array}{cccc} 32 \\ 33 \\ 34 \\ 35 \\ 35 \\ 36 \\ 37 \\ Portugal \\ 38 \\ 39 \\ Puerto Rico \\ 40 \\ 41 \\ 42 \\ Qatar \\ 43 \\ 44 \\ Republic of \\ 45 \\ Korea \\ 46 \\ Republic of \\ 47 \\ Moldova \\ 49 \\ 80 \\ Romania \\ 51 \\ Russian \\ 52 \\ Russian \\ 53 \\ Federation \\ 54 \\ 55 \\ Rwanda \\ 56 \\ 57 \\ Saint Kitts and \\ 58 \\ Nevis \\ \end{array}$	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49) 70.01 (58.65 to 82.51) 95.59 (81.25 to 111.84) 6.69 (5.55 to 8.31)	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09) 70.93 (63.66 to 79.55) 85.89 (72.98 to 100.35) 7.89 (6.47 to 9.74)	$\begin{array}{c} -3.73 \ (-4.52 \\ \text{to} \ -2.94) \\ 0.72 \ (0.46 \ \text{to} \\ 0.99) \\ 0.00 \ (-0.04 \\ \text{to} \ 0.04) \\ 0.53 \ (0.42 \ \text{to} \\ 0.64) \\ 1.25 \ (0.89 \ \text{to} \\ 1.61) \\ 0.47 \ (0.09 \ \text{to} \\ 0.85) \\ 0.37 \ (0.16 \ \text{to} \\ 0.59) \\ -0.12 \ (-0.25 \\ \text{to} \ 0.00) \\ 0.57 \ (0.40 \ \text{to} \\ 0.74) \\ \end{array}$	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47) 0.27 (0.23 to 0.31) 0.57 (0.42 to 0.66) 0.92 (0.61 to 1.40)	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39) 0.23 (0.18 to 0.28) 0.56 (0.46 to 0.66) 0.65 (0.42 to 0.92)	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25) -0.65 (-1.01 to -0.29) -0.40 (-0.74 to -0.06) -1.79 (-2.06 to -1.51)	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69) 21.99 (17.23 to 27.18) 30.76 (24.06 to 37.42) 29.08 (17.93 to 46.16)	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12) 17.97 (13.92 to 22.6) 28.04 (22.97 to 34.48) 19.33 (12.66 to 28.48)	$\begin{array}{c} -2.70 \ (-3.28 \\ \text{to} \ -2.11) \\ \hline 1.24 \ (1.07 \ \text{to} \\ 1.41) \\ -2.69 \ (-3.09 \\ \text{to} \ -2.29) \\ 0.13 \ (-0.12 \\ \text{to} \ 0.37) \\ -3.63 \ (-4.02 \\ \text{to} \ -3.23) \\ -0.20 \ (-0.52 \\ \text{to} \ 0.13) \\ -0.63 \ (-0.89 \\ \text{to} \ -0.37) \\ -0.52 \ (-0.70 \\ \text{to} \ -0.35) \\ -1.92 \ (-2.15 \\ \text{to} \ -1.69) \end{array}$
32 33 34 35 36 37 Portugal 38 39 Puerto Rico 40 41 42 Qatar 43 44 Republic of 45 Korea 46 Republic of 47 Moldova 49 50 Romania 51 Russian 53 Federation 54 Rwanda 56 57 Saint Kitts and	418.60 (351.62 to 498.71) 52.37 (46.30 to 58.76) 31.12 (29.32 to 33.10) 38.47 (31.44 to 45.79) 37.89 (33.49 to 42.88) 67.21 (55.76 to 80.49) 70.01 (58.65 to 82.51) 95.59 (81.25 to 111.84) 6.69 (5.55 to 8.31) 29.59 (24.68	177.25 (157.39 to 199.48) 74.24 (66.91 to 82.44) 30.88 (28.28 to 33.59) 44.46 (36.75 to 53.66) 70.21 (66.03 to 74.79) 66.12 (59.51 to 73.09) 70.93 (63.66 to 79.55) 85.89 (72.98 to 100.35) 7.89 (6.47 to 9.74) 28.95 (23.75	$\begin{array}{c} -3.73 \ (-4.52 \\ \text{to} \ -2.94) \\ 0.72 \ (0.46 \ \text{to} \\ 0.99) \\ 0.00 \ (-0.04 \\ \text{to} \ 0.04) \\ 0.53 \ (0.42 \ \text{to} \\ 0.64) \\ 1.25 \ (0.89 \ \text{to} \\ 1.61) \\ 0.47 \ (0.09 \ \text{to} \\ 0.85) \\ 0.37 \ (0.16 \ \text{to} \\ 0.59) \\ -0.12 \ (-0.25 \\ \text{to} \ 0.00) \\ 0.57 \ (0.40 \ \text{to} \\ 0.74) \\ 0.06 \ (-0.02 \end{array}$	0.44 (0.41 to 0.51) 0.69 (0.60 to 0.76) 0.56 (0.43 to 0.64) 0.37 (0.24 to 0.59) 1.76 (0.56 to 2.34) 0.38 (0.32 to 0.47) 0.27 (0.23 to 0.31) 0.57 (0.42 to 0.66) 0.92 (0.61 to 1.40) 2.25 (1.70 to	0.53 (0.42 to 0.62) 1.06 (0.57 to 1.24) 0.27 (0.19 to 0.41) 0.34 (0.21 to 0.51) 0.30 (0.23 to 0.39) 0.33 (0.27 to 0.39) 0.23 (0.18 to 0.28) 0.56 (0.46 to 0.66) 0.65 (0.42 to 0.92) 1.44 (1.06 to	0.82 (0.68 to 0.96) 2.38 (1.99 to 2.77) -3.70 (-4.28 to -3.10) 0.52 (0.07 to 0.98) -7.96 (-8.67 to -7.25) -0.60 (-0.96 to -0.25) -0.65 (-1.01 to -0.29) -0.40 (-0.74 to -0.06) -1.79 (-2.06 to -1.51) -2.01 (-2.26	72.05 (51.85 to 95.72) 20.51 (17.46 to 24.14) 21.05 (16.43 to 24.23) 14.06 (10.55 to 19.68) 31.72 (18.30 to 38.85) 22.87 (18.45 to 27.69) 21.99 (17.23 to 27.18) 30.76 (24.06 to 37.42) 29.08 (17.93 to 46.16) 67.93 (52.91	38.44 (29.32 to 49.04) 27.82 (20.23 to 33.05) 12.28 (9.43 to 16.08) 13.06 (9.28 to 17.59) 15 (11.13 to 19.33) 20.72 (16.98 to 25.12) 17.97 (13.92 to 22.6) 28.04 (22.97 to 34.48) 19.33 (12.66 to 28.48) 42.16 (29.05	-2.70 (-3.28 to -2.11) 1.24 (1.07 to 1.41) -2.69 (-3.09 to -2.29) 0.13 (-0.12 to 0.37) -3.63 (-4.02 to -3.23) -0.20 (-0.52 to 0.13) -0.63 (-0.89 to -0.37) -0.52 (-0.70 to -0.35) -1.92 (-2.15 to -1.69) -2.07 (-2.32

5.98 (4.90 to

7.28)

25.18 (20.47

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Sri Lanka

Sudan

1 2									
3	to 31.22)	to 33.54)	0.42)	1.15)	0.84)	to -1.78)	to 37.29)	to 28.14)	to -1.49)
4 5 Saint Vincent	24.91 (20.72	24.40 (20.24	0.24 (0.13 to	1.31 (1.08 to	1.22 (0.98 to	-0.56 (-0.70	44.25 (37.35	38.61 (31.46	-0.80 (-0.94
6 and the	to 30.36)	to 29.76)	0.24 (0.13 to	1.51 (1.08 to	1.22 (0.98 to	-0.30 (-0.70 to -0.41)	to 51.61)	to 48.07)	-0.80 (-0.94 to -0.67)
7 Grenadines	10 50.50)	10 29.70)	0.54)	1.37)	1.55)	10 -0.41)	10 51.01)	10 48.07)	10 -0.07)
8 9 <sub>Samoa</sub>	5.60 (4.60 to	4.77 (3.92 to	-0.77 (-1.05	0.98 (0.66 to	0.63 (0.45 to	-1.64 (-1.80	27.95 (18.61	17.97 (11.92	-1.62 (-1.75
9 <sub>Samoa</sub> 10	6.71)	5.78)	to -0.49)	1.49)	0.85)	to -1.47)	to 40.58)	to 26.18)	to -1.49)
11	107.02	112.86	0.02 (0.01 +-	0.27 (0.27 +-	0.26 (0.22 +-	0.00 (0.06 +-	21 57 (15 70	21 70 (15 52	0 15 (0 11 4-
12 13 San Marino	(89.88 to	(94.72 to	0.23 (0.21 to	0.37 (0.27 to	0.36 (0.22 to	0.22 (0.06 to	21.57 (15.79	21.79 (15.52	0.15 (0.11 to
14	126.67)	132.67)	0.24)	0.48)	0.53)	0.38)	to 28.34)	to 28.71)	0.19)
15Sao Tome and	10.50 (8.66	11.85 (9.61	0.59 (0.46 to	0.46 (0.26 to	0.31 (0.21 to	-1.58 (-1.93	15.7 (9.25 to	10.34 (7.41	-1.71 (-2.03
16 Principe	to 12.87)	to 14.64)	0.71)	0.73)	0.50)	to -1.24)	23.73)	to 15.57)	to -1.38)
17 18g r	33.86 (28.47	34.43 (28.66	0.22 (0.09 to	0.19 (0.11 to	0.15 (0.11 to	-0.60 (-0.71	9.73 (6.96 to	8.9 (6.65 to	-0.18 (-0.25
18 <sub>Saudi</sub> Arabia 19	to 40.38)	to 41.36)	0.35)	0.31)	0.21)	to -0.48)	13.65)	11.75)	to -0.10)
20	8.06 (6.57 to	8.84 (7.25 to	0.39 (0.27 to	0.55 (0.29 to	0.43 (0.27 to	-1.00 (-1.21	18.61 (9.28	14.15 (8.71	-1.12 (-1.32
21 Senegal 22	9.88)	11.10)	0.51)	0.93)	0.65)	to -0.78)	to 29.66)	to 21.53)	to -0.91)
23	118.24	151.50	0.42 (0.24)	0.40 (0.27.)	0.74 (0.50 )	0.40 (0.05 )	21 72 (24 20	00 47 (00 70	0.02 (0.67.)
24 Serbia	(99.70 to	(130.14 to	0.43 (0.26 to	0.49 (0.37 to	0.76 (0.50 to	2.49 (2.05 to	31.72 (24.28	39.47 (29.72	0.83 (0.67 to
25 26	138.39)	173.84)	0.61)	0.78)	0.97)	2.94)	to 43.38)	to 49.82)	0.98)
27	4.66 (3.75 to	5.45 (4.43 to	0.52 (0.44 to	0.30 (0.19 to	0.22 (0.16 to	-1.44 (-1.65	8.38 (5.69 to	6.28 (4.77 to	-1.35 (-1.51
28 Seychenes	5.71)	6.55)	0.60)	0.38)	0.30)	to -1.23)	10.68)	7.85)	to -1.19)
29	7.33 (6.06 to	8.45 (6.95 to	0.64 (0.51 to	0.42 (0.19 to	0.43 (0.24 to	0.20 (-0.07	15.88 (6.30	15.30 (8.12	0.00 (-0.27
30Sierra Leone 31	9.02)	10.53)	0.77)	0.72)	0.61)	to 0.48)	to 28.04)	to 23.35)	to 0.26)
32	47.14 (38.3	41.88 (34.28	-0.58 (-0.74	0.18 (0.14 to	0.07 (0.06 to	-3.18 (-3.41	12.19 (9.33	8.16 (5.69 to	-1.52 (-1.73
33 Singapore	to 56.56)	to 51.91)	to -0.43)	0.20)	0.11)	to -2.95)	to 15.58)	11.25)	to -1.31)
34 35	165.72	154.57	0.05 ( 0.10	0.54 (0.45)		1.55 (1.01.)	40.62.621.20	40.01.(00.00	0.04 (0.10)
36 Slovakia	(148.05 to	(140.40 to	-0.05 (-0.12	0.54 (0.45 to	0.68 (0.48 to	1.56 (1.21 to	40.62 (31.28	40.31 (30.39	0.34 (0.19 to
37	183.09)	170.08)	to 0.02)	0.84)	0.90)	1.91)	to 53.36)	to 50.67)	0.49)
38 39	167.07	179.18	0.15 (0.00)	0.44.00.00		1.00 ( 0.10	24 60 (25 60	24.25 (24.55	0.40.007
40 Slovenia	(146.63 to	(160.70 to	0.15 (0.08 to	0.44 (0.33 to	0.39 (0.28 to	-1.39 (-2.13	34.68 (25.60	34.27 (24.57	-0.42 (-0.67
41	189.8)	199.69)	0.21)	0.56)	0.52)	to -0.65)	to 44.77)	to 44.81)	to -0.17)
42 Solomon	3.49 (2.80 to	3.35 (2.73 to	-0.31 (-0.46	0.75 (0.42 to	0.53 (0.33 to	-1.42 (-1.56	24.39 (12.55	17.28 (10.22	-1.38 (-1.51
43 44 <sup>Islands</sup>	4.25)	4.12)	to -0.15)	1.16)	0.79)	to -1.29)	to 43.26)	to 29.48)	to -1.25)
45	5.39 (4.41 to	5.28 (4.33 to	-0.09 (-0.12	0.55 (0.29 to	0.48 (0.30 to	-0.45 (-0.53	17.8 (7.75 to	14.47 (8.44	-0.63 (-0.69
46 Somalia	6.68)	6.56)	to -0.06)	0.91)	0.79)	to -0.37)	34.12)	to 24.4)	to -0.56)
47 48 c - 1 - 1 c :	11.04 (9.21	12.40 (10.36	0.52 (0.44 to	0.39 (0.30 to	0.39 (0.30 to	0.13 (-0.38	15.07 (10.33	12.17 (9.76	-0.56 (-0.99
48 <sub>South</sub> Africa 49	to 13.55)	to 15.05)	0.60)	0.50)	0.47)	to 0.64)	to 20.06)	to 14.04)	to -0.14)
50	6.93 (5.69 to	7.78 (6.41 to	0.35 (0.31 to	0.68 (0.39 to	0.65 (0.36 to	-0.05 (-0.09	22.59 (10.42	19.12 (11.06	-0.45 (-0.58
51 South Sudan 52	8.55)	9.49)	0.40)	1.43)	1.40)	to 0.00)	to 43.44)	to 39.88)	to -0.32)
52 53	00 41 (04 14	134.10	0.77 (0.40)	0.54 (0.45)	0.25 (0.20)	0.16/0.51	04.01 (20.22	07.01.(00.(1	0.04 / 0.45
54 Spain	90.41 (86.16	(127.51 to	0.77 (0.60 to	0.54 (0.46 to	0.35 (0.29 to	-2.16 (-2.54	24.91 (20.33	27.31 (20.61	-0.26 (-0.47
55	to 94.9)		0.95)	0.60)	0.50)	to -1.78)	to 30.25)	to 34.99)	to -0.05)

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0.10 (0.07 to

0.13)

0.25 (0.14 to

-2.15 (-2.31

to -1.99)

0.95 (0.78 to

5.73 (4.38 to

7.09)

9.58 (5.87 to

3.77 (2.86 to

4.79)

10.84 (7.56

-1.45 (-1.57

to -1.33)

0.71 (0.58 to

0.18 (0.14 to

0.23)

0.21 (0.10 to

1.67 (1.38 to

1.96)

0.90 (0.76 to

141.19)

9.51 (8.29 to

10.90)

30.96 (25.17

1									
2 3	to 31.02)	to 37.98)	1.05)	0.39)	0.43)	1.11)	15.53)	to 15.32)	0.84)
4	25.78 (21.39	25.28 (20.76	0.11 (0.01 to	1.00 (0.77 to	0.66 (0.50 to	-1.99 (-2.24	35.66 (26.78	23.00 (18.20	-1.99 (-2.24
5 Suriname 6	to 31.18)	to 30.88)	0.22)	1.18)	0.86)	to -1.73)	to 43.03)	to 29.10)	to -1.75)
7	294.18	315.22	•)						
8 Sweden	(253.51 to	(271.18 to	0.31 (0.28 to	0.68 (0.56 to	0.38 (0.31 to	-3.16 (-4.26	56.12 (41.20	53.00 (37.35	-0.35 (-0.54
9 <sup>Sweden</sup> 10	336.93)	360.86)	0.34)	0.75)	0.56)	to -2.06)	to 73.41)	to 71.73)	to -0.16)
11	129.02	134.73							
12 Switzerland	(116.30 to	(121.98 to	0.09 (0.06 to	0.68 (0.54 to	0.58 (0.47 to	-1.03 (-1.80	32.21 (25.49	29.51 (22.30	-0.56 (-0.82
13 14	142.70)	148.05)	0.12)	0.77)	0.75)	to -0.26)	to 39.69)	to 37.67)	to -0.31)
15 Syrian Arab	28.71 (23.39	33.67 (27.34	0.96 (0.65 to	0.46 (0.23 to	0.36 (0.19 to	-1.00 (-1.20	14.71 (9.86	12.75 (9.00	-0.46 (-0.53
16 <sub>Republic</sub>	to 35.03)	to 40.47)	1.26)	0.76)	0.52)	to -0.80)	to 20.18)	to 16.93)	to -0.39)
17 18 <sup>Taiwan</sup>									
19 (Province of	11.23 (9.74	27.80 (24.80	4.29 (3.71 to	0.91 (0.57 to	0.50 (0.38 to	-2.08 (-3.37	17.35 (12.32	12.40 (10.06	-0.85 (-1.78
20 <sub>China)</sub>	to 12.86)	to 31.28)	4.86)	1.04)	0.65)	to -0.78)	to 19.43)	to 15.44)	to 0.10)
21 22 <sub>Taiikistan</sub>	68.84 (56.59	71.19 (59.54	0.12 (0.07 to	0.41 (0.28 to	0.3 (0.22 to	-0.79 (-0.88	30.29 (19.52	20.60 (15.55	-0.89 (-1.10
22 Tajikistan 23	to 83.10)	to 85.49)	0.18)	0.58)	0.41)	to -0.70)	to 43.28)	to 26.90)	to -0.69)
24	3.31 (2.57 to	4.28 (3.44 to	0.96 (0.83 to	0.2 (0.14 to	0.12 (0.08 to	-2.46 (-2.78	6.06 (4.39 to	3.64 (2.76 to	-2.40 (-2.71
25 Thailand 26	4.15)	5.22)	1.08)	0.26)	0.15)	to -2.14)	7.89)	4.68)	to -2.09)
77	3.20 (2.51 to	3.90 (3.14 to	0.84 (0.75 to	0.42 (0.17 to	0.36 (0.20 to	-0.57 (-0.70	11.64 (5.58	9.14 (5.17 to	-0.95 (-1.13
28	3.91)	4.72)	0.94)	0.83)	0.61)	to -0.44)	to 22.42)	14.89)	to -0.77)
29 30 Togo	9.42 (7.74 to	9.00 (7.38 to	0.03 (-0.09	0.49 (0.28 to	0.48 (0.32 to	-0.05 (-0.31	17.29 (9.05	16.30 (10.74	-0.23 (-0.48
30 Togo 31	11.41)	11.07)	to 0.15)	0.76)	0.68)	to 0.21)	to 26.59)	to 22.75)	to 0.01)
32 77 Tokelau	4.65 (3.78 to	5.36 (4.37 to	0.72 (0.46 to	0.89 (0.57 to	0.58 (0.42 to	-1.72 (-1.88	25.84 (15.77	16.11 (11.19	-1.68 (-1.80
33 <sup>Tokelau</sup> 34	5.66)	6.54)	0.97)	1.34)	0.78)	to -1.57)	to 38.77)	to 22.98)	to -1.56)
35 <sub>Tonga</sub>	5.55 (4.56 to	4.96 (4.08 to	-0.51 (-0.69	1.14 (0.67 to	0.76 (0.56 to	-1.73 (-1.92	31.30 (19.82	21.58 (15.55	-1.63 (-1.83
36	6.66)	5.98)	to -0.32)	1.64)	1.02)	to -1.54)	to 44.12)	to 30.10)	to -1.44)
37 <sub>Trinidad</sub> and	27.68 (22.88	27.49 (22.91	0.31 (0.17 to	0.34 (0.24 to	0.29 (0.21 to	-0.98 (-1.25	14.27 (10.86	12.54 (9.51	-0.66 (-0.84
38 39 <sup>Tobago</sup>	to 33.63)	to 33.71)	0.45)	0.39)	0.39)	to -0.72)	to 16.75)	to 16.14)	to -0.48)
40 Tunisia	35.29 (29.00	40.47 (33.21	0.59 (0.45 to	0.15 (0.1 to	0.14 (0.09 to	-0.05 (-0.15	9.05 (6.50 to	9.36 (6.89 to	0.27 (0.17 to
41	to 42.68)	to 49.35)	0.73)	0.22)	0.20)	to 0.06)	12.22)	12.40)	0.37)
42 43 Turkey	50.66 (44.42	98.87 (84.96	2.04 (1.87 to	0.67 (0.43 to	0.40 (0.30 to	-1.87 (-2.02	27.88 (19.30	25.05 (19.42	-0.61 (-0.70
44	to 56.99)	to 113.45)	2.20)	1.06)	0.56)	to -1.72)	to 38.53)	to 32.24)	to -0.51)
45 46 <sup>Turkmenistan</sup>	69.03 (57.31	77.89 (64.42	0.43 (0.32 to	0.37 (0.28 to	0.33 (0.22 to	-0.50 (-0.78	24.59 (17.78	22.90 (16.63	-0.20 (-0.38
46 <sup>-</sup> 47	to 82.24)	to 92.76)	0.54)	0.49)	0.46)	to -0.21)	to 31.67)	to 29.27)	to -0.02)
48 <sub>Tuvalu</sub>	4.48 (3.63 to	4.08 (3.38 to	-0.47 (-0.63	1.08 (0.65 to	0.71 (0.47 to	-1.60 (-1.73	33.30 (17.86	21.17 (13.37	-1.65 (-1.76
49	5.44)	4.88)	to -0.30)	1.59)	1.05)	to -1.47)	to 54.06)	to 33.22)	to -1.55)
50 51 Uganda	5.79 (4.75 to	7.14 (5.88 to	1.01 (0.88 to	0.59 (0.37 to	0.61 (0.40 to	-0.03 (-0.17	17.22 (11.39	17.40 (12.18	-0.02 (-0.16
52	7.14)	8.92)	1.15)	0.91)	0.92)	to 0.10)	to 25.60)	to 25.46)	to 0.13)
53 Ukraine	68.71 (57.64	68 (57.27 to	0.19 (0.03 to	0.34 (0.26 to	0.39 (0.31 to	0.17 (-0.10	21.06 (16.76	23.62 (18.99	0.34 (0.12 to
54	to 82.57)	80.79)	0.35)	0.45)	0.48)	to 0.44)	to 26.65)	to 28.82)	0.56)
55 <sub>United</sub> Arab 56	36.50 (30.28	42.72 (35.58	0.73 (0.60 to	0.21 (0.09 to	0.24 (0.15 to	0.72 (0.25 to	10.79 (6.88	12.40 (8.88	0.73 (0.52 to
57 Emirates	to 44.12)	to 51.97)	0.87)	0.43)	0.43)	1.20)	to 16.90)	to 17.45)	0.94)
58 United	223.81	240.37	0.17 (0.12 to	0.97 (0.85 to	1.30 (1.12 to	1.22 (0.84 to	52.80 (41.67	59.34 (47.21	0.41 (0.25 to
59 <sub>Kingdom</sub> 60	(197.49 to	(214.96 to	0.21)	1.18)	1.44)	1.59)	to 65.37)	to 72.73)	0.57)

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2									
3	251.35)	267.14)							
<ul><li>4</li><li>5 United</li><li>6 Republic of</li></ul>	7.20 (5.89 to	7.76 (6.36 to	0.22 (0.10 to	0.58 (0.40 to	0.60 (0.41 to	0.38 (0.19 to	19.56 (13.24	18.91 (12.48	0.25 (0.07 to
7 <sub>Tanzania</sub>	8.90)	9.50)	0.35)	0.81)	0.89)	0.57)	to 32.21)	to 26.55)	0.43)
8 9 United States 10 11 of America	343.12 (295.81 to 394.51)	193.07 (179.65 to 206.87)	-1.59 (-2.08 to -1.09)	0.67 (0.60 to 0.82)	1.02 (0.80 to 1.11)	1.80 (1.52 to 2.07)	64.72 (47.50 to 84.88)	49.82 (40.25 to 60.19)	-0.48 (-0.78 to -0.18)
12 United States	31.96 (26.73	33.22 (27.69	0.23 (0.16 to	0.81 (0.56 to	0.45 (0.34 to	-2.32 (-2.66	26.35 (19.55	15.91 (12.54	-2.03 (-2.27
13 14Virgin Islands	to 38.19)	to 39.97)	0.23 (0.10 to	1.02)	0.59)	to -1.99)	to 32.66)	to 20.17)	to -1.78)
15	17.66 (14.59	17.41 (14.35	-0.17 (-0.21	0.27 (0.23 to	0.41 (0.35 to	1.10 (0.62 to	9.71 (8.22 to	12.78 (11.11	0.63 (0.27 to
16 <sup>Uruguay</sup>	to 21.30)	to 21.13)	to -0.13)	0.37)	0.47)	1.58)	12.16)	to 14.58)	0.98)
17 18 <sub>Uzbekistan</sub>	74.25 (62.30	75.79 (63.42	-0.02 (-0.05	0.28 (0.20 to	0.29 (0.23 to	-0.33 (-0.58	23.48 (17.64	21.90 (17.37	-0.47 (-0.58
18 Uzbekistan 19	to 88.98)	to 90.50)	to 0.01)	0.39)	0.39)	to -0.09)	to 29.48)	to 27.16)	to -0.36)
20	4.27 (3.44 to	3.94 (3.23 to	-0.42 (-0.59	1.22 (0.69 to	0.84 (0.52 to	-1.74 (-1.94	34.45 (18.68	25.36 (15.29	-1.58 (-1.80
21 Vanuatu 22	5.21)	4.77)	to -0.24)	2.03)	1.24)	to -1.54)	to 54.26)	to 38.79)	to -1.36)
23 Venezuela	20.50 (25.20	20.02/24.54	0.01 ( 0.05	0.05 (0.17)	0.15 (0.11 (	0.00 ( 0.80	12.00 (0.22	0.07 (6.04 (	126/166
24 (Bolivarian	29.50 (25.29	29.03 (24.54	-0.01 (-0.05	0.25 (0.17 to	0.15 (0.11 to	-2.32 (-2.82	12.00 (9.33	8.87 (6.84 to	-1.36 (-1.66
25 26 <sup>Republic of)</sup>	to 33.94)	to 34.19)	to 0.03)	0.29)	0.21)	to -1.82)	to 14.20)	11.26)	to -1.05)
27 Viet Nam	9.12 (7.04 to	18.35 (14.68	2.72 (2.05 to	0.58 (0.30 to	0.22 (0.15 to	-3.98 (-4.35	13.87 (8.53	7.60 (5.65 to	-2.48 (-2.72
28	11.43)	to 22.55)	3.39)	0.88)	0.32)	to -3.61)	to 18.99)	9.80)	to -2.23)
29 30 Yemen	23.40 (18.89	28.03 (22.65	0.95 (0.76 to	0.28 (0.15 to	0.33 (0.22 to	0.85 (0.73 to	10.64 (7.11	12.40 (9.18	0.79 (0.66 to
31	to 29.12)	to 34.94)	1.14)	0.52)	0.52)	0.97)	to 15.89)	to 16.77)	0.93)
32 33 Zambia	6.36 (5.26 to	8.42 (6.92 to	0.86 (0.63 to	0.86 (0.60 to	0.70 (0.51 to	-0.86 (-1.04	27.59 (16.02	20.49 (14.47	-1.05 (-1.14
33 <sup>Zambia</sup> 34	7.78)	10.46)	1.10)	1.32)	0.94)	to -0.69)	to 45.42)	to 27.66)	to -0.96)
35 <sub>Zimbabwe</sub>	8.69 (7.15 to	8.91 (7.29 to	0.21 (0.11 to	0.47 (0.36 to	0.58 (0.35 to	0.96 (0.85 to	14.20 (10.79	17.38 (10.28	1.22 (0.99 to
36	10.74)	11.06)	0.30)	0.64)	0.86)	1.06)	to 19.20)	to 25.35)	1.44)
37 38	Abbrevia	tions: CI=	-confidence	interval.	DALY=dis	ability adj	usted life	year.	
39	EAPC=e	stimated an	nual percent	age change.	UI=uncerta	inty interva	1.		

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STROBE Statement-checklist of items that should be included in reports of observational studies

	Item No	Recommendation	Pag No
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the	1
		abstract	
		(b) Provide in the abstract an informative and balanced summary of what	2
		was done and what was found	
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods	-		
Study design	4	Present key elements of study design early in the paper	5
Setting	5	Describe the setting, locations, and relevant dates, including periods of	5
C		recruitment, exposure, follow-up, and data collection	
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods	5
1		of selection of participants. Describe methods of follow-up	
		<i>Case-control study</i> —Give the eligibility criteria, and the sources and	
		methods of case ascertainment and control selection. Give the rationale for	
		the choice of cases and controls	
		Cross-sectional study—Give the eligibility criteria, and the sources and	
		methods of selection of participants	
		(b) Cohort study—For matched studies, give matching criteria and number	
		of exposed and unexposed	
		Case-control study—For matched studies, give matching criteria and the	
		number of controls per case	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders,	5-6
		and effect modifiers. Give diagnostic criteria, if applicable	
Data sources/	8*	For each variable of interest, give sources of data and details of methods of	5-6
measurement		assessment (measurement). Describe comparability of assessment methods if	
		there is more than one group	
Bias	9	Describe any efforts to address potential sources of bias	6
Study size	10	Explain how the study size was arrived at	6
Study size Quantitative variables		Explain how the study size was arrived at Explain how quantitative variables were handled in the analyses. If	
Study size Quantitative variables	10	* · ·	
	10	Explain how quantitative variables were handled in the analyses. If	
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5-6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why ( <i>a</i> ) Describe all statistical methods, including those used to control for	5-6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why ( <i>a</i> ) Describe all statistical methods, including those used to control for confounding	5-6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why(a) Describe all statistical methods, including those used to control for confounding(b) Describe any methods used to examine subgroups and interactions	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed         (d) Cohort study—If applicable, explain how loss to follow-up was	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed         (d) Cohort study—If applicable, explain how loss to follow-up was addressed	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed         (d) Cohort study—If applicable, explain how loss to follow-up was addressed         Case-control study—If applicable, explain how matching of cases and	5-6 6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If</li> <li>applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for</li> <li>confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> <li>(c) Explain how missing data were addressed</li> <li>(d) Cohort study—If applicable, explain how loss to follow-up was</li> <li>addressed</li> <li><i>Case-control study</i>—If applicable, explain how matching of cases and</li> <li>controls was addressed</li> </ul>	5-6 6 6

Continued on next page

Participants	13*	(a) Report numbers of individuals at each stage of study-eg numbers potentially	6-
		eligible, examined for eligibility, confirmed eligible, included in the study, completing	
		follow-up, and analysed	
		(b) Give reasons for non-participation at each stage	6-
		(c) Consider use of a flow diagram	6-
Descriptive	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and	6-
data		information on exposures and potential confounders	
		(b) Indicate number of participants with missing data for each variable of interest	6-
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)	6-
Outcome data	15*	Cohort study-Report numbers of outcome events or summary measures over time	6-
		Case-control study—Report numbers in each exposure category, or summary	6-
		measures of exposure	
		Cross-sectional study—Report numbers of outcome events or summary measures	6-
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and	6-
		their precision (eg, 95% confidence interval). Make clear which confounders were	
		adjusted for and why they were included	
		(b) Report category boundaries when continuous variables were categorized	6-
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a	6-
		meaningful time period	
Other analyses	17	Report other analyses done-eg analyses of subgroups and interactions, and	6-
		sensitivity analyses	
Discussion			
Key results	18	Summarise key results with reference to study objectives	10
			11
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or	12
		imprecision. Discuss both direction and magnitude of any potential bias	
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations,	10
		multiplicity of analyses, results from similar studies, and other relevant evidence	13
Generalisability	21	Discuss the generalisability (external validity) of the study results	13
Other informati	on		
	22	Circle the second of finding and the rate of the finders for the second study and if	14
Funding	22	Give the source of funding and the role of the funders for the present study and, if	14

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

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# The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019, based on Global Burden Disease Study 2019

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The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019, based on Global Burden Disease Study 2019

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Running title: Global burden of inflammatory bowel disease

# Abstract

**Objectives** We aim to provide the most updated estimates on the global burden of inflammatory bowel disease (IBD) to improve management strategies.

**Design** We extracted data from the Global Burden of Disease (GBD) 2019 database to evaluate IBD burden with different measures in 204 countries and territories from 1990 to 2019.

**Setting** Studies from the GBD 2019 database generated by population-representative data sources identified through literature review and research collaborations were included.

Participants Patients with IBD diagnosis.

**Outcomes** Total numbers, age-standardised rates of prevalence, mortality and disability-adjusted life year (DALY), and their estimated annual percentage changes (EAPCs) were the main outcomes.

**Results** In 2019, there were approximately 4.9 million cases of IBD globally, with China and the United States having the highest number of cases [911405 and 762890 respectively (66.9 and 245.3 cases per 100 000 population respectively)]. Between 1990 and 2019, the global age-standardised rates of prevalence, deaths, and DALYs decreased (EAPC = -0.66, -0.69, and -1.04, respectively). However, age-standardised prevalence rate increased in 13 out of 21 GBD regions. And a total of 147 out of 204 countries or territories experienced an increase in age-standardised prevalence rate. From 1990 to 2019, IBD prevalent cases, deaths and DALYs were higher in females than males. Higher Socio-demographic Index (SDI) was associated with higher age-standardised prevalence rates.

**Conclusions** IBD will continue to be a major public health burden due to increasing numbers of prevalent cases, deaths, and DALYs. The epidemiology trends and disease burden of IBD have changed dramatically at regional and national level, so understanding these changes would be beneficial for policy makers to tackle IBD.

**Keywords:** Inflammatory bowel disease; Global burden of disease; Prevalence; Disability-adjusted life years; Estimated annual percentage change.

# Strengths and limitations of this study

This is the most updated estimate on IBD epidemiology globally, including 204 countries some of which were not assessed before.

GBD 2019 incorporated more studies, adjusted diagnostic criteria, and further improved data reliability, hence, presenting data more representative to individuals. One of the limitations is heterogeneity in population and location between studies included.

Another limitation is the variability in study design and data collection methods also affects the precision of the estimates, which is only partially compensated in our analysis model.

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# Introduction

Inflammatory bowel diseases (IBDs), including Crohn's disease and ulcerative colitis, are debilitating and chronic inflammatory disorders of the gastrointestinal tract that have no cure.<sup>1</sup> IBD is characterised by a relapsing-remitting course and a heterogeneous clinical presentation that includes episodes of abdominal pain, chronic diarrhea, rectal bleeding, and weight loss, which are often associated with systemic symptoms such as fatigue and occasionally fever.<sup>2</sup> Because IBD can cause significant morbidity and lead to complications such as strictures, fistulas, infections, and cancer, this disorder lead to substantial health care costs and place a great stress on health care systems.<sup>3,4</sup> Although the cause of IBD remains unknown, the pathogenesis of IBD is suggested to be associated with genetic susceptibility of the host, intestinal microbiota, other environmental factors (e.g., diet, smoking, and physiological stress), and immunological abnormalities.<sup>5</sup>

Traditionally, IBD has been regarded as a disease of the western world; however, studies over the last two decades have shown a rapid increasing incidence in newly industrialized countries in the Middle East, Asia, and South America.<sup>6</sup> Conversely, IBD incident rates appear to be plateauing in the Western world in the 21st century.<sup>7</sup> These significant changes highlight the need for a comparable, consistent and systematic analysis of disease burden and trends concerning IBD in different regions and countries, which can be used to give a convincing evidence for rational allocation of resources and heath care planning in reducing the global burden of IBD.

The Global Burden of Diseases (GBD) 2019 Study, a systematical worldwide epidemiological study, assessed prevalence, morbidity, mortality, disability of 369 diseases by location, sex, age and year,<sup>8</sup> which provides a unique opportunity to understand the state of IBD. The purpose of this study was to use data from GBD 2019 study to determine the global, regional and national burden of IBD across 204 countries and territories from 1990 to 2019 by age, gender and social-development index (SDI). Our study provides updated estimates on IBD global epidemiology and provides data on some regions not assessed previously, or data-scarce locations, of which estimates mainly rely on predictive covariates or global trends with

consideration of SDI level and data from a single country.

# Methods

The general methodology of GBD 2019 has been reported in detail in previous publications.<sup>8-11</sup> In brief, GBD Study collected data from censuses, household surveys, civil registration and vital statistics, disease registries, health service use, satellite imaging, disease notifications, and other sources.<sup>9</sup> A Bayesian meta-regression modelling tool, DisMod-MR 2.1, was used to model and derive estimates of the burden under several conditions in 204 countries and territories from 1990 to 2019.<sup>9</sup> The model included all of the above available information for each disease and applied correcting process for known bias to derive country-specific estimates of prevalence and of the burden of diseases, which have been described in previous studies.<sup>8</sup> Uncertainty intervals (UIs) were generated for every metric using the 25th and 975th ordered 1000 draw values of the posterior distribution.<sup>9</sup>

We extracted from the GBD database yearly crude and age-standardised estimates of different measures of the burden of IBD from 1990 to 2019 and the respective 95% UIs via the Global Health Data Exchange (GHDx) query tool (http://ghdx.healt hdata.org/gbd-results-tool). For the GBD 2019 assessment, IBD was defined according to 10th revisions of the International Classification of Diseases (ICD-10: K50-K51.319, K51.5-K52, K52.8-K52.9). The variables obtained from the database included prevalent cases, death numbers, disability-adjusted life-years (DALYs) numbers, years of life lost (YLLs) numbers, years lived with disability (YLDs) numbers, and their corresponding age-standardised rates (ASRs) at the global, regional, and national levels. Prevalence rate (per 100 000) was defined as aggregated cases (including new cases and previously diagnosed cases) divided by the population size; mortality rate (per 100 000) was defined as the number of annual deaths divided by the total population size, and DALYs were calculated as the sum of YLLs and YLDs. These data were stratified by age (1-4, 5-9, every 5-year age group up to 95 years, and 95 years and older), calendar year (1990-2019), region, and country (or territory). Geographically, the world was classified into 21 regions. Moreover, 204

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countries and territories were divided into five categories, according to the socio-demographic index (SDI). SDI was constructed based on the geometric mean of three indicators: the total fertility rate, income per capita, and average years of schooling among people aged 15 years or older, ranging from zero to one.<sup>12</sup> The larger the SDI, the more developed the country.<sup>13</sup>

Estimated average percentage change (EAPC) was used to evaluate the trends in age-standardised rates of prevalence, death, and DALY over a specific period. The natural logarithm of age-standardised rate is assumed to be linear along with time; that is,  $y = \alpha + \beta x + \varepsilon$ , where  $y = \ln$  (rate), x = calendar year, and  $\varepsilon =$  error term. Based on this formula,  $\beta$  represents the positive or negative age-standardised rate trends. EAPC was calculated as  $100 \times (\exp (\beta) - 1)$ , and its 95% confidence interval (CI) could also be calculated from this model.<sup>14</sup> The age-standardised indicator was recognized to be in an increasing trend if the 95% CI of the corresponding EAPC estimation > 0, to be a decreasing trend if the 95% CI < 0, and to be stable if the 95% CI included 0. All statistical analyses and visualizations were conducted using R statistical software program (version 4.1.0). *P* value < 0.05 was considered statistically significant.

Because the study was based on publicly available dataset, this study was exempted by the ethics committee of the Third Xiangya Hospital of Central South University. This study followed the guideline of cross-sectional study described in the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER).<sup>15</sup>

# Patient and public involvement

Patients and/or the public were not involved in the study design, or data interpretation, or manuscript drafting, or dissemination plans of this research.

### Results

## **Prevalence of IBD**

Globally, IBD accounted for 3.32 million estimated cases (95% UI 2.90 to 3.79) in 1990 and 4.90 million cases (4.35 to 5.50) in 2019, corresponding to an increase of 47.45% between 1990 and 2019 (Supplementary Table 1 and Figure 1A). The global age-standardised prevalence rate of IBD decreased from 73.23 per 100 000 population

(63.86 to 83.63) in 1990 to 59.25 per 100 000 population (52.78 to 66.47) in 2019 with the EAPC being -0.66 (95% CI -0.75 to -0.57) (Table 1; Figure 1B, 1C; and Figure 2A).

At regional level in 2019, the largest number of prevalent case was observed in Western Europe [1.03 million (95% UI 0.93 to 1.13)] (Supplementary Table 1), and the highest age-standardised prevalence rate was observed in High-income Asia Pacific [210.54 per 100 000 population (183.69 to 239.68)] (Figure 3A). From 1990 to 2019, an increase in total prevalent cases was seen across most of GBD regions, as shown in Figure 4A. However, age-standardised prevalence rate increased in 13 GBD regions and decreased in 5 regions, with the highest increasing trend in East Asia [EAPC = 2.79 (95% CI 2.41 to 3.18)] and the largest decrease in High-income North America [EAPC = -1.32 (-1.75 to -0.89)] (Figure 2B).

At national and territorial level in 2019, China and United States of America had the highest number of prevalent cases [911405 (95% UI 776347 to 1069533), 762890 (712357 to 813654), respectively] (Supplementary Table 2 and Figure 1A). In 2019, the highest age-standardised prevalence rates of IBD were observed in Norway [498.95 (429.41 to 570.55)] (Supplementary Table 3 and Figure 1B). Between 1990 and 2019, age-standardised prevalence rates were found in an increasing trend in 147 countries or territories, with the greatest increase in Taiwan (Province of China) [EAPC = 4.29 (95% CI 3.71 to 4.86)] (Figure 1C).

Overall, the global number of prevalent cases was higher in females than males in 2019 (Supplementary Table 1). While the age-standardised prevalence rate was similar between males and females in 2019 (Table 1). The highest peak of IBD prevalent cases and age-specific prevalence rate occurred at age 50-54 years and 60-64 years respectively both in females and males in 2019 (Figure 5A). From 1990 to 2019, the number of prevalent cases continued to increase in both sexes and was higher in females than males in all years. The age-standardised prevalence rate decreased in both sexes during the same period (Supplementary Figure 1).

# **Death of IBD**

In 2019, there were 40998 deaths (95% UI 34933 to 44661) due to IBD globally,

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which increased by 68.75% (47.12 to 94.62) from 24295 (20258 to 28376) in 1990 (Supplementary Table 1 and Supplementary Figure 2). The global age-standardised death rate was 0.54 per 100 000 population (0.46 to 0.59) in 2019, which decreased from 0.67 per 100 000 population (0.57 to 0.78) in 1990, with the EAPC being -0.69 (95% CI -0.81 to -0.57) (Table 1, Figure 2C, and Supplementary Figure 3-4).

At regional level, Western Europe was also the region with the largest number of deaths [11981 (95% UI 9244 to 13315)] and the highest age-standardised death rate [1.11 per 100 000 population (0.87 to 1.23)] in 2019 (Supplementary Table 1 and Figure 3B). From 1990 to 2019, most of GBD regions experienced an increase in total deaths of IBD (Figure 4B). However, age-standardised death rate declined in more than 60% of GBD regions, such as High-income Asia Pacific [EAPC = -4.29 (95% CI -4.64 to -3.93)], East Asia [EAPC = -3.98 (-4.33 to -3.63)], and Andean Latin America [EAPC = -2.74 (-3.16 to -2.32)] (Figure 2D).

At national and territorial level in 2019, China and United States of America also had the highest number of death cases [4676 (95% UI 3774 to 5461), 5910 (4622 to 6464), respectively] (Supplementary Table 2 and Supplementary Figure 2). Netherlands had the highest age-standardised death rate in 2019 [2.08 per 100 000 population (1.58 to 2.40)] (Supplementary Table 3 and Supplementary Figure 3). Between 1990 and 2019, more than 60% countries or territories experienced a decrease in age-standardised death rate of IBD, and the highest decrease was noted in Republic of Korea [EAPC = -7.96 (-8.67 to -7.25)] (Supplementary Figure 4).

Globally, death cases were higher in females than males in 2019 (Supplementary Table 1). And the age-standardised death rate was 0.56 per 100 000 population (95% UI 0.45 to 0.62) in males and 0.52 per 100 000 population (0.43 to 0.58) in females (Table 1). In 2019, the highest number of deaths was observed in males aged 80-84 years and females aged 85-89 years, and the highest age-specific death rate was observed in the oldest age group ( $\geq$ 95 years) for both sexes (Figure 5B). Between 1990 and 2019, the deaths of IBD also continued to increase in both sexes and were higher in females than males in all years. However, the age-standardised death rate decreased in both sexes from 1990 to 2019 (Supplementary Figure 5).

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# **DALY of IBD**

Globally, 1.62 million (95% UI 1.36 to 1.92) DALYs, 0.73 million (0.49 to 0.99) YLDs, and 0.90 million (0.78 to 1.00) YLLs were due to IBD in 2019, which increased from 1990 by 29.98%, 47.96%, and 18.31%, respectively (Supplementary Table 1, Supplementary Table 4, and Supplementary Figure 6-9). The global age-standardised DALY rate decreased from 27.20 per 100 000 population (21.70 to 32.39) in 1990 to 20.15 per 100 000 population (16.86 to 23.71) in 2019, with the EAPC being -1.04 (95% CI -1.06 to -1.01) (Table 1, Figure 2E, and Supplementary Figure 10-11). The same decreased trend was found in the age-standardised YLL rate [EAPC = -1.33 (-1.37 to -1.30)] and the age-standardised YLD rate [EAPC = -0.62 (-0.70 to -0.53)] (Supplementary Table 5 and Supplementary Figure 12-14).

At regional level, Western Europe had the largest DALYs [310691 (95% UI 255911 to 371106)] in 2019 (Supplementary Table 1). The highest age-standardised DALY rates in 2019 were observed in High-income North America [51.27 per 100 000 population (95% UI 40.90 to 62.35)] (Figure 3C). As shown in Figure 4C, an increase in total DALYs was found across most of GBD regions from 1990 to 2019. While most of the GBD regions had a decreased trend in age-standardised DALY rate, with the largest decrease in Andean Latin America [EAPC = -3.68 (95% CI -4.17 to -3.18)] (Figure 2F).

At national and territorial level in 2019, China and United States of America had the highest number of DALYs [232464 (95% UI 179903 to 291090), 215289 (175991 to 256059), respectively] (Supplementary Table 2 and Supplementary Figure 6). The highest age-standardised DALY rate was observed in Norway in 2019 [80.37 per 100 000 population (56.25 to 108.56)] (Supplementary Table 3 and Supplementary Figure 10). From 1990 to 2019, more than 65% countries or territories experienced a decrease in age-standardised DALY rate of IBD, and the highest decrease was founded in Peru [EAPC = -5.08 (95% CI -5.69 to -4.47)] (Supplementary Figure 11).

In 2019, the global number of DALYs was also higher in females than males (Supplementary Table 1). The age-standardised DALY rate was 20.6 per 100 000 population (95% UI 17.2 to 24.3) in males and 19.7 per 100 000 population (16.2 to

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 23.5) in females (Table 1). And the number of DALYs was highest in males aged 50-54 years and females aged 55-59 years (Figure 5C). The highest number of YLLs occurred in the group aged 65-69 years [75234, (63865 to 83022)], while the highest number of YLDs occurred in the group aged 45-49 years [80776, (53187 to 113688)] (Supplementary Figure 15). As with prevalent cases and deaths, the DALYs continued to increase in both sexes and were higher in females than males in all years from 1990 to 2019. And the age-standardised DALY rate decreased in both sexes between 1990 and 2019 (Supplementary Figure 16).

# **Burden of IBD by SDI**

Higher SDI was associated with higher age-standardised prevalence rates of IBD, with values that were higher than the global rate in high and high-middle SDI quintiles, and lower than the global rate in the other three SDI quintiles (Table 1). High SDI quintile had the highest age-standardised prevalence rate, death rate and DALY rate in 2019. Between 1990 and 2019, age-standardised death rate and age-standardised DALY rate decreased in all SDI quintiles except the high SDI quintile, where it increased [EAPC = 0.82 (95% CI 0.64 to 1.01)] and remained stable [EAPC = 0.00 (-0.06 to 0.05)], respectively (Table 1 and Figure 2C, 2E). Whereas, age-standardised prevalence rate decreased in high and high-middle SDI quintiles and increased in other three SDI quintiles during the observation period (Table 1 and Figure 2A).

The observed global and regional age-standardised prevalence, death, and DALY rates in relation to SDI are shown in Figure 6, expressed in the annual time series from 1990 to 2019. Regions generally followed the trend of increased death and DALY rates with higher SDI. However, more than 60% of the regions showed an increase trend in age-standardised prevalence rate during this study period. At the global level, the age-standardised prevalence, death, and DALY rates dropped with increasing SDI values but above the expected levels during the past 30 years.

# Discussion

In this study, we comprehensively analyzed the temporal trend in IBD burden at the global, regional, and national levels. GBD 2019 reported 4.90 million IBD estimates globally in 2019 and 4.79 million in 2017, while GBD 2017 reported 6.85 million in

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2017.<sup>16</sup> The discrepancy could be partly attributed to the improved specificity of case definition since GBD 2019 adjusted administrative data inputs toward expected stringent diagnosis using previously published IBD data with ICD codes.<sup>11</sup> In addition, GBD 2019 improved model fit prevalence and incidence by setting more plausible bounds on excess mortality rate and passing less-informative priors to lower levels of the geographical hierarchy in DisMod-MR 2.1.<sup>11</sup> Indeed, GBD 2019 study provides the most current overview of the burden of IBD. It incorporated more data sources, with some carried out in regions not previously assessed, providing updated estimates on IBD global epidemiology.<sup>11</sup> Besides, GBD 2019 updated the bias adjustment, which further improved the data reliability.<sup>11</sup> After these adjustments, our study confirmed two epidemiological shifts in IBD since 1990. The number of prevalent cases increased globally since 1990, with China and United States of America in the top number of cases. The age-standardised rates of death and DALYs decreased, implying significant improvements in IBD management. The changing trend and geographical patterns made implications for policy-makers to prioritise IBD management, especially in newly industrialised countries.

The highest age-standardised prevalence rates were observed in High-income North America, Western Europe, and High-income Asia Pacific. The pattern was also shown in the high SDI countries such as Norway and Canada. This is consistent with several previous meta-analysis,<sup>6,17</sup> and might correlate with several risk factors of IBD.<sup>18,19</sup> Deeply processed food with low fiber, high fat, and sugar is a risk factor for decreased microbial species.<sup>20-22</sup> Others include smoking, hygiene, latitude resulting in vitamin D/sun exposure.<sup>23,24</sup> Though the largest reduction in age-standardised prevalence rate was also observed in High-income North America, which was consistent with some of the previous reports,<sup>6,25</sup> indicating the shift of the epidemiological stages of IBD in western countries.<sup>26,27</sup>

Despite increasing numbers of prevalent cases, the global age-standardised prevalence rate showed a decreasing trend. The discrepancy reflects denominator effects of increasing global population and age-specific effects.<sup>28</sup> Coward S and his colleagues<sup>29</sup> reported that the prevalence rate in elderly and adults was ten times more

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than pediatric in Canada. The trend in age-standardised prevalence rate differed substantially between the GBD regions. The highest increasing trend was observed in East Asia. At the national level, China, with a total number of 911405 IBD patients, was a prominent contribution to the total numbers of global IBD. The pattern is consistent with several previous report,<sup>6,30</sup> which is related mainly to urbanization, industrialization, and some area cultural westernization in China.<sup>31</sup> With epidemiological surveillance strategies shifting from paper-record to electronic healthcare databases using International Classification of Disease (ICD) codes, advances in health-care facilities like the implementation of endoscopy,<sup>32</sup> detection and diagnosis of IBD also increased.

IBD causes body disability.<sup>33,34</sup> Consistent with the previous study,<sup>4</sup> the age-standardised DALY and mortality rate showed a decreasing trend globally, especially in East Asia, likely resulting from the improved treatment strategy such as early use of biological agents and patient support programs.<sup>35</sup> The introduction of biological agents improved life quality and reduced surgery rate.<sup>30,36</sup> Unfortunately, the cost of biologic therapy is considerable, estimated at more than US\$25,000 per year.<sup>37</sup> More attention should be paid in optimizing patient selection, dosing and withdrawal.

There are some limitations of our study. First, the accuracy of the estimated IBD burden largely depends on the availability and quality of data acquired, which could be partially compensated by statistical methods. However, in regions with scarce data, especially in low-SDI countries, estimates could only rely on predictive covariates or global trends with consideration of SDI level and data from a single country, which is less representative. Extra cautions should be made when interpreting data in these areas. Additional high-quality population-based studies should be done, especially in countries with scarce data. Second, estimates discrepancies compared to some of the previously published studies could be further improved, although GBD 2019 has improved model fit to prevalence and incidence, partly overcoming the discrepancies. For example, the prevalence rate in Canada was only 46 to 57 per 100,000 population in GBD 2017. However, around 520 per 100,000 population was reported by a

previous large population-based study in Canada.<sup>38</sup> GBD 2019 reported 357.73 in 100,000 population after adjustment. Third, UC-specific and CD-specific trends were not assessed due to the lack of relevant data. The association between IBD and certain risk factors should also be included in the future. Nevertheless, GBD 2019 provided the most up-to-date estimated IBD global epidemiology for the last three decades and implications for new hypotheses. It has covered 204 countries. Therefore, it generates more representative data and can compensate for biases in individual literatures.

# Conclusions

Despite the reduction in age-standardised rate of prevalence, death, and DALY, IBD will continue to be a major public health burden due to increasing numbers of prevalent cases globally. However, the trend has shifted substantially since 1990. When the age-standardised prevalence rate rapidly increases in newly industrialized countries especially in east Asia, the incidence has been stabilized or even decreased in western countries like high-income north America. The prevalence of IBD in newly industrialized countries is quickly approaching western countries. More systematic epidemiologic monitoring strategies, especially in low-SDI countries and risk factors integrated into the estimate model of the GBD Study would further facilitate IBD management. Our findings might help some policymakers to justify medical resources allocation, especially in low SDI countries.

## Abbreviations

EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; SDI, socio-demographic index; GBD, Global Burden of Disease, Injuries, and Risk Factors Study; DALYs, disability adjusted life years; YLDs, years of life lived with disability; YLLs, years of life lost; IHME, Institute for Health Metrics and Evaluation; GATHER, Guidelines for Accurate and Transparent Health Estimates Reporting; ASR, age-standardised rate; UI, uncertainty interval; CI, confidence interval.

## Ethics approval and consent to participate

This study did not involve human participants and the study did not need ethics

 approval because it used publicly available data.

#### **Consent for publication**

Not applicable.

# Data availability statement

Data are available in a public, open access repository. Data are publicly available at the Institute for Health Metrics and Evaluation (IHME) website (http://www.ghdx.healthdata.org/gbd-results-tool).

### **Declaration of interests**

The authors declare no conflict of interests.

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#### Disclaimer

The funding source had no role in the design, conduct or reporting of the study.

# **Author Contributions**

Study concept and design: Decai Zhang and Rui Wang. Acquisition of data: Zhaoqi Li and Shaojun Liu. Data analysis and interpretation: Rui Wang RW, Zhaoqi Li, Shaojun Liu, and Decai Zhang. Drafting the manuscript: Decai Zhang and Rui Wang. Critical revision of manuscript: all authors. All authors had full access to all the data in the study and had final responsibility for the decisions to submit for publication.

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# References

- 1. Seyed Tabib NS, Madgwick M, Sudhakar P, Verstockt B, Korcsmaros T, Vermeire S. Big data in IBD: big progress for clinical practice. *Gut.* 2020;69(8):1520-1532.
- Magro F, Gionchetti P, Eliakim R, et al. Third European Evidence-based Consensus on Diagnosis and Management of Ulcerative Colitis. Part 1: Definitions, Diagnosis, Extra-intestinal Manifestations, Pregnancy, Cancer Surveillance, Surgery, and Ileo-anal Pouch Disorders. J Crohns Colitis. 2017;11(6):649-670.
- 3. Agrawal M, Spencer EA, Colombel JF, Ungaro RC. Approach to the Management of Recently Diagnosed Inflammatory Bowel Disease Patients: A User's Guide for Adult and Pediatric Gastroenterologists. *Gastroenterology*. 2021;161(1):47-65.
- 4. Piovani D, Danese S, Peyrin-Biroulet L, Bonovas S. Inflammatory bowel disease: estimates from the global burden of disease 2017 study. *Aliment Pharmacol Ther*. 2020;51(2):261-270.
- Guan Q. A Comprehensive Review and Update on the Pathogenesis of Inflammatory Bowel Disease. *J Immunol Res.* 2019;2019:7247238.
- Ng SC, Shi HY, Hamidi N, et al. Worldwide incidence and prevalence of inflammatory bowel disease in the 21st century: a systematic review of population-based studies. *Lancet*. 2017;390(10114):2769-2778.
- 7. Khalili H. The Changing Epidemiology of Inflammatory Bowel Disease: What Goes Up May Come Down. *Inflamm Bowel Dis.* 2020;26(4):591-592.
- Collaborators GBDD. Global age-sex-specific fertility, mortality, healthy life expectancy (HALE), and population estimates in 204 countries and territories, 1950-2019: a comprehensive demographic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;396(10258):1160-1203.
- Diseases GBD, Injuries C. 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.* 2020;396(10258):1204-1222.
- Collaborators GBDUHC. Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 2020;396(10258):1250-1284.
- Collaborators GBDRF. Global burden of 87 risk factors in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.*

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1		
2 3		
4	10	2020;396(10258):1223-1249.
5	12.	Collaborators GBDM. Global, regional, and national under-5 mortality, adult mortality,
6 7		age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global
8	13.	Burden of Disease Study 2016. <i>Lancet.</i> 2017;390(10100):1084-1150. Alcohol GBD, Drug Use C. The global burden of disease attributable to alcohol and drug use
9	13.	in 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of
10 11		Disease Study 2016. <i>Lancet Psychiatry</i> . 2018;5(12):987-1012.
12	14	• • • • • • • • •
13	14.	Deng Y, Zhao P, Zhou L, et al. Epidemiological trends of tracheal, bronchus, and lung cancer at the global regional and national levels: a nonvlation based study. <i>L Hamstel Oncol</i>
14 15		at the global, regional, and national levels: a population-based study. <i>J Hematol Oncol</i> . 2020;13(1):98.
16	15	
17	15.	Stevens GA, Alkema L, Black RE, et al. Guidelines for Accurate and Transparent Health
18 19	16	Estimates Reporting: the GATHER statement. <i>Lancet.</i> 2016;388(10062):e19-e23. Collaborators GBDIBD. The global, regional, and national burden of inflammatory bowel
20	16.	
21		disease in 195 countries and territories, 1990-2017: a systematic analysis for the Global
22	17	Burden of Disease Study 2017. Lancet Gastroenterol Hepatol. 2020;5(1):17-30.
23 24	17.	Ye Y, Manne S, Treem WR, Bennett D. Prevalence of Inflammatory Bowel Disease in
25		Pediatric and Adult Populations: Recent Estimates From Large National Databases in the
26	10	United States, 2007-2016. <i>Inflamm Bowel Dis.</i> 2020;26(4):619-625.
27 28	18.	de Souza HSP, Fiocchi C, Iliopoulos D. The IBD interactome: an integrated view of aetiology,
29	10	pathogenesis and therapy. <i>Nat Rev Gastroenterol Hepatol.</i> 2017;14(12):739-749.
30	19.	Ng SC, Tsoi KK, Kamm MA, et al. Genetics of inflammatory bowel disease in Asia:
31	20	systematic review and meta-analysis. <i>Inflamm Bowel Dis.</i> 2012;18(6):1164-1176.
32 33	20.	Ananthakrishnan AN, Khalili H, Konijeti GG, et al. A prospective study of long-term intake
34		of dietary fiber and risk of Crohn's disease and ulcerative colitis. <i>Gastroenterology</i> . 2013;145(5):970-977.
35	21	
36 37	21.	Suez J, Korem T, Zeevi D, et al. Artificial sweeteners induce glucose intolerance by altering
38	22.	the gut microbiota. <i>Nature</i> . 2014;514(7521):181-186.
39	22.	Ananthakrishnan AN. Environmental risk factors for inflammatory bowel diseases: a review.
40 41	23.	<i>Dig Dis Sci.</i> 2015;60(2):290-298. Kaplan GG, Ng SC. Understanding and Preventing the Global Increase of Inflammatory
42	23.	Bowel Disease. <i>Gastroenterology</i> . 2017;152(2):313-321 e312.
43	24	Piovani D, Danese S, Peyrin-Biroulet L, Bonovas S. Environmental, Nutritional, and
44	24.	
45 46		Socioeconomic Determinants of IBD Incidence: A Global Ecological Study. <i>J Crohns Colitis</i> .
47	25.	2020;14(3):323-331. Zhao M, Gonczi L, Lakatos PL, Burisch J. The Burden of Inflammatory Bowel Disease in
48	23.	Europe in 2020. <i>J Crohns Colitis</i> . 2021;15(9):1573-1587.
49 50	26.	Kaplan GG, Windsor JW. The four epidemiological stages in the global evolution of
51	20.	inflammatory bowel disease. <i>Nat Rev Gastroenterol Hepatol.</i> 2021;18(1):56-66.
52	27.	Kaplan GG. The global burden of IBD: from 2015 to 2025. <i>Nat Rev Gastroenterol Hepatol.</i>
53 54	<i>∠</i> /.	2015;12(12):720-727.
55	28.	Collaborators GBDM. Global, regional, and national age-sex-specific mortality and life
56	20.	expectancy, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017.
57 58		<i>Lancet.</i> 2018;392(10159):1684-1735.
59	29.	Coward S, Clement F, Benchimol EI, et al. Past and Future Burden of Inflammatory Bowel
60	<i>L</i> J.	coward 5, crement 1, benchmor E1, et al. 1 ast and Future Burdell 01 Initalinitatory BOWel

**BMJ** Open

Diseases Based on Modeling of Population-Based Data. *Gastroenterology*. 2019;156(5):1345-1353 e1344.

- Qiu Y, Ren W, Liu Y, Chen WE, Pan XH, Ren JJ. Disease burden of inflammatory bowel disease in China from 1990 to 2017: Findings from the global burden of diseases 2017. *EClinicalMedicine*. 2020;27:100544.
- 31. Su HJ, Chiu YT, Chiu CT, et al. Inflammatory bowel disease and its treatment in 2018: Global and Taiwanese status updates. *J Formos Med Assoc.* 2019;118(7):1083-1092.
- Pavlovic-Calic N, Salkic NN, Gegic A, Smajic M, Alibegovic E. Crohn's disease in Tuzla region of Bosnia and Herzegovina: a 12-year study (1995-2006). *Int J Colorectal Dis.* 2008;23(10):957-964.
- Shafer LA, Sofia MA, Rubin DT, et al. An International Multicenter Comparison of IBD-Related Disability and Validation of the IBDDI. *Clin Gastroenterol Hepatol.* 2021;19(12):2524-2531.
- 34. Marinelli C, Zingone F, Inferrera M, et al. Factors associated with disability in patients with ulcerative colitis: A cross-sectional study. *J Dig Dis.* 2020;21(2):81-87.
- 35. Jones JL, Nguyen GC, Benchimol EI, et al. The Impact of Inflammatory Bowel Disease in Canada 2018: Quality of Life. *J Can Assoc Gastroenterol*. 2019;2(Suppl 1):S42-S48.
- Frolkis AD, Lipton DS, Fiest KM, et al. Cumulative incidence of second intestinal resection in Crohn's disease: a systematic review and meta-analysis of population-based studies. *Am J Gastroenterol.* 2014;109(11):1739-1748.
- 37. Marchetti M, Liberato NL. Biological therapies in Crohn's disease: are they cost-effective? A critical appraisal of model-based analyses. *Expert Rev Pharmacoecon Outcomes Res.* 2014;14(6):815-824.
- Benchimol EI, Manuel DG, Guttmann A, et al. Changing age demographics of inflammatory bowel disease in Ontario, Canada: a population-based cohort study of epidemiology trends. *Inflamm Bowel Dis.* 2014;20(10):1761-1769.

# **Figure legends**

**Figure 1.** The global prevalence burden of IBD in 204 countries and territories. (A) The absolute number of IBD prevalent cases in 2017. (B) The age-standardised prevalence rate (per 100 000 population) of IBD in 2017. (C) The EAPC of age-standardised prevalence rate for IBD between 1990 and 2019.

EAPC=estimated annual percentage change. IBD=inflammatory bowel disease.

**Figure 2.** The EAPCs in age-standardised rates of prevalence (A, B), deaths (C, D), and DALYs (E, F) due to IBD from 1990 to 2019, both sexes, by GBD region, and by SDI quintile.

DALYs=disability adjusted life years. EAPC=estimated annual percentage change. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Socio-demographic Index.

**Figure 3.** The age-standardised rates of prevalence (A), deaths (B), and DALYs (C) due to IBD by sex, across 21 regions, in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the age-standardised rates.

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DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

**Figure 4.** The absolute number of prevalent cases (A), deaths (B), and DALYs (C) due to IBD for all GBD regions from 1990 to 2019.

DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease.

**Figure 5.** Age patterns by sex of the total number and age-standardised rates of prevalent cases (A), deaths (B), and DALYs (C) due to IBD at the global level in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the number of cases. Shading indicates the 95% UI for the rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

**Figure 6.** The age-standardised rates of IBD prevalence (A), deaths (B), and DALYs globally and for 21 GBD regions by SDI from 1990 to 2019.

The expected age-standardised rates in 2019 based solely on SDI were represented by the black line. For each region, points from left to right depict estimates from each year from 1990 to 2019. DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Socio-demographic Index.



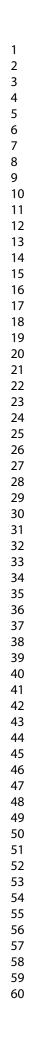
# **Table 1** Age-standardised prevalence, death and DALY rates for inflammatory bowerdisease (IBD) in 1990 and 2019 and their temporal trends from 1990 to 2019

11	disease (1	BD) in 1990	and 2019 ar	nd their tem	poral trends	s from 1990	to 2019		
12 13	Age-stand	lardised prevaler	ice rate	Age-standardized death rate			Age-standardized DALY rate		
14 Characteristics 15	per 100,000 population			per 100,000 population			per 100,000 population		
	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.
16 <del>17</del>	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)
18									
18 lobal	73.23 (63.86	59.25 (52.78	-0.66 (-0.75	0.67 (0.57	0.54 (0.46	-0.69 (-0.81	27.20 (21.70	20.15 (16.86	-1.04 (-1.06
20	to 83.63)	to 66.47)	to -0.57)	to 0.78)	to 0.59)	to -0.57)	to 32.39)	to 23.71)	to -1.01)
21 2g <sub>ex</sub>									
23	71.52 (62.12	59.30 (52.60	-0.56 (-0.64	0.69 (0.56	0.56 (0.45	-0.78 (-0.83	27.40 (21.78	20.64 (17.16	-0.99 (-1.01
2 <sub>1</sub> Iale	to 81.89)	to 66.91)	to -0.49)	to 0.88)	to 0.62)	to -0.72)	to 33.22)	to 24.31)	to -0.97)
25 26	75.01 (65.67	59.33 (52.89	-0.74 (-0.85	0.63 (0.50	0.52 (0.43	-0.64 (-0.80	27.09 (20.30	19.70 (16.16	-1.09 (-1.12
2 <sup>5</sup> / <sub>2<sup>5</sup>/<sub>e</sub>male</sub>									
28 SDL quintile	to 85.45)	to 66.18)	to -0.64)	to 0.74)	to 0.58)	to -0.47)	to 32.42)	to 23.49)	to -1.06)
29 <sup>DI</sup> quintile	200.92	102 14							
30 3 <sub>High</sub>	200.83	183.14	-0.34 (-0.43	0.72 (0.65	0.84 (0.69	0.82 (0.64	43.95 (34.13	42.93 (33.66	0.00 (-0.06
32	(176.43  to)	(166.58 to	to -0.24)	to 0.85)	to 0.92)	to 1.01)	to 55.06)	to 53.08)	to 0.05)
33	226.92)	201.17)	0.20 ( 0.47	0.52 (0.46	0.20 (0.24	1 17 ( 1 20	05.00 (01.04	10.24 (15.50	1 10 ( 1 17
34 3 <sup>High-middle</sup>	82.41 (71.42	73.85 (65.38	-0.32 (-0.47	0.52 (0.46	0.38 (0.34	-1.17 (-1.32	25.92 (21.34	19.34 (15.59	-1.12 (-1.17
36	to 95.06)	to 83.09)	to -0.18)	to 0.60)	to 0.43)	to -1.02)	to 30.93)	to 23.73)	to -1.07)
3 <b>™</b> iddle	22.50 (19.00	30.57 (25.70	1.25 (1.04 to	0.57 (0.40	0.31 (0.26	-2.44 (-2.59	18.11 (14.29	11.61 (9.70	-1.63 (-1.68
38	to 26.62)	to 36.01)	1.47)	to 0.74)	to 0.34)	to -2.29)	to 21.72)	to 13.71)	to -1.58)
39 4 <del>þ</del> ow-middle	19.02 (15.75	20.94 (17.41	0.52 (0.40 to	0.74 (0.47	0.48 (0.38	-1.75 (-1.90	23.29 (16.18	15.37 (12.47	-1.58 (-1.65
41	to 22.93)	to 25.11)	0.64)	to 1.06)	to 0.58)	to -1.60)	to 30.53)	to 18.32)	to -1.51)
4 <sub>2ow</sub>	12.40 (10.21	12.85 (10.64	0.29 (0.19 to	0.67 (0.48	0.55 (0.43	-0.80 (-0.86	22.19 (14.49	17.19 (13.57	-0.94 (-0.99
43	to 15.06)	to 15.81)	0.39)	to 0.99)	to 0.70)	to -0.74)	to 29.80)	to 21.70)	to -0.89)
44 BD region									
45 Andean Latin 46	16.55 (14.08	17.09 (14.60	0.06 (0.03 to	0.54 (0.36	0.26 (0.20	-2.74 (-3.16	26.36 (15.78	9.83 (7.75	-3.68 (-4.17
4≯merica	to 19.39)	to 19.88)	0.10)	to 0.71)	to 0.32)	to -2.32)	to 38.96)	to 12.19)	to -3.18)
48 49	108.86	156.30	0.83 (0.61 to	0.54 (0.47	0.72 (0.53	1.77 (1.41	26.19 (20.48	34.98 (26.87	0.93 (0.75
49 Australasia 50	(92.21 to	(137.65 to	1.05)	to 0.64)	to 0.83)	to 2.13)	to 32.91)	to 44.64)	to 1.12)
51	126.63)	177.07)	,	,			,	,	,
52 5Saribbean	27.93 (23.96	26.31 (22.13	-0.05 (-0.13	0.56 (0.44	0.42 (0.31	-1.24 (-1.41	23.38 (16.68	18.21 (13.08	-0.91 (-1.06
53 <sup>unocean</sup> 54	to 32.85)	to 31.28)	to 0.03)	to 0.69)	to 0.53)	to -1.08)	to 34.05)	to 24.76)	to -0.76)
55 Sentral Asia	76.86 (64.98	78.72 (66.39	0.09 (0.05 to	0.39 (0.30	0.32 (0.28	-1.00 (-1.12	26.11 (21.03	22.26 (18.04	-0.70 (-0.76
56	to 91.56)	to 93.40)	0.12)	to 0.46)	to 0.37)	to -0.89)	to 31.71)	to 27.31)	to -0.65)
57 58	208.99	160.49	-1.25 (-1.64	0.46 (0.43	0.47 (0.40	0.30 (0.17	46.28 (36.16	35.84 (27.66	-1.08 (-1.37
58 59 <sup>entral Europe</sup>	(179.90 to	(145.58 to	-1.23 (-1.04 to -0.87)	to 0.52)	to 0.55)	to 0.44)	40.28 (30.10 to 57.91)	to 44.67)	-1.08 (-1.37 to -0.78)
60	243.75)	176.95)	10 -0.07)	10 0.52)	00.55	10 0.44)	w <i>31.71</i> )	10 ++.07)	10-0.70)

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2 <sup>3</sup> Central Latin	37.84 (32.42	32.59 (27.93	-0.49 (-0.58	0.32 (0.28	0.37 (0.30	0.98 (0.68	14.84 (12.69	14.68 (12.25	0.32 (0.08
4 5 <sup>America</sup>	to 44.16)	to 38.07)	to -0.41)	to 0.35)	to 0.43)	to 1.28)	to 17.31)	to 17.41)	to 0.56)
6Central	9 <b>22</b> (( 7( to	9 21 (6 90	0.14 ( 0.22	0.72 (0.51	0 (0 (0 45	0 (0 ( 0 77	22 26 (14 75	17 77 (12 09	0.70 ( 0.99
7 <sub>Sub-Saharan</sub>	8.22 (6.76 to	8.21 (6.80	-0.14 (-0.33	0.72 (0.51	0.60 (0.45	-0.69 (-0.77	22.26 (14.75	17.77 (12.98	-0.79 (-0.88
8 9 <sup>Africa</sup>	10.11)	to 10.11)	to 0.06)	to 1.03)	to 0.83)	to -0.60)	to 32.74)	to 24.27)	to -0.70)
10 11 <sup>East Asia</sup>	22.51 (18.72	46.22 (39.36	2.79 (2.41 to	0.86 (0.59	0.31 (0.25	-3.98 (-4.33	24.23 (17.74	13.08 (10.31	-2.31 (-2.48
	to 26.72)	to 53.98)	3.18)	to 1.14)	to 0.35)	to -3.63)	to 29.83)	to 16.19)	to -2.15)
12 1≩astern Europe	88.07 (75.40	82.82 (70.77	0.01 (-0.11 to	0.49 (0.38	0.51 (0.43	-0.25 (-0.53	27.68 (21.86	26.67 (21.96	-0.30 (-0.45
14	to 103.25)	to 96.45)	0.14)	to 0.56)	to 0.58)	to 0.04)	to 33.71)	to 32.46)	to -0.14)
1 <u>∎</u> astern	6.27 (5.25 to	7.21 (6.01	0.46 (0.42 to	0.72 (0.52	0.69 (0.50	-0.12 (-0.20	22.58 (16.13	19.44 (14.69	-0.46 (-0.54
16 Sub-Saharan 17	7.68)	to 8.82)	0.50)	to 1.01)	to 0.93)	to -0.05)	to 33.35)	to 25.63)	to -0.39)
18 <sup>frica</sup>	,			,	,	,	,	,	,
19 2 <sup>High-income</sup>	126.18	210.54	1.04 (0.68 to	0.40 (0.24	0.13 (0.11	-4.29 (-4.64	26.43 (19.87	34.55 (23.75	0.35 (0.11
20 ° 2Asia Pacific	(105.73 to	(183.69 to	1.41)	to 0.47)	to 0.18)	to -3.93)	to 33.86)	to 46.76)	to 0.60)
22	149.32)	239.68)							
23 24 <sup>High-income</sup>	346.93	209.60	-1.32 (-1.75	0.68 (0.61	0.97 (0.79	1.43 (1.15	65.62 (48.61	51.27 (40.90	-0.46 (-0.72
24 2§Jorth America	(303.63 to	(195.48 to	to -0.89)	to 0.83)	to 1.05)	to 1.72)	to 84.95)	to 62.35)	to -0.20)
26	392.66)	224.46)							
2North Africa	36.27 (31.06	48.26 (40.98	0.97 (0.84 to	0.34 (0.24	0.26 (0.22	-0.86 (-0.93	14.36 (10.79	13.26 (10.60	-0.30 (-0.34
28 Middle	to 41.91)	to 56.94)	1.10)	to 0.49)	to 0.30)	to -0.80)	to 18.73)	to 16.47)	to -0.25)
29 East 30	4.34 (3.51 to	3.87 (3.16	0.54 ( 0.72	0.63 (0.42	0.44 (0.33	-1.41 (-1.50	20.60 (13.34	14.93 (10.45	1 20 ( 1 29
3 <sub>b</sub> <sub>ceania</sub> 32	4.34 (3.31 to 5.20)	to 4.71)	-0.54 (-0.72 to -0.35)	to 0.86)	to 0.60)	to -1.32)	to 28.78)	to 21.01)	-1.29 (-1.38 to -1.20)
33	5.20) 19.68 (15.98	20.11 (16.38	0.26 (0.10 to	0.69 (0.47	0.44 (0.33	-1.91 (-2.07	21.48 (14.77	14.00 (10.70	-1.68 (-1.78
3 <b>4</b> outh Asia	to 24.40)	to 24.81)	0.42)	to 1.06)	to 0.57)	-1.91 (-2.07 to -1.74)	to 29.47)	to 17.52)	to -1.58)
35	4.40 (3.55 to	6.69 (5.52	1.58 (1.27 to	0.50 (0.27	0.28 (0.21	-2.36 (-2.52	13.16 (8.47	7.45 (6.06	-2.29 (-2.44
36 39 37	5.35)	to 8.04)	1.90)	to 0.66)	to 0.33)	to -2.19)	to 15.9)	to 8.76)	to -2.15)
38 Southern Latin	19.22 (15.96	20.53 (17.36	0.28 (0.08 to	0.31 (0.27	0.28 (0.25	-0.46 (-0.62	11.10 (9.69	10.06 (8.61	-0.40 (-0.50
39 4 merica	to 22.60)	to 24.24)	0.49)	to 0.34)	to 0.34)	to -0.30)	to 12.66)	to 11.94)	to -0.31)
4\$outhern	,	,	,	,			,	,	,
42 Sub-Saharan	10.44 (8.67	11.78 (9.83	0.53 (0.45 to	0.42 (0.33	0.44 (0.36	0.25 (-0.16	15.11 (10.88	13.66 (11.37	-0.12 (-0.44
43 44 <sup>frica</sup>	to 12.74)	to 14.31)	0.61)	to 0.53)	to 0.51)	to 0.65)	to 18.87)	to 15.90)	to 0.20)
<b>45</b> ropical Latin	65.14 (57.26	47.34 (41.21	-0.87 (-1.08	0.47 (0.41	0.44 (0.40	0.03 (-0.14	23.37 (19.94	19.26 (16.53	-0.44 (-0.61
4 America	to 74.08)	to 54.02)	to -0.65)	to 0.51)	to 0.51)	to 0.21)	to 27.30)	to 22.44)	to -0.26)
47 48	156.46	188.22	0.05 (0.06)	0.00 (0.50	1 11 (0 07	1 51 (1 07	20.04 (21.10		0.50 (0.40
49Vestern Europe	(139.89 to	(169.47 to	0.37 (0.26 to	0.82 (0.73	1.11 (0.87	1.51 (1.27	39.24 (31.18	46.79 (36.98	0.59 (0.49
50	173.69)	207.48)	0.48)	to 1.04)	to 1.23)	to 1.75)	to 48.16)	to 57.57)	to 0.69)
51 Western 52	9 40 (7 02 4-	10.00 (9.29	0.79 (0.66 to	0.5( (0.22	0 5 (0 25 4=	0 27 ( 0 4(	10 (0 (11 (4	16 77 (11 61	0.57 ( 0.66
5 <b>S</b> ub-Saharan	8.49 (7.03 to	10.09 (8.38	0.78 (0.66 to	0.56 (0.33	0.5 (0.35 to	-0.37 (-0.46	19.69 (11.64	16.77 (11.61	-0.57 (-0.66
5 <b>A</b> frica	10.33)	to 12.23)	0.90)	to 0.91)	0.67)	to -0.28)	to 30.47)	to 22.73)	to -0.48)
55 56	Abbreviat	tions: CI, co	onfidence int	erval; DAI	LY, disabili	ty adjusted	life year; E	EAPC,	
57	estimated	annual pe	ercentage ch	nange; GB	D, Global	Burden o	of Disease;	SDI,	
50	a · 1	1 · •	1 T.T.	, • , • ,	1				

Socio-demographic Index; UI, uncertainty interval.



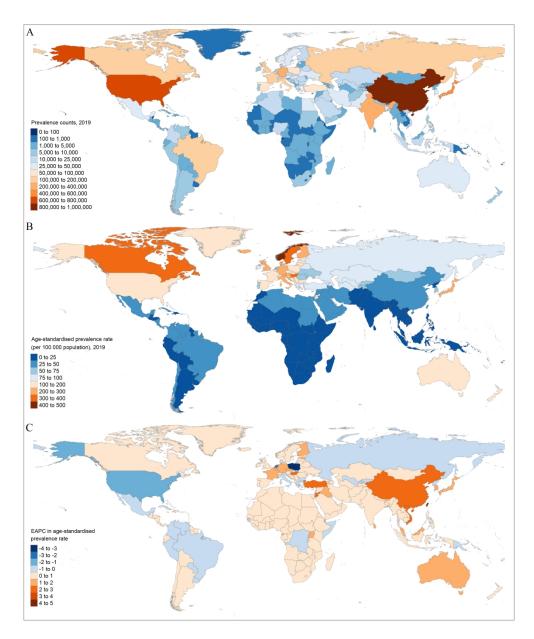
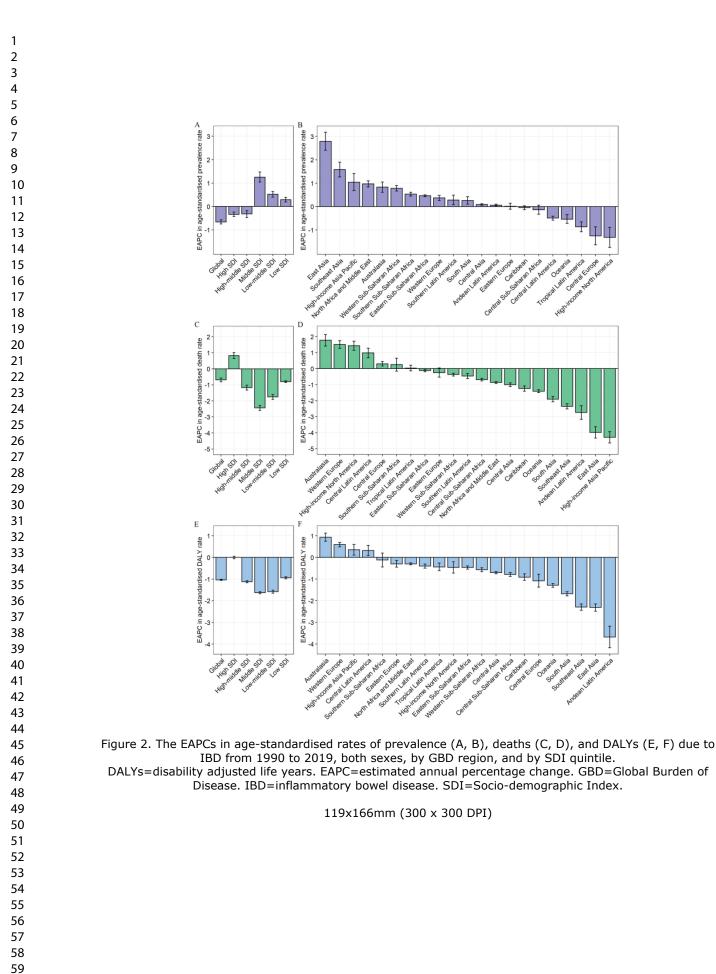


Figure 1. The global prevalence burden of IBD in 204 countries and territories. (A) The absolute number of IBD prevalent cases in 2017. (B) The age-standardised prevalence rate (per 100 000 population) of IBD in 2017. (C) The EAPC of age-standardised prevalence rate for IBD between 1990 and 2019. EAPC=estimated annual percentage change. IBD=inflammatory bowel disease.

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Female Male

150 200 ce rate (per 100 000 population)

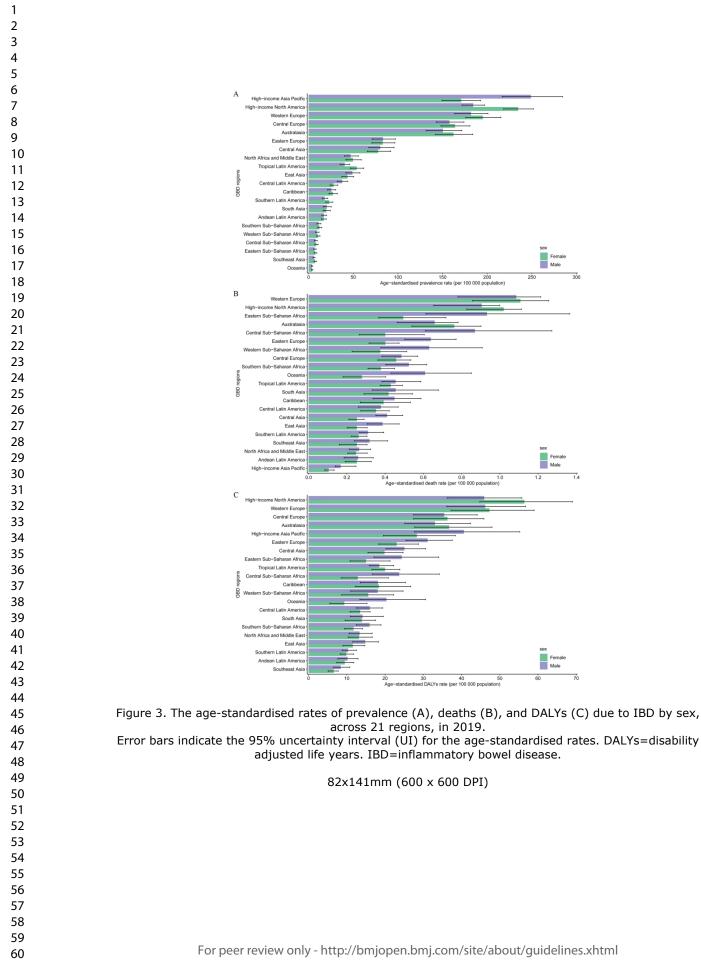
0.8 100 000 populati

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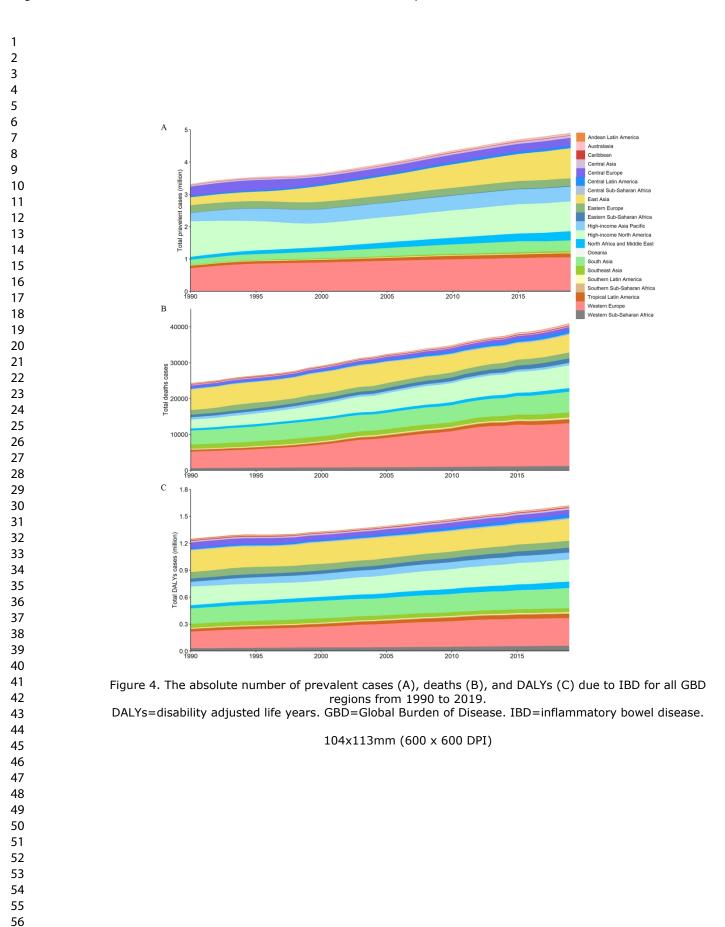
ath rate (pe

20 30 40 50 Age-standardised DALYs rate (per 100 000 population)

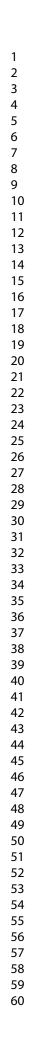
).4 Age·



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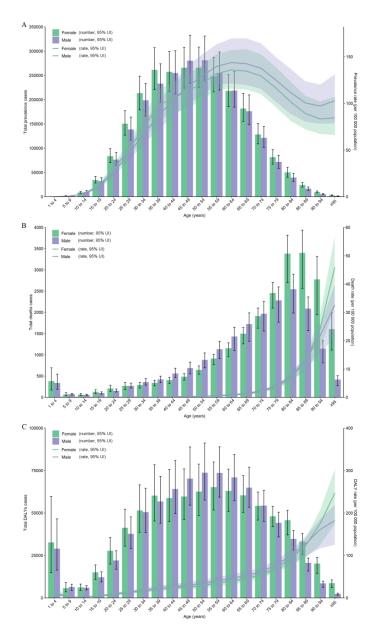
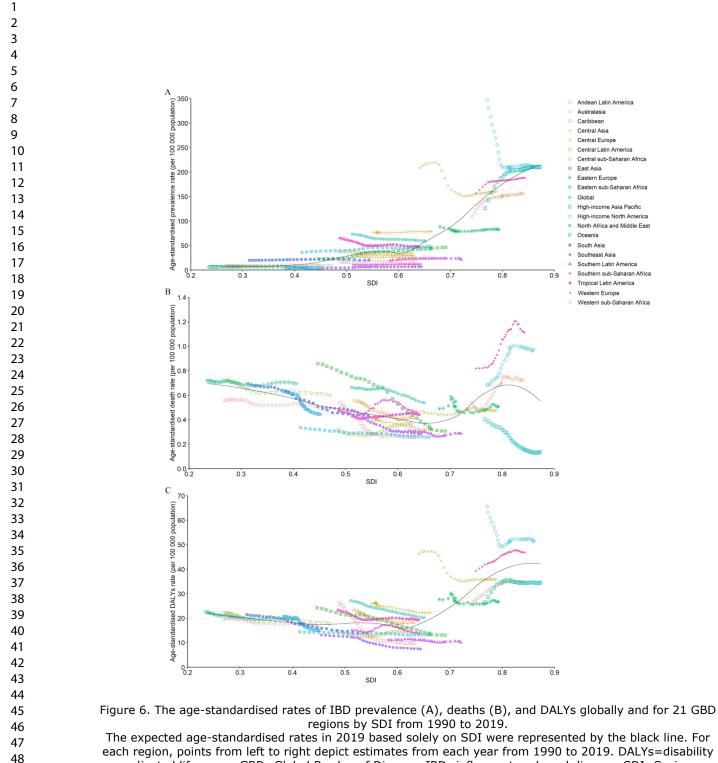


Figure 5. Age patterns by sex of the total number and age-standardised rates of prevalent cases (A), deaths (B), and DALYs (C) due to IBD at the global level in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the number of cases. Shading indicates the 95% UI for the rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

84x148mm (600 x 600 DPI)



each region, points from left to right depict estimates from each year from 1990 to 2019. DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Sociodemographic Index.

159x194mm (600 x 600 DPI)

Supplement to: The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019, based on Global Burden Disease Study 2019

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Supplementary Figure 14: The EAPC of age-standardised YLD rate for IBD in 204 countries and territories between 1990 and 2019.

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Supplementary Figure 16: Trends from 1990 to 2019 in number and age-standardised DALY rate of IBD at the global level.

# **Supplementary Tables**

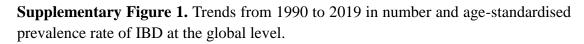
Supplementary Table 1: Prevalent cases, deaths and disability adjusted life years (DALYs) of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019

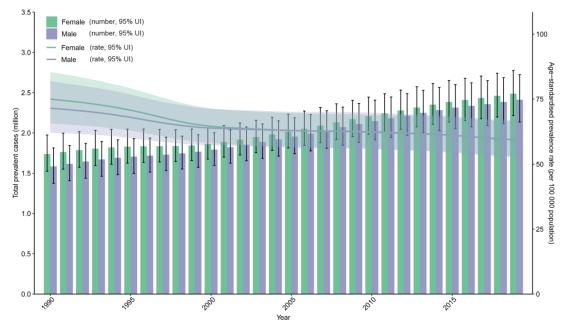
Supplementary Table 2: Prevalent cases, deaths and disability adjusted life years (DALYs) for inflammatory bower disease (IBD) by 204 countries or territories in 2019 and 2019, and their percentage change from 1990 to 2019.

Supplementary Table 3: Age-standardised prevalence, death and DALY rates for inflammatory bower disease (IBD) by 204 countries or territories in 1990 and 2019, and their temporal trends from 1990 to 2019.

Supplementary Table 4: Incident cases, YLLs and YLDs of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019.

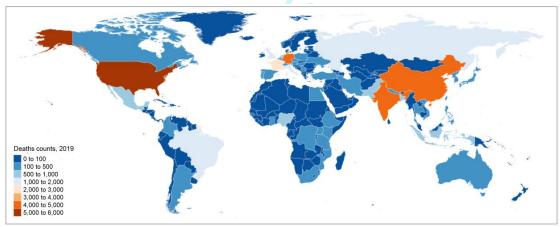
Supplementary Table 5: Age-standardised incidence, YLL and YLD rates for inflammatory bower disease (IBD) in 1990 and 2019 and their temporal trends from 1990 to 2019.





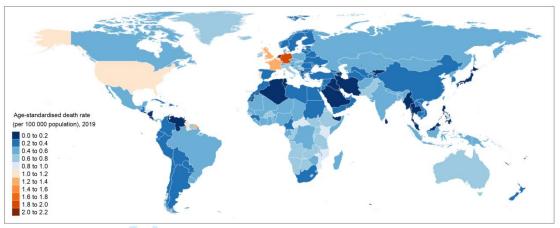
Error bars indicate the 95% uncertainty interval (UI) for number of prevalent cases. Shading indicates the 95% UI for the age-standardised prevalence rate. IBD, inflammatory bowel disease.

**Supplementary Figure 2.** The absolute number of deaths due to IBD for 204 countries and territories in 2019.



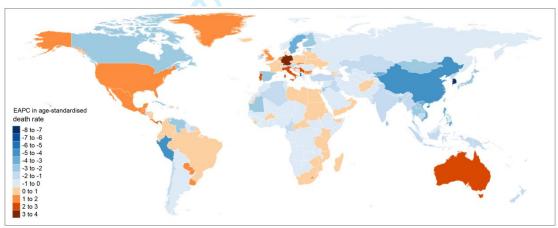
IBD, inflammatory bowel disease.

**Supplementary Figure 3.** The age-standardised death rate (per 100 000 population) of IBD for 204 countries and territories in 2019.



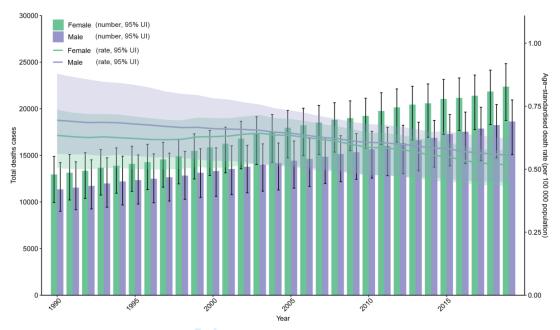
IBD, inflammatory bowel disease.

**Supplementary Figure 4.** The EAPC of age-standardised death rate for IBD in 204 countries and territories between 1990 and 2019.



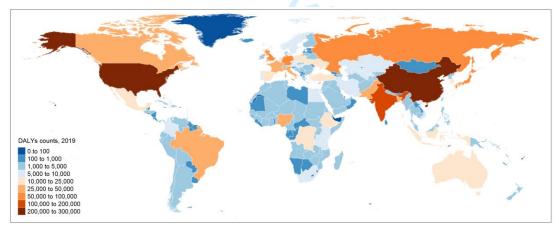
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 5.** Trends from 1990 to 2019 in number and age-standardised death rate of IBD at the global level.



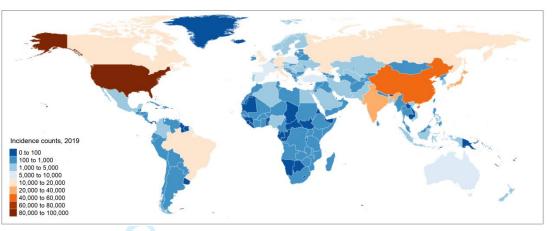
Error bars indicate the 95% uncertainty interval (UI) for number of death cases. Shading indicates the 95% UI for the age-standardised death rate. IBD, inflammatory bowel disease.

**Supplementary Figure 6.** The absolute number of DALYs due to IBD for 204 countries and territories in 2019.



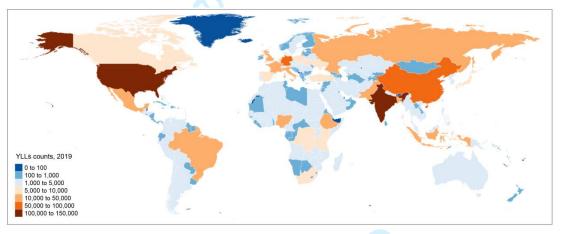
DALYs, disability adjusted life years; IBD, inflammatory bowel disease.

**Supplementary Figure 7.** The absolute number of incident cases due to IBD for 204 countries and territories in 2019.



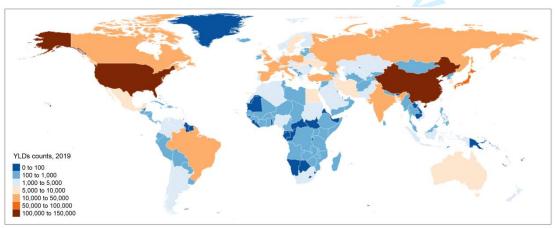
IBD, inflammatory bowel disease.

**Supplementary Figure 8.** The absolute number of YLLs due to IBD for 204 countries and territories in 2019.



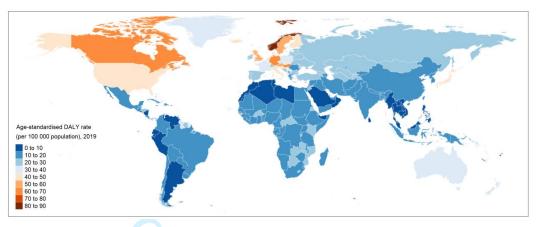
IBD, inflammatory bowel disease; YLLs, years of life lost.

**Supplementary Figure 9.** The absolute number of YLDs due to IBD for 204 countries and territories in 2019.



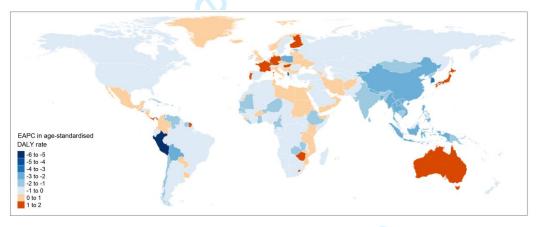
IBD, inflammatory bowel disease; YLDs, years of life lived with disability.

**Supplementary Figure 10.** The age-standardised DALY rate (per 100 000 population) of IBD for 204 countries and territories in 2019.



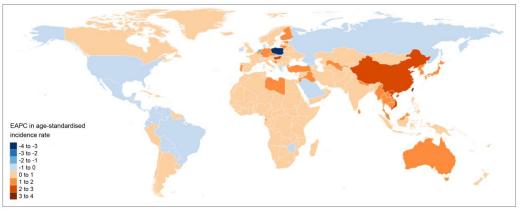
DALY, disability adjusted life year; IBD, inflammatory bowel disease.

**Supplementary Figure 11.** The EAPC of age-standardised DALY rate for IBD in 204 countries and territories between 1990 and 2019.



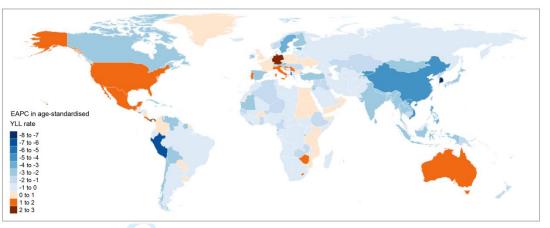
DALY, disability adjusted life year; EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 12.** The EAPC of age-standardised incidence rate for IBD in 204 countries and territories between 1990 and 2019.



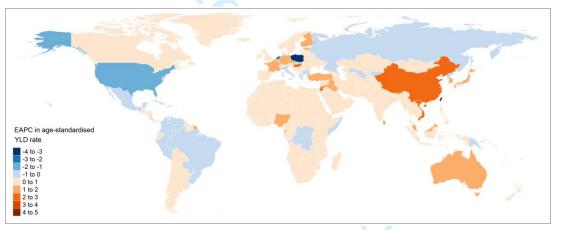
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 13.** The EAPC of age-standardised YLL rate for IBD in 204 countries and territories between 1990 and 2019.



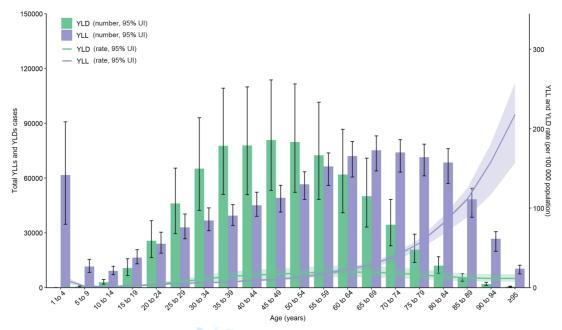
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; YLL, years of life lost.

**Supplementary Figure 14.** The EAPC of age-standardised YLD rate for IBD in 204 countries and territories between 1990 and 2019.



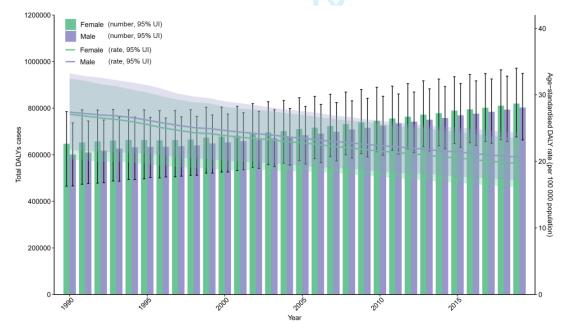
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; YLD, years of life lived with disability.

**Supplementary Figure 15.** Global counts and age-specific rates of YLLs and YLDs due to IBD across age group in 2019.



Error bars indicate the 95% uncertainty interval (UI) for YLLs and YLDs. Shading indicates the 95% UI for the rates. IBD, inflammatory bowel disease; YLDs, years of life lived with disability; YLLs, years of life lost.

**Supplementary Figure 16.** Trends from 1990 to 2019 in number and age-standardised DALY rate of IBD at the global level.



Error bars indicate the 95% uncertainty interval (UI) for number of DALYs cases. Shading indicates the 95% UI for the age-standardised DALY rate. DALY, disability adjusted life year; IBD, inflammatory bowel disease.

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Supplementary Table 1 Prevalent cases, deaths and disability adjusted life years (DALYs) of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019

7	Prevalent cases			Deaths			DALYs		
8 9 Characteristics 10 11 <del>12</del>	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)
13 14 15 <sup>Global</sup> 16 17	3322132 (2903627 to 3790430)	4898558 (4353233 to 5499296)	47.45 (43.76 to 51.43)	24295 (20258 to 28376)	40998 (34933 to 44661)	68.75 (47.12 to 94.62)	1248275 (963014 to 1503174)	1622498 (1356296 to 1915042)	29.98 (14.83 to 50.21)
18 <sup>9ex</sup> 19 20 2 Male 22 23	1584462 (1374414 to 1814399)	2411840 (2136219 to 2724369)	52.22 (48.47 to 56.34)	11347 (9002 to 14218)	18633 (15060 to 20938)	64.21 (37.52 to 90.74)	600963 (466033 to 736983)	802748 (663563 to 949342)	33.58 (15.75 to 53.92)
24 25 26 <sub>Female</sub> 27 28 29	1737670 (1523309 to 1974864)	2486718 (2216240 to 2775262)	43.11 (39.03 to 47.31)	12947 (9953 to 14888)	22365 (18759 to 24838)	72.74 (47.65 to 115.99)	647311 (465166 to 785221)	819751 (676700 to 971584)	26.64 (10.70 to 54.99)
29 30 quintile 31 32 3 <sup>High</sup> 34 35	1883348 (1654416 to 2128434)	2283717 (2079286 to 2493360)	21.26 (15.68 to 27.38)	7386 (6656 to 8731)	17801 (14215 to 19552)	141.02 (73.28 to 161.46)	415485 (323781 to 520634)	603330 (489511 to 729627)	45.21 (26.78 to 56.21)
36 37 <sub>High-middle</sub> 38 39	942961 (817123 to 1086707)	1362491 (1206918 to 1538822)	44.49 (40.70 to 48.74)	5045 (4476 to 5782)	7272 (6519 to 8110)	44.13 (24.31 to 65.11)	288336 (236216 to 344578)	352794 (285252 to 432623)	22.36 (12.11 to 32.44)
40 41 <sub>Middle</sub> 42 43	301457 (252149 to 355140)	818871 (688348 to 968484)	171.64 (163.13 to 181.21)	5425 (4146 to 6768)	6598 (5602 to 7341)	21.61 (-2.11 to 58.92)	248139 (184995 to 297495)	291088 (240412 to 345833)	17.31 (-3.67 to 60.14)
44 45_ow-middle 46 47	152118 (124851 to 184061)	335789 (278324 to 403122)	120.74 (115.27 to 126.61)	4533 (3018 to 6152)	6180 (4994 to 7392)	36.34 (9.54 to 81.14)	203020 (126472 to 268417)	236584 (189248 to 283804)	16.53 (-9.40 to 65.68)
48 49_ow 50 51	41264 (33866 to 50406)	95941 (78454 to 116802)	132.51 (127.59 to 136.94)	1893 (1144 to 2626)	3125 (2442 to 4016)	65.06 (21.70 to 141.90)	92718 (45634 to 147570)	137867 (100264 to 180825)	48.69 (1.39 to 148.81)
51 52 <sup>GBD</sup> region 53 54 <sup>Andean</sup> Latin 55 <sup>America</sup> 56	4294 (3643 to 5026)	10380 (8875 to 12027)	141.73 (131.47 to 153.82)	168 (99 to 249)	144 (111 to 182)	-14.37 (-45.71 to 56.11)	10768 (5527 to 17349)	5942 (4666 to 7395)	-44.82 (-67.80 to 12.24)
57 58Australasia 59 60	24135 (20445 to 28083)	53225 (47167 to 59881)	120.53 (104.13 to 137.71)	117 (103 to 139)	400 (291 to 465)	241.68 (120.09 to 298.29)	5802 (4531 to 7299)	13328 (10488 to 16560)	129.69 (92.95 to 151.94)

2 3 4 5 Caribbean	8194 (7012 to 9634)	13360 (11262 to 15892)	63.04 (55.79 to 71.54)	157 (118 to 208)	210 (156 to 264)	33.66 (3.39 to 70.80)	7451 (5008 to 11792)	8900 (6523 to 11709)	19.44 (-16.93 to 53.06)
6 7 8 9 <sup>Central Asia</sup> 10	42100 (35493 to 49944)	72034 (60489 to 86073)	71.10 (65.37 to 77.74)	215 (167 to 251)	249 (218 to 288)	15.70 (-1.33 to 47.63)	15952 (12800 to 19230)	20237 (16357 to 24806)	26.86 (10.10 to 46.33)
11 12 Central Europe 13 14	290304 (249715 to 338920)	236196 (214732 to 259804)	-18.64 (-24.57 to -11.98)	604 (563 to 696)	958 (799 to 1104)	58.66 (24.18 to 83.87)	61546 (47417 to 77414)	54694 (42729 to 67570)	-11.13 (-18.70 to -3.30)
15 16 <sup>C</sup> entral Latin 17America 18	40471 (34451 to 47294)	81606 (69904 to 95542)	101.64 (96.51 to 107.43)	301 (270 to 330)	854 (702 to 997)	183.85 (135.53 to 232.71)	18096 (15456 to 20849)	36178 (30219 to 43014)	99.92 (74.40 to 127.28)
19Central 2Q <sub>Sub-Saharan</sub> 21 22 <sup>Africa</sup>	2781 (2267 to 3400)	7015 (5690 to 8639)	152.29 (138.04 to 168.85)	193 (118 to 301)	355 (254 to 497)	84.05 (16.03 to 200.18)	9491 (4855 to 17734)	15574 (10733 to 22385)	64.1 (-9.96 to 213.74)
23 24 <sub>East</sub> Asia 25 26	244790 (202981 to 291054)	925074 (788347 to 1085238)	277.90 (260.33 to 300.79)	5734 (4169 to 7374)	4983 (4074 to 5769)	-13.11 (-36.64 to 22.31)	240231 (167510 to 299891)	239963 (187123 to 299808)	-0.11 (-25.58 to 54.11)
27 2&Eastern Europe 29 30	233969 (199922 to 274757)	237672 (203164 to 276577)	1.58 (-0.80 to 4.10)	1305 (992 to 1507)	1633 (1370 to 1865)	25.06 (5.75 to 56.78)	72932 (57526 to 88869)	77123 (63287 to 94008)	5.75 (-4.27 to 21.34)
3 <sup>Eastern</sup> 3 <b>2</b> ub-Saharan 33 <sub>Africa</sub> 34	7067 (5804 to 8596)	18830 (15395 to 22997)	166.43 (160.39 to 173.14)	697 (462 to 1111)	1253 (923 to 1678)	79.64 (7.37 to 192.58)	35480 (16916 to 68481)	52928 (39435 to 74044)	49.18 (-19.5 to 202.23)
35 <sub>High</sub> -income 36 37 <sup>Asia Pacific</sup> 38	255028 (213480 to 302123)	459062 (403027 to 520418)	80.00 (65.57 to 95.92)	685 (439 to 789)	694 (556 to 912)	1.33 (-19.66 to 85.83)	51699 (38591 to 66563)	78601 (55261 to 105049)	52.04 (37.02 to 68.81)
39High-income 40 North America 41	1100006 (961428 to 1248970)	920750 (859032 to 982587)	-16.30 (-22.94 to -9.05)	2442 (2189 to 2964)	6314 (5076 to 6886)	158.55 (83.64 to 182.08)	209072 (155328 to 270983)	245234 (200564 to 294018)	17.30 (2.00 to 33.02)
42 <sub>North</sub> Africa 43 44 <sup>and</sup> Middle 45 <sup>cast</sup> 46	89159 (76544 to 102596)	282534 (239506 to 334478)	216.89 (196.52 to 234.98)	592 (407 to 836)	1033 (866 to 1226)	74.43 (20.30 to 164.45)	35438 (25569 to 46318)	72755 (56928 to 91112)	105.30 (56.49 to 171.10)
47 48 49	199 (159 to 240)	417 (338 to 509)	109.69 (96.12 to 124.69)	22 (14 to 31)	36 (26 to 51)	65.38 (12.06 to 142.01)	1036 (602 to 1625)	1696 (1107 to 2576)	63.81 (3.61 to 170.09)
50 51 <sub>South</sub> Asia 52 53	157942 (127077 to 195839)	335746 (272330 to 413946)	112.58 (106.64 to 120.13)	3864 (2533 to 5504)	5702 (4286 to 7410)	47.58 (16.55 to 93.31)	171448 (105178 to 227334)	221978 (166881 to 278494)	29.47 (1.12 to 76.01)
54 55 <sub>Southeast</sub> Asia 56 57	16557 (13040 to 20323)	48152 (39527 to 58063)	190.83 (174.97 to 212.05)	1230 (741 to 1536)	1498 (1139 to 1771)	21.79 (-3.10 to 72.54)	45316 (30762 to 56838)	46686 (38847 to 55186)	3.02 (-20.10 to 46.45)
5&outhern Latin 5America 60	9153 (7618 to 10754)	15243 (12896 to	66.53 (58.55 to 74.68)	139 (123 to 151)	236 (210 to 280)	69.36 (46.49 to 101.01)	5248 (4578 to 5993)	7740 (6670 to 9152)	47.49 (32.63 to 65.73)

1 2 3 4 5 Southern 6 Sub-Saharan 7 Africa 8 9 Tropical Latin 10 America 11 12 13 14 Western Europe 15 16 Western 17 18 Sub-Saharan 19 Africa 20	3760 (3109 to 4581) 74856 (65373 to 85425) 707145 (634121 to 786986) 10222 (8432 to 12421)	18023) 8141 (6736 to 9864) 117653 (102012 to 134397) 1026504 (925440 to 1127578) 28965 (23820 to 35133)	116.54 (109.70 to 124.72) 57.17 (51.82 to 63.44) 45.16 (41.37 to 48.78) 183.36 (178.45 to 188.56)	<ul> <li>138 (99 to</li> <li>169)</li> <li>455 (400 to</li> <li>492)</li> <li>4600 (4132 to 5864)</li> <li>634 (365 to</li> <li>996)</li> </ul>	240 (198 to 278) 1047 (950 to 1217) 11981 (9244 to 13315) 1178 (805 to 1610)	74.44 (31.74 to 161.11) 129.84 (109.36 to 167.46) 160.46 (66.17 to 190.17) 85.67 (40.49 to 177.24)	6615 (4279 to 9518) 27724 (23589 to 32357) 185733 (149509 to 227830) 31197 (14381 to 47867)	9230 (7542 to 10926) 46997 (40115 to 54972) 310691 (255911 to 371106) 56026 (35327 to 78051)	<ul> <li>39.54 (-0.67</li> <li>to 121.74)</li> <li>69.52 (59.16</li> <li>to 83.74)</li> <li>67.28 (34.40</li> <li>to 79.72)</li> <li>79.59 (30.21</li> <li>to 198.66)</li> </ul>
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60		rtainty inter	D=Global E val.						

**Supplementary Table 2** Prevalent cases, deaths and disability adjusted life years (DALYs) for inflammatory bower disease (IBD) by 204 countries or territories in 2019 and 2019, and their percentage change from 1990 to 2019

1 2 3

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5

6 2019 and 2019, and their percentage change from 1990 to 2019 7 Depths DALVs											
8		Prevalent ca			Death		DALYs				
9 <sub>Characteristics</sub> 10 11	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)		
<del>12</del> 13 14 Afghanistan 15 16	1738 (1410 to 2120)	5699 (4548 to 7113)	228.01 (200.09 to 258.61)	31 (14 to 55)	58 (31 to 89)	88.34 (29.82 to 190.04)	1237 (627 to 2377)	3017 (1879 to 4660)	143.91 (72.00 to 244.29)		
16 17 18 Albania 19	3324 (2792 to 3928)	3896 (3286 to 4630)	17.22 (7.74 to 27.7)	50 (21 to 65)	13 (9 to 19)	-74.70 (-84.65 to -32.21)	3904 (1399 to 5200)	991 (727 to 1300)	-74.62 (-83.28 to -33.39)		
20 21 22 <sup>Algeria</sup> 23 24	5982 (5169 to 6928)	16875 (13593 to 20871)	182.11 (149.55 to 221.44)	28 (18 to 44)	53 (38 to 70)	90.14 (11.64 to 209.90)	1826 (1320 to 2675)	4021 (2997 to 5295)	120.18 (51.51 to 190.24)		
25 American 26 <sub>Samoa</sub> 27	2 (2 to 3)	3 (3 to 4)	48.88 (37.37 to 61.93)	0 (0 to 1)	0 (0 to 0)	-37.72 (-65.35 to 47.30)	15 (9 to 21)	8 (5 to 14)	-47.39 (-70.61 to 25.25)		
28 29 30 31	69 (58 to 81)	133 (111 to 159)	93.79 (79.63 to 110.16)	0 (0 to 0)	1 (1 to 2)	266.11 (124.63 to 467.38)	17 (13 to 23)	36 (26 to 47)	111.42 (66.64 to 167.41)		
32 33 <sub>Angola</sub> 34 35	460 (373 to 573)	1648 (1338 to 2017)	258.10 (233.16 to 285.26)	37 (17 to 76)	78 (52 to 117)	112.25 (2.89 to 349.24)	1913 (713 to 4719)	3662 (2249 to 5786)	91.46 (-19.81 to 397.70)		
36 37 <sup>Antigua</sup> and 38 Barbuda 39	17 (14 to 20)	34 (28 to 41)	102.06 (85.45 to 119.33)	1 (0 to 1)	1 (0 to 1)	17.47 (-15.05 to 92.04)	18 (13 to 20)	22 (18 to 28)	25.07 (-4.44 to 87.07)		
40 41 Argentina	4828 (3926 to 5756)	7825 (6413 to 9484)	62.10 (49.74 to 73.10)	84 (74 to 93)	143 (124 to 169)	71.49 (45.04 to 102.47)	2981 (2577 to 3433)	4556 (3904 to 5373)	52.84 (34.77 to 71.30)		
42 43 Armenia 44	2547 (2109 to 3013)	3263 (2744 to 3956)	28.11 (18.76 to 37.72)	7 (5 to 9)	11 (8 to 13)	51.30 (17.69 to 101.11)	637 (492 to 805)	764 (593 to 979)	19.86 (4.07 to 38.21)		
45 46 <sub>Australia</sub> 47 48	18262 (15282 to 21523)	44624 (39169 to 50438)	144.35 (122.23 to 167.82)	97 (85 to 120)	369 (259 to 430)	279.18 (123.37 to 350.95)	4536 (3533 to 5743)	11569 (9111 to 14334)	155.05 (104.34 to 184.94)		
49 50 <sub>Austria</sub> 51 52	25345 (22242 to 28177)	33080 (29600 to 37293)	30.52 (19.87 to 42.12)	99 (88 to 133)	101 (80 to 165)	2.52 (-14.48 to 30.58)	5699 (4484 to 7140)	6463 (4736 to 8366)	13.41 (1.99 to 27.18)		
53 54 Azerbaijan 55 56	4623 (3817 to 5491)	9463 (7886 to 11458)	104.71 (89.06 to 120.81)	12 (9 to 15)	13 (10 to 18)	12.27 (-26.26 to 63.36)	1080 (815 to 1410)	1829 (1289 to 2470)	69.47 (44.70 to 98.86)		
57 Bahamas 58	65 (55 to 77)	123 (102 to 152)	88.60 (70.75 to 107.18)	1 (1 to 1)	2 (1 to 2)	82.56 (39.32 to 142.99)	49 (41 to 57)	78 (63 to 98)	60.27 (27.44 to 102.98)		
59 <sub>Bahrain</sub> 60	179 (152 to	846 (688 to	373.26	0 (0 to 1)	1 (1 to 2)	178.61	44 (32 to	167 (116 to	283.01		

1 2									
3	206)	1035)	(309.51 to			(82.33 to	57)	229)	(204.71 to
4 5			442.36)			326.1)			374.48)
6	11796 (0404	33018	180.14	544 (333 to	713 (431 to	30.90	23781	26354	10.82
7 Bangladesh	11786 (9494	(26285 to	(157.01 to			(-18.82 to	(13440 to	(17363 to	(-35.76 to
8 9	to 14655)	41258)	203.31)	805)	1068)	117.77)	35324)	37248)	104.55)
10	183 (153 to	282 (238 to	54.27 (41.76	1 (1 4- 1)	2(1 + 2)	48.15 (12.33	58 (47 to	81 (62 to	39.17 (18.58
Barbados	218)	340)	to 69.09)	1 (1 to 1)	2 (1 to 2)	to 96.63)	71)	101)	to 61.35)
12 13 Belarus	9910 (8453	11335 (9509	14.38 (6.51	45 (32 to	58 (42 to	29.88 (-8.49	2690 (2011	3063 (2364	13.87 (-6.13
13 Belarus 14	to 11723)	to 13529)	to 23.58)	60)	77)	to 97.40)	to 3484)	to 3923)	to 41.64)
15	9661 (8871	20093	107.97	112 (00 to	272 (206 to	141.39	2207 (2755	6270 (5226	02 62 (55 21
16 <sub>Belgium</sub> 17	to 10430)	(17518 to	(87.58 to	113 (99 to 134)	273 (206 to 319)	(64.63 to	3307 (2755	6370 (5236	92.63 (55.31
18	10 10450)	22821)	131.05)	154)	519)	188.06)	to 3921)	to 7678)	to 116.01)
19	26 (22 to	87 (71 to	230.96			117.53	40 (29 to	77 (64 to	91.51 (43.10
20 <sub>Belize</sub> 21	32)	106)	(204.21 to	1 (1 to 1)	2 (1 to 2)	(55.55 to	40 (29 to 50)	97)	to 212.80)
22	52)	100)	258.71)			286.06)	50)	)))	10 212.00)
23	209 (171 to	685 (549 to	227.98		30 (18 to	116.13	694 (232 to	1437 (773 to	107.25
24 <sub>Benin</sub> 25	253)	838)	(203.9 to	14 (6 to 24)	44)	(28.68 to	1320)	2281)	(11.24 to
25	233)	050)	255.4)			334.23)	1520)	2201)	374.73)
27	23 (19 to	33 (27 to	42.79 (30.81			-15.72	18 (14 to	14 (11 to	-22.33
28 Bermuda	28)	39)	to 55.62)	1 (0 to 1)	0 (0 to 1)	(-38.69 to	21)	18)	(-40.21 to
29 30	20)	37)	10 55.02)			37.20)	21)	10)	11.58)
31	66 (52 to	158 (128 to	140.27			57.00 (-6.75	86 (38 to	102 (67 to	18.91
32 Bhutan	83)	197)	(120.87 to	2 (1 to 4)	3 (2 to 7)	to 195.84)	160)	202)	(-35.13 to
33 34	/		162.46)			,	/		133.49)
35 <sup>Bolivia</sup>	569 (473 to	1400 (1171	145.90	25 (10 to	34 (26 to	39.57	1552 (546 to	1348 (986 to	-13.09
36(Plurinational	694)	to 1693)	(129.42 to	48)	45)	(-28.99 to	3375)	1772)	(-59.56 to
37 <sub>State of)</sub> 38			165.45)			217.03)			134.61)
39 Bosnia and	4910 (4225	5387 (4726	9.73 (1.15 to	18 (12 to	26 (13 to	40.25	1285 (987 to	1372 (949 to	6.80 (-13.90
40 Herzegovina	to 5717)	to 6247)	17.87)	23)	35)	(-11.49 to	1644)	1778)	to 28.67)
41 42			214.50			108.03)			104 45
43	70 (58 to	221 (179 to	214.79		0 (6 - 12)	104.82	188 (121 to	388 (241 to	106.67
44 Botswana	86)	276)	(189.25 to	4 (3 to 6)	9 (6 to 13)	(14.62 to	269)	620)	(18.10  to)
45 46	72960	115(07	244.24)			221.73)	27207	46250	226.68)
47 Drogil	73860	115697	56.64 (51.18	451 (396 to	1035 (939 to	129.44	27396	46350	69.18 (58.65
48 Brazil	(64511 to	(100339 to	to 62.94)	488)	1207)	(108.60  to)	(23325 to	(39647 to	to 83.50)
49 50	84264)	132222)	12470			167.01)	31992)	54190)	
51 Brunei	126 (100 to	295 (237 to	134.79	1(1 + 2)	$2(2 \pm 2)$	127.20	57 (40 to	114 (89 to	99.44 (53.62
52 Darussalam	155)	361)	(114.54 to 156.55)	1 (1 to 2)	3 (2 to 3)	(58.12 to 237.13)	85)	147)	to 164.86)
53 54	12507					257.15)			7 55
55 <sub>Bulgaria</sub>	13507 (11443 to	11275 (9602	-16.53 (-23.08 to	25 (22 to	41 (32 to	65.55 (22.25	2779 (2081	2569 (1937	-7.55 (-19.78 to
56	15898)	to 13477)	-9.27)	32)	51)	to 118.70)	to 3597)	to 3319)	(-19.78 to 6.98)
57 58	392 (318 to	1098 (901 to	-9.27)	35 (16 to	81 (41 to	130.36	1781 (607 to	3942 (1729	121.28
58 59 <sup>Burkina Faso</sup>	485)	1347)	(158.26 to	58)	129)	(25.65 to	3594)	to 7006)	(15.32 to
60	TU5)	1377)	(120.2010	50)	127)	(25.05 10	5574)		(13.32 10

1 2									
3			200.27)			350.02)			380.59)
4 5 6 Burundi 7	207 (169 to 255)	459 (369 to 561)	121.41 (105.47 to 137.36)	21 (13 to 37)	38 (24 to 58)	76.44 (-8.52 to 253.21)	1064 (461 to 2387)	1608 (1001 to 2527)	51.13 (-33.49 to 272.32)
8 9 10 Cabo Verde 11 12	23 (19 to 28)	63 (51 to 78)	176.77 (156.29 to 198.45)	1 (0 to 1)	1 (1 to 1)	37.26 (-16.62 to 131.63)	34 (21 to 47)	43 (35 to 54)	28.23 (-15.29 to 118.40)
13 14 <sup>Cambodia</sup> 15	218 (168 to 273)	595 (467 to 730)	172.54 (148.48 to 197.52)	26 (14 to 39)	38 (26 to 48)	46.42 (-4.73 to 167.94)	1175 (547 to 2166)	1222 (890 to 1546)	3.97 (-44.25 to 128.29)
16 17 18 <sup>Cameroon</sup> 19	538 (438 to 666)	1938 (1576 to 2393)	259.93 (232.74 to 288.04)	30 (14 to 46)	58 (30 to 95)	95.05 (-1.81 to 218.33)	1367 (583 to 2134)	2830 (1520 to 4639)	107.06 (11.41 to 245.01)
20 21 22 Canada 23	116922 (112352 to 121655)	157737 (142113 to 173888)	34.91 (23.15 to 47.18)	270 (241 to 302)	403 (323 to 605)	49.15 (24.68 to 106.93)	22694 (17260 to 29101)	29915 (21904 to 38441)	31.82 (19.21 to 46.22)
24 2 <b>£</b> entral African 26 Republic 27	116 (95 to 145)	243 (199 to 299)	109.71 (91.54 to 126.84)	12 (7 to 19)	21 (12 to 35)	80.23 (18.71 to 166.11)	510 (273 to 935)	890 (475 to 1568)	74.48 (9.24 to 167.75)
27 28 29 Chad 30 31	251 (205 to 306)	713 (580 to 881)	184.44 (162.13 to 208.28)	21 (10 to 35)	44 (25 to 64)	108.90 (42.17 to 222.10)	960 (360 to 1689)	2084 (1020 to 3460)	117.09 (31.20 to 260.72)
32 33 Chile	3739 (3165 to 4369)	6732 (5813 to 7788)	80.06 (68.43 to 93.27)	46 (36 to 51)	70 (59 to 89)	53.60 (25.60 to 123.36)	1928 (1573 to 2244)	2612 (2169 to 3169)	35.45 (14.76 to 72.90)
34 35 36 China 37 38	239473 (198363 to 285024)	911045 (776347 to 1069533)	280.44 (262.77 to 303.34)	5560 (4048 to 7203)	4676 (3774 to 5461)	-15.89 (-39.57 to 19.52)	234245 (162916 to 293663)	232464 (179903 to 291090)	-0.76 (-26.71 to 54.23)
39 40 Colombia 41	6732 (5626 to 7997)	15348 (13025 to 18234)	127.99 (113.25 to 144.58)	56 (48 to 61)	154 (116 to 202)	175.73 (106.78 to 258.47)	3215 (2689 to 3798)	6419 (4991 to 7986)	99.66 (64.35 to 143.95)
42 43 44 Comoros 45	21 (17 to 26)	48 (39 to 60)	123.01 (106.31 to 142.32)	2 (1 to 3)	4 (2 to 6)	81.66 (13.33 to 277.77)	77 (29 to 137)	119 (75 to 174)	54.58 (-16.19 to 298.98)
46 47 48 <sup>Congo</sup> 49	145 (120 to 178)	421 (343 to 518)	189.59 (170.45 to 215.68)	9 (6 to 14)	17 (12 to 25)	87.61 (15.68 to 196.61)	396 (237 to 645)	681 (463 to 980)	72.21 (-4.05 to 195.14)
50 51 <sub>Cook</sub> Islands 52 53	1 (1 to 1)	1 (1 to 2)	28.57 (18.27 to 40.87)	0 (0 to 0)	0 (0 to 0)	-14.75 (-42.49 to 32.51)	8 (5 to 11)	5 (3 to 7)	-33.66 (-57.85 to 4.48)
54 55 <sub>Costa</sub> Rica 56 57	670 (560 to 796)	1637 (1380 to 1937)	144.55 (127.55 to 162.48)	3 (2 to 3)	10 (7 to 13)	270.81 (169.90 to 398.49)	190 (150 to 238)	524 (399 to 669)	176.16 (128 to 235.84)
58 59 <sup>C ôte</sup> d'Ivoire 60	578 (465 to 714)	1562 (1251 to 1950)	170.18 (151.08 to	25 (11 to 42)	54 (32 to 79)	111.95 (32.09 to	1324 (535 to 2260)	2583 (1501 to 3952)	95.11 (14.75 to 276.09)

1 2									
3 4			190.01)			290.61)			
5	9449 (8823	10780 (9980	14.09 (9.79	16 (14 to	33 (25 to	106.49	1866 (1411	2288 (1717	22.61 (2.99
6 Croatia 7 8	to 10129)	to 11592)	to 18.67)	24)	42)	(18.11 to 180.74)	to 2410)	to 2898)	to 39.06)
9	3240 (2702	4574 (3750	41.18 (29.72	36 (23 to	42 (33 to	16.33	1518 (1151	1682 (1335	10.76 (-8.18
10 Cuba 11	to 3901)	to 5525)	to 54.70)	43)	53)	(-11.71 to 79.06)	to 1818)	to 2085)	to 38.33)
12 13	344 (292 to	962 (870 to	179.86		16 (12 to	35.72 (-8.18	257 (180 to	370 (303 to	43.92 (7.35
14 Cyprus	400)	1050)	(151.26 to	12 (7 to 16)	20)	to 121.22)	333)	444)	to 105.55)
15 16		20802	216.30) 103.57						
17 18 <sup>Czechia</sup>	10218 (8616	(19084 to	(74.68 to	71 (64 to	114 (87 to	59.45 (13.25	3246 (2697	5259 (4127	62.01 (34.95
19	to 12269)	22519)	138.01)	82)	141)	to 100.62)	to 3932)	to 6597)	to 90.03)
20 <sub>Democratic</sub>	2005 (2554		<b>(0.00)</b> (10.10)	<b>7</b> 4 (41 )	100 (75.)		22 (2 (1 (2) 7	21 (1 (2222	-5.99
22 People's 23 Republic of	3097 (2554 to 3714)	4965 (4120 to 5978)	60.33 (48.19 to 72.89)	74 (41 to 114)	108 (75 to 147)	45.76 (-9.28 to 166.1)	3363 (1697 to 6033)	3161 (2323 to 4117)	(-46.37 to
24 Korea	00011)	60 0 9 1 0 9	(0 /2.03)	,	117)	10 100.1)	10 0000)	(0 1117)	81.39)
25 26 Democratic	1975 (1605	4445 (3597	125.06	130 (79 to	231 (159 to	77.23 (4.65	6456 (3284	10018 (6738	55.18
2 <sup>₱</sup> Pepublic of the	to 2418)	to 5502)	(107.08 to	207)	336)	to 194.58)	to 12595)	to 15367)	(-21.39 to
28 Congo 29	13729	15310	145.69)						209.02)
30 31 <sup>Denmark</sup>	(12468 to	(13920 to	11.51 (5.37	43 (38 to	70 (60 to	65.35 (42.63	2893 (2227	3391 (2644	17.21 (8.04
32	15154)	16882)	to 17.43)	50)	83)	to 92.58)	to 3654)	to 4239)	to 27.16)
33 34	20 (16 to	90 (72 to	342.41	1 (1 ( 2)		190.20	60 (27 to	144 (88 to	138.93
35 Djibouti 36	25)	111)	(307.26 to 378.51)	1 (1 to 2)	3 (2 to 5)	(72.46 to 408.23)	121)	236)	(25.91 to 367.14)
37	19 (16 to	22 (18 +-	17.43 (7.09			-9.08	23 (19 to	21 (16 +-	-11.16
38 39 Dominica	23)	22 (18 to 27)	to 28.52)	1 (1 to 1)	1 (0 to 1)	(-35.39 to	28)	21 (16 to 27)	(-34.54 to
40 41	,	,				27.05)	,	,	19.86)
42 Dominican	1239 (1022	2521 (2070	103.40 (87.28 to	11 (9 to 16)	22 (16 to	99.41 (29.65	732 (527 to	1109 (821 to	51.44 (0.42
43 Republic 44	to 1507)	to 3084)	121.86)		30)	to 202.38)	1060)	1450)	to 118.17)
45	1159 (1021	3315 (2981	186.04	16 (12 to	34 (24 to	107.95	982 (705 to	1475 (1120	50.25 (3.59
46 <sub>Ecuador</sub> 47	to 1302)	to 3667)	(172.00 to 200.27)	21)	44)	(37.86 to 223.02)	1302)	to 1823)	to 124.68)
48 49	17107	39271	129.56						109.10
50 <sub>Egypt</sub>	(14592 to	(31782 to	(97.49 to	59 (35 to 119)	119 (70 to 186)	100.85 (5.49 to 238.69)	4521 (3160 to 6354)	9453 (6709 to 12613)	(57.59 to
51 52	19726)	48388)	159.21)	11))	100)	,	10 0004)	(0 12013)	171.14)
53 54 El Salvador	842 (701 to	1478 (1239	75.42 (62.88	13 (8 to 16)	9 (7 to 12)	-28.67 (-54.13 to	661 (461 to	437 (329 to	-33.83 (-55.24 to
55	998)	to 1741)	to 87.97)	15 (0 10 10)	> (1 10 12)	18.21)	881)	574)	-1.58)
56 57 <sub>Equatorial</sub>	19 (16 to	95 (79 to	397.19			66.29 (-6.86	73 (37 to	119 (73 to	63.28
58 59 <sup>Guinea</sup>	24)	117)	(353.40 to	2 (1 to 3)	3 (2 to 4)	to 195.01)	135)	119 (73 10	(-22.44 to
60			443.01)						233.97)

1 2 3 4 5 6	Eritrea	114 (93 to 141)	327 (263 to 398)	186.49 (164.83 to 210.17)	9 (4 to 17)	23 (15 to 34)	165.47 (22.99 to 516.12)	474 (168 to 1107)	1017 (645 to 1643)	114.61 (-12.62 to 493.09)
7 8 9 10	Estonia	1311 (1148 to 1494)	1821 (1593 to 2066)	38.90 (26.62 to 51.17)	10 (9 to 12)	9 (6 to 11)	-17.88 (-40.41 to 15.88)	511 (425 to 601)	448 (341 to 573)	-12.32 (-28.71 to 9.89)
11 12 13 14	Eswatini	38 (31 to 47)	80 (65 to 98)	109.48 (95.32 to 125.52)	2 (1 to 3)	4 (2 to 5)	72.30 (1.22 to 254.21)	106 (47 to 206)	153 (101 to 227)	44.21 (-27.03 to 242.69)
15 16 17 18	Ethiopia	1763 (1447 to 2135)	4457 (3634 to 5454)	152.76 (143.58 to 162.31)	219 (128 to 398)	325 (197 to 489)	48.24 (-33.27 to 200.06)	11296 (4911 to 25054)	12866 (8426 to 19913)	13.90 (-51.97 to 197.17)
19 20 21 22	Fiji	28 (23 to 34)	42 (35 to 52)	50.29 (36.12 to 66.63)	1 (1 to 2)	2 (1 to 2)	27.79 (-16.31 to 91.11)	59 (45 to 80)	68 (49 to 91)	14.67 (-24.77 to 72.54)
23 24 25 26	Finland	9450 (8777 to 10150)	19960 (17972 to 22078)	111.22 (94.08 to 127.73)	33 (24 to 39)	39 (33 to 46)	18.82 (-5.40 to 68.55)	2012 (1537 to 2571)	3465 (2517 to 4569)	72.24 (51.93 to 93.91)
27 28 29 30	France	60982 (55563 to 66348)	101092 (91225 to 111418)	65.77 (54.06 to 77.24)	943 (807 to 1043)	2181 (1253 to 2615)	131.25 (51.63 to 168.76)	23073 (19741 to 26699)	40856 (30081 to 48291)	77.07 (34.58 to 97.82)
31 32 33	Gabon	65 (54 to 80)	163 (134 to 201)	150.81 (132.67 to 173.19)	4 (2 to 6)	5 (4 to 8)	52.52 (-4.74 to 134.04)	144 (85 to 223)	205 (137 to 294)	42.02 (-13.99 to 140.73)
34 35 36 37	Gambia	49 (39 to 60)	130 (105 to 161)	162.91 (142.17 to 186.15)	3 (1 to 5)	5 (3 to 7)	85.18 (3.78 to 214.51)	132 (63 to 243)	215 (140 to 298)	62.69 (-6.86 to 192.83)
38 39 40 41	Georgia	5100 (4308 to 6037)	4210 (3545 to 5060)	-17.45 (-22.85 to -11.71)	16 (10 to 22)	17 (10 to 22)	3.41 (-22.82 to 40.33)	1222 (911 to 1581)	991 (741 to 1269)	-18.96 (-30.33 to -5.81)
42 43 44 45	Germany	101153 (87240 to 117946)	236048 (208508 to 266966)	133.36 (115.87 to 150.36)	1201 (987 to 2011)	4286 (3156 to 4903)	256.72 (63.30 to 351.66)	37493 (30500 to 51704)	92002 (74718 to 107721)	145.38 (51.12 to 187.04)
46 47 48 49	Ghana	982 (800 to 1189)	2894 (2355 to 3533)	194.61 (176.45 to 216.26)	56 (24 to 95)	103 (57 to 155)	84.24 (5.66 to 242.87)	2633 (1097 to 4201)	4506 (2554 to 6654)	71.16 (2.12 to 227.26)
50 51 52 53	Greece	12180 (10236 to 14240)	10403 (9422 to 11537)	-14.59 (-23.98 to -3.38)	35 (30 to 40)	66 (54 to 80)	86.77 (51.57 to 131.14)	2407 (1790 to 3170)	2424 (1911 to 3027)	0.69 (-13.02 to 15.85)
54 55 56 57	Greenland	78 (64 to 92)	108 (92 to 125)	39.24 (25.78 to 55.52)	0 (0 to 0)	0 (0 to 1)	147.84 (18.45 to 275.98)	17 (13 to 23)	25 (19 to 33)	49.12 (13.65 to 82.39)
58 59 60	Grenada	16 (13 to 19)	28 (23 to 35)	76.27 (60.87 to 93.49)	1 (1 to 1)	1 (1 to 2)	29.20 (-4.73 to 79.53)	33 (27 to 39)	43 (36 to 52)	30.86 (1.58 to 68.87)

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2 3 4 5 Guam 6	8 (6 to 9)	12 (10 to 14)	49.19 (36.21 to 64.35)	0 (0 to 0)	0 (0 to 0)	21.60 (-20.17 to 84.57)	9 (7 to 12)	9 (7 to 13)	2.91 (-31.52 to 53.3)
7 8 9 Guatemala 10	1041 (867 to 1243)	3192 (2680 to 3791)	206.76 (185.26 to 227.66)	13 (8 to 22)	35 (27 to 45)	180.16 (34.43 to 377.94)	866 (522 to 1506)	1761 (1381 to 2210)	103.35 (6.31 to 246.71)
11 12 13 14	309 (251 to 384)	677 (543 to 826)	119.23 (103.12 to 138.21)	19 (6 to 34)	29 (14 to 46)	49.62 (-7.31 to 159.78)	1008 (272 to 2032)	1414 (609 to 2445)	40.38 (-20.12 to 170.29)
15 16 <sub>Guinea</sub> -Bissau 17 18	44 (36 to 54)	103 (83 to 126)	134.63 (116.21 to 153.25)	4 (2 to 7)	6 (3 to 8)	39.91 (-18.84 to 175.43)	201 (66 to 403)	265 (152 to 392)	31.85 (-30.36 to 186.15)
19 20 <sub>Guyana</sub> 21 22	126 (103 to 152)	170 (139 to 210)	35.00 (24.45 to 45.80)	5 (4 to 6)	6 (5 to 9)	20.04 (-18.42 to 74.53)	239 (189 to 291)	257 (191 to 336)	7.22 (-25.07 to 53.03)
23 24 Haiti 25 26	860 (708 to 1057)	1916 (1570 to 2384)	122.68 (105.23 to 142.3)	58 (24 to 105)	85 (45 to 125)	45.78 (-11 to 148.4)	3030 (946 to 6879)	3782 (1875 to 6104)	24.85 (-33.53 to 156.75)
27 28 Honduras 29 30	619 (513 to 734)	1803 (1499 to 2141)	191.20 (171.74 to 211.20)	22 (14 to 31)	50 (31 to 69)	128.99 (47.94 to 251.69)	1240 (712 to 1929)	1816 (1191 to 2508)	46.37 (-11.95 to 139.27)
31 32 Hungary 33	24215 (21977 to 26809)	42233 (39099 to 45377)	74.41 (64.26 to 86.04)	84 (76 to 109)	100 (80 to 128)	19.27 (-4.55 to 45.83)	5849 (4647 to 7201)	8339 (6257 to 10544)	42.56 (25.99 to 56.19)
34 35 36 Iceland 37	357 (301 to 420)	872 (752 to 1007)	144.33 (123.25 to 167.58)	2 (2 to 2)	4 (3 to 5)	107.81 (52.43 to 151.5)	90 (71 to 113)	187 (142 to 239)	107.79 (81.26 to 131.98)
38 39 40 India 41	133927 (107800 to 166434)	270719 (219873 to 332264)	102.14 (95.94 to 110.29)	2770 (1783 to 3802)	4214 (2950 to 5531)	52.13 (19.29 to 98.65)	127568 (77798 to 169843)	164416 (117527 to 208276)	28.89 (1.40 to 72.21)
42 43 44 Indonesia 45	5025 (3974 to 6141)	11410 (9158 to 13704)	127.09 (115.15 to 141.04)	704 (401 to 910)	913 (582 to 1179)	29.58 (2.63 to 76.95)	26026 (16965 to 34445)	24943 (18268 to 32252)	-4.16 (-31.91 to 42.06)
46 47Iran (Islamic 48 <sub>Republic</sub> of) 49	14964 (12153 to 18513)	40493 (32952 to 49751)	170.60 (160.28 to 181.00)	51 (33 to 68)	132 (55 to 164)	158.02 (43.67 to 247.65)	4022 (3121 to 5103)	9481 (6679 to 12439)	135.71 (84.19 to 177.03)
50 51 Iraq 52 53	2270 (1890 to 2694)	10029 (8221 to 12199)	341.76 (303.6 to 377.49)	34 (21 to 51)	51 (38 to 67)	52.37 (-14.19 to 162.33)	2135 (1267 to 3447)	3719 (2808 to 4931)	74.13 (2.20 to 190.75)
54 55 <sup>Ireland</sup> 56	3253 (2736 to 3869)	5762 (4988 to 6655)	77.13 (58.69 to 97.43)	33 (29 to 37)	51 (41 to 65)	53.61 (25.28 to 93.62)	1106 (922 to 1332)	1623 (1294 to 2033)	46.76 (29.96 to 67.57)
57 58 Israel 59 60	3274 (2767 to 3882)	6640 (5924 to 7451)	102.78 (76.8 to 132.02)	22 (18 to 24)	46 (38 to 63)	111.01 (70.80 to 199.17)	1000 (812 to 1229)	1851 (1484 to 2306)	85.14 (61.05 to 116.46)

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2 3 4 5 Italy 6	183929 (159353 to 209220)	186447 (165268 to 209019)	1.37 (-2.84 to 6.10)	351 (310 to 581)	1305 (944 to 1468)	272.23 (70.52 to 339.63)	33890 (24913 to 43884)	44427 (34629 to 54814)	31.09 (5.26 to 46.90)
7 8 9 <sup>Jamaica</sup> 10	543 (455 to 648)	884 (737 to 1059)	62.81 (49.97 to 76.46)	6 (4 to 7)	7 (5 to 10)	21.88 (-16.58 to 110.45)	304 (231 to 367)	343 (264 to 432)	12.67 (-13.90 to 66.78)
11 12 <sub>Japan</sub> 13 14	236120 (196281 to 281825)	408632 (353858 to 468152)	73.06 (59.11 to 88.73)	367 (270 to 394)	452 (350 to 629)	23.32 (1.39 to 112.57)	41769 (30062 to 56026)	67424 (46877 to 91495)	61.42 (48.32 to 75.54)
15 16 <sub>Jordan</sub> 17 18	1611 (1394 to 1851)	11508 (9646 to 13565)	614.12 (540.91 to 683.77)	6 (4 to 8)	13 (10 to 17)	135.70 (49.91 to 281.75)	452 (339 to 570)	2155 (1536 to 2953)	376.81 (274.79 to 495.45)
19 20 <sub>Kazakhstan</sub> 21 22	11689 (9797 to 14063)	15823 (13219 to 18930)	35.36 (26.10 to 46.10)	76 (56 to 95)	82 (66 to 100)	7.52 (-17.29 to 48.48)	4458 (3567 to 5515)	5172 (4164 to 6466)	16.03 (-1.28 to 37.13)
23 24 <sub>Kenya</sub> 25	868 (711 to 1056)	2870 (2364 to 3474)	230.72 (219.85 to 242.5)	74 (46 to 125)	180 (111 to 265)	144.03 (82.74 to 228.15)	3011 (1930 to 4593)	6453 (4376 to 9370)	114.3 (40.66 to 213.60)
26 27 <sub>Kiribati</sub> 28	2 (2 to 3)	4 (3 to 4)	60.33 (46.38 to 76.77)	1 (0 to 1)	1 (0 to 1)	5.25 (-33.24 to 73.45)	28 (11 to 58)	30 (14 to 55)	4.10 (-35.53 to 92.08)
29 30 31 <sup>Kuwait</sup> 32	863 (798 to 937)	2857 (2338 to 3483)	230.91 (174.37 to 298.63)	1 (1 to 2)	4 (3 to 5)	195.71 (125.48 to 314.39)	188 (140 to 241)	558 (391 to 755)	197.49 (143.44 to 262.68)
33 34 35 Kyrgyzstan 36	2526 (2126 to 3008)	4283 (3592 to 5083)	69.58 (59.46 to 81.49)	15 (10 to 19)	10 (8 to 12)	-36.11 (-51.26 to 14.99)	1109 (784 to 1376)	1031 (789 to 1325)	-7.05 (-27.91 to 29.99)
37 <sub>Lao</sub> People's 38 39 40 Republic	90 (70 to 113)	241 (191 to 300)	167.27 (144.93 to 193.03)	10 (5 to 15)	11 (6 to 17)	8.81 (-34.31 to 91.32)	385 (177 to 639)	387 (234 to 610)	0.50 (-45.77 to 106.92)
41 42 <sub>Latvia</sub> 43 44	3273 (2810 to 3770)	3226 (2843 to 3623)	-1.44 (-8.09 to 5.70)	12 (10 to 14)	14 (11 to 17)	18.35 (-5.77 to 47.79)	811 (632 to 1017)	779 (605 to 981)	-4.01 (-15.43 to 8.10)
45 46 <sub>Lebanon</sub> 47 48	881 (721 to 1091)	2494 (2037 to 3050)	182.89 (160.10 to 205.97)	3 (2 to 4)	8 (4 to 12)	146.92 (25.25 to 359.10)	220 (161 to 297)	545 (394 to 737)	148.06 (90.21 to 219.00)
49 50 Lesotho 51 52	95 (78 to 115)	150 (122 to 185)	58.00 (46.76 to 69.06)	6 (4 to 8)	9 (6 to 12)	51.75 (-12.69 to 142.65)	222 (137 to 323)	326 (210 to 480)	46.51 (-15.14 to 129.83)
52 53 54 Liberia 55 56	104 (85 to 129)	288 (233 to 354)	176.51 (154.41 to 199.50)	7 (3 to 12)	11 (6 to 17)	46.34 (-18.23 to 235.23)	360 (108 to 705)	490 (271 to 833)	35.96 (-36.97 to 268.26)
56 57 58 Libya 59 60	629 (514 to 759)	1910 (1557 to 2333)	203.80 (175.90 to 233.83)	4 (3 to 7)	11 (7 to 15)	159.15 (33.45 to 345.08)	229 (166 to 324)	595 (436 to 782)	160.02 (65.02 to 262.55)

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3 4 5	Lithuania	4535 (3980 to 5145)	4848 (4481 to 5210)	6.90 (-3.51 to 20.95)	14 (10 to 16)	18 (14 to 23)	26.29 (-2.24 to 67.72)	1054 (817 to 1321)	1105 (861 to 1375)	4.77 (-8.66 to 20.85)
6	Luxembourg	775 (680 to 879)	1503 (1318 to 1707)	93.98 (81.65 to 107.23)	5 (4 to 6)	11 (8 to 13)	124.41 (55.78 to 172.33)	202 (162 to 247)	376 (297 to 471)	85.81 (59.15 to 105.40)
10	Madagascar	490 (401 to 604)	1330 (1089 to 1651)	171.16 (153.22 to 190.88)	36 (17 to 60)	69 (48 to 103)	92.10 (5.72 to 331.04)	1875 (646 to 3722)	3000 (2035 to 4374)	60.01 (-23.07 to 329.63)
14 15 16 17	Malawi	336 (273 to 415)	741 (603 to 910)	120.33 (105.3 to 136.64)	39 (19 to 76)	55 (38 to 78)	39.48 (-33.91 to 218.89)	2236 (716 to 5491)	2323 (1541 to 3545)	3.89 (-57.34 to 225.03)
18 19 20 21		638 (533 to 747)	2165 (1879 to 2498)	239.19 (213.74 to 272.55)	16 (13 to 20)	41 (30 to 56)	157.56 (64.69 to 265.74)	612 (503 to 742)	1434 (1090 to 1814)	134.26 (68.55 to 208.48)
22 23 24 25		6 (5 to 7)	27 (21 to 33)	357.26 (319.05 to 402.53)	0 (0 to 1)	1 (1 to 1)	97.39 (13.04 to 268.14)	19 (10 to 33)	29 (23 to 38)	58.10 (-20.10 to 218.81)
26 27 28	Mali	396 (321 to 489)	1033 (841 to 1256)	161.12 (141.84 to 182.05)	29 (9 to 53)	55 (26 to 93)	90.14 (10.52 to 338.68)	1569 (384 to 3318)	2748 (1107 to 5138)	75.21 (-6.44 to 320.25)
29 30 31 32	Malta	275 (237 to 318)	390 (346 to 441)	42.03 (32.40 to 52.30)	2 (2 to 2)	6 (5 to 7)	182.23 (117.73 to 248.53)	84 (68 to 102)	149 (123 to 178)	77.16 (51.73 to 106.18)
33 34 35 36	Marshall Islands	1 (1 to 1)	2 (2 to 3)	81.58 (65.63 to 99.90)	0 (0 to 0)	0 (0 to 0)	14.19 (-33.41 to 79.45)	10 (6 to 17)	12 (6 to 20)	15.49 (-36.36 to 90.92)
37 38 39 40	Mauritania	118 (96 to 144)	330 (270 to 405)	179.57 (158.4 to 202.27)	8 (4 to 11)	9 (6 to 13)	19.95 (-22.88 to 109.37)	322 (167 to 487)	376 (245 to 543)	16.93 (-28.24 to 120.07)
41 42 43 44	Mauritius	47 (37 to 58)	86 (69 to 102)	81.67 (65.36 to 99.25)	1 (1 to 1)	3 (3 to 4)	176.18 (101.94 to 258.21)	50 (43 to 61)	117 (90 to 147)	134.12 (70.2 to 198.45)
45 46 47 48	Mexico	25697 (21937 to 30082)	46570 (40040 to 53889)	81.22 (75.62 to 87.02)	157 (142 to 176)	519 (408 to 622)	229.87 (156.16 to 297.06)	9626 (8180 to 11411)	21132 (17386 to 25318)	119.55 (86.73 to 154.33)
	Micronesia (Federated	3 (2 to 4)	4 (3 to 5)	26.76 (16.02 to 38.96)	1 (0 to 1)	1 (0 to 1)	-23.01 (-59.09 to 31.38)	28 (16 to 49)	20 (10 to 38)	-27.22 (-62.97 to 22.93)
53 54	Monaco	43 (36 to 51)	59 (50 to 69)	37.31 (28.37 to 47.29)	0 (0 to 0)	0 (0 to 1)	37.96 (-4.38 to 94.10)	11 (8 to 14)	14 (11 to 18)	30.63 (10.51 to 53.62)
55 56 57 58	Mongolia	961 (801 to 1153)	2328 (1907 to 2810)	142.14 (124.80 to 161.08)	11 (6 to 15)	12 (9 to 16)	11.41 (-26.46 to 89.38)	690 (380 to 1073)	814 (620 to 1028)	17.92 (-26.45 to 100.76)

3 (2 to 3)

48.81 (1.77

191 (145 to

221 (165 to

15.74 (1.68

2 (1 to 2)

59 <sub>Montenegro</sub> 60

879 (744 to

1051 (890 to

19.54 (12.1

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2 3 4	1032)	1240)	to 27.53)			to 101.73)	247)	288)	to 30.37)
5 6 Morocco 7	3007 (2487 to 3582)	6614 (5488 to 7909)	119.98 (105.44 to 135.91)	31 (19 to 48)	59 (41 to 77)	91.82 (30.18 to 192.53)	1438 (989 to 2101)	2615 (1988 to 3373)	81.81 (30.04 to 139.60)
8 9 10Mozambique 11	487 (397 to 601)	1111 (897 to 1347)	128.31 (112.18 to 146.62)	52 (30 to 88)	107 (71 to 154)	107.07 (16.28 to 270.37)	2567 (1058 to 5668)	4503 (2907 to 7196)	75.44 (-18.50 to 319.21)
12 13 14 Myanmar 15	1024 (797 to 1272)	2062 (1656 to 2558)	101.31 (83.73 to 120.83)	60 (34 to 95)	59 (44 to 82)	-0.68 (-40.07 to 64.77)	2820 (1386 to 5128)	2258 (1680 to 3215)	-19.94 (-57.94 to 48.65)
16 17 18 <sup>Namibia</sup> 19	87 (72 to 108)	217 (175 to 268)	148.34 (130.13 to 167.81)	6 (4 to 8)	9 (6 to 13)	61.81 (0.64 to 190.79)	218 (129 to 344)	333 (223 to 498)	52.64 (-12.57 to 213.41)
20 21 22 <sup>Nauru</sup> 23	0 (0 to 0)	0 (0 to 0)	12.57 (3.45 to 21.62)	0 (0 to 0)	0 (0 to 0)	-34.79 (-63.12 to 6.11)	3 (1 to 6)	2 (1 to 4)	-34.16 (-60.95 to 18.41)
24 25 <sub>Nepal</sub> 26 27	2180 (1726 to 2758)	5036 (4049 to 6194)	131.04 (112.62 to 151.30)	93 (56 to 165)	115 (71 to 190)	23.09 (-15.11 to 93.10)	3780 (2183 to 5903)	3819 (2683 to 5781)	1.05 (-34.25 to 65.01)
28 29 <sub>Netherlands</sub> 30 31	24401 (22175 to 26704)	16251 (13975 to 18987)	-33.4 (-41.14 to -24.18)	278 (240 to 344)	782 (582 to 906)	180.66 (78.32 to 230.31)	8234 (6818 to 9979)	12100 (10246 to 13731)	46.95 (10.86 to 70.21)
32 33 <sup>New Zealand</sup>	5873 (5089 to 6670)	8600 (7850 to 9491)	46.45 (37.95 to 57.06)	20 (17 to 22)	31 (26 to 39)	58.14 (32.29 to 109.75)	1267 (976 to 1592)	1758 (1327 to 2254)	38.84 (26.73 to 54.82)
34 35 36 Nicaragua 37 38	500 (414 to 598)	1453 (1218 to 1720)	190.37 (167.53 to 212.17)	3 (2 to 3)	7 (6 to 9)	177.21 (99.51 to 267.74)	187 (149 to 245)	444 (340 to 555)	137.59 (85.21 to 192.36)
39 40 Niger 41	321 (256 to 395)	942 (760 to 1154)	193.63 (171.22 to 216.83)	27 (9 to 54)	55 (26 to 95)	106.00 (18.53 to 313.02)	1564 (379 to 3724)	2835 (1120 to 5521)	81.21 (-7.73 to 318.21)
42 43 44 <sup>Nigeria</sup> 45	5162 (4259 to 6269)	14578 (11955 to 17708)	182.41 (176.97 to 187.98)	314 (165 to 514)	560 (306 to 909)	78.53 (23.85 to 168.11)	15139 (7194 to 24017)	26794 (15017 to 42474)	76.98 (13.30 to 185.01)
46 47 48 <sup>Niue</sup> 49	0 (0 to 0)	0 (0 to 0)	-12.86 (-20.01 to -3.97)	0 (0 to 0)	0 (0 to 0)	-42.22 (-65.13 to -10.86)	1 (0 to 1)	0 (0 to 1)	-45.91 (-68.37 to -8.78)
50 North 51 Macedonia 52 Northern	2473 (2098 to 2927)	3374 (2855 to 3973)	36.41 (27.51 to 46.86)	4 (3 to 4)	5 (3 to 6)	37.22 (1.2 to 83.42) -44.77	490 (358 to 648)	635 (459 to 844)	29.55 (14.26 to 46.45) -57.52
54 Mariana 55 <sub>Islands</sub> 56	3 (2 to 3)	3 (3 to 4)	17.67 (3.72 to 33.96)	0 (0 to 0)	0 (0 to 0)	(-70.47 to 26.41)	12 (8 to 19)	5 (4 to 9)	(-77.38 to -4.80)
57 58 Norway 59 60	20686 (17395 to 24323)	33097 (28492 to 37859)	60.00 (50.85 to 68.77)	29 (26 to 41)	38 (32 to 55)	30.65 (17.07 to 54.59)	3551 (2585 to 4687)	5414 (3835 to 7244)	52.44 (44.12 to 61.59)

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3 4 5 6	Oman	431 (347 to 517)	1575 (1266 to 1924)	265.15 (237.03 to 297.09)	2 (1 to 3)	4 (3 to 5)	135.73 (37.95 to 331.56)	122 (85 to 178)	375 (271 to 496)	206.46 (111.98 to 320.55)
7 8 9 10	Pakistan	9984 (7995 to 12369)	26815 (21768 to 33849)	168.59 (154.72 to 184.98)	454 (240 to 866)	657 (447 to 993)	44.84 (-2.73 to 133.76)	16234 (9791 to 26748)	27286 (18727 to 38379)	68.08 (19.36 to 148.68)
11 12 13 14	Palau	1 (1 to 1)	1 (1 to 1)	58.71 (43.16 to 76.15)	0 (0 to 0)	0 (0 to 0)	23.28 (-26.34 to 101.05)	3 (2 to 7)	4 (2 to 6)	14.99 (-29.80 to 103.99)
15 16 17 18	Palestine	374 (305 to 450)	1351 (1104 to 1621)	261.47 (229.04 to 293.11)	3 (2 to 4)	4 (3 to 6)	49.80 (-14.64 to 127.75)	132 (92 to 195)	320 (235 to 443)	142.19 (82.43 to 220.08)
19 20 21 22	Panama	553 (471 to 638)	1338 (1131 to 1560)	141.92 (123.11 to 161.72)	7 (6 to 10)	25 (19 to 32)	239.99 (135.70 to 373.74)	436 (347 to 538)	1002 (763 to 1297)	129.97 (65.87 to 224.87)
23	Papua New Guinea	116 (92 to 140)	285 (229 to 350)	145.64 (124.56 to 168.38)	13 (7 to 20)	25 (16 to 38)	95.85 (20.41 to 222.69)	661 (335 to 1140)	1258 (758 to 2034)	90.40 (5.88 to 270.52)
27 28 29	Paraguay	996 (853 to 1165)	1956 (1652 to 2324)	96.35 (82.38 to 111.71)	4 (4 to 5)	12 (8 to 16)	171.03 (73.55 to 302.03)	327 (263 to 404)	647 (481 to 831)	97.76 (55.83 to 147.82)
30 31 32 33	Peru	2566 (2121 to 3079)	5665 (4638 to 6822)	120.79 (105.66 to 138.38)	128 (74 to 194)	76 (54 to 105)	-40.28 (-66.32 to 19.96)	8234 (3972 to 13912)	3118 (2308 to 4194)	-62.13 (-79.74 to -11.96)
37	Philippines	2067 (1630 to 2519)	5073 (4044 to 6166)	145.40 (135.48 to 156.45)	98 (54 to 125)	117 (95 to 155)	19.59 (-15.39 to 149.06)	3743 (2419 to 4551)	4556 (3797 to 5981)	21.71 (-7.83 to 121.46)
38 39 40 41	Poland	177477 (149170 to 211629)	88307 (77909 to 99826)	-50.24 (-54.72 to -45.27)	180 (168 to 211)	361 (281 to 426)	99.98 (43.08 to 136.68)	30297 (21831 to 40254)	20081 (15602 to 25064)	-33.72 (-41.18 to -24.23)
42 43 44 45	Portugal	6035 (5365 to 6750)	9894 (8866 to 11003)	63.94 (50.98 to 79.42)	81 (72 to 90)	306 (158 to 363)	277.16 (96.34 to 355.45)	2425 (2073 to 2832)	5332 (3507 to 6256)	119.87 (37.89 to 153.53)
49	Puerto Rico	1123 (1058 to 1194)	1442 (1320 to 1565)	28.41 (21.63 to 35.32)	20 (15 to 22)	18 (13 to 28)	-9.54 (-38.39 to 73.14)	755 (589 to 869)	592 (456 to 801)	-21.63 (-40.46 to 23.39)
50 51 52 53	Qatar	154 (123 to 187)	1446 (1178 to 1746)	838.58 (770.76 to 916.51)	0 (0 to 1)	2 (1 to 3)	413.11 (169.07 to 853.64)	41 (29 to 57)	296 (205 to 412)	628.10 (423.39 to 857.49)
56 57	Republic of Korea	17167 (15174 to 19498)	46956 (44197 to 49997)	173.52 (147.67 to 206.09)	313 (143 to 399)	234 (183 to 313)	-25.35 (-46.63 to 58.97)	9498 (6903 to 11454)	10451 (7829 to 13343)	10.04 (-17.52 to 63.35)
58 59 60	Republic of Moldova	3098 (2561 to 3712)	3166 (2836 to 3521)	2.20 (-11.58 to 19.64)	17 (14 to 21)	18 (14 to 21)	4.75 (-16.20 to 31.59)	1046 (844 to 1266)	999 (820 to 1209)	-4.45 (-18.23 to

1									
2 3 4 5 6 Romania 7	17947 (15104 to 21254)	17043 (15232 to 19020)	-5.04 (-15.24 to 7.37)	64 (55 to 76)	74 (59 to 93)	15.86 (-8.37 to 45.57)	5269 (4206 to 6540)	4364 (3404 to 5459)	13.21) -17.18 (-29.98 to -2.13)
8 9 Russian 10 11 Federation	167371 (141580 to 195591)	170565 (145182 to 199143)	1.91 (-0.13 to 4.04)	977 (726 to 1128)	1257 (1021 to 1464)	28.65 (6.46 to 62.61)	53401 (41640 to 64977)	56533 (46127 to 69324)	5.86 (-5.94 to 23.29)
12 13 14 Rwanda 15	288 (237 to 355)	726 (584 to 888)	152.30 (132.10 to 172.65)	34 (20 to 59)	42 (27 to 62)	21.96 (-36.82 to 143.44)	1761 (735 to 3717)	1838 (1153 to 3012)	4.34 (-55.16 to 173.20)
16 1 <b>T</b> aint Kitts and 18 <sub>Nevis</sub> 19	10 (8 to 12)	21 (17 to 26)	106.61 (90.32 to 126.13)	1 (1 to 1)	1 (1 to 1)	9.71 (-25.03 to 72.10)	25 (19 to 29)	28 (19 to 41)	14.61 (-24.18 to 78.38)
20 21 22 Saint Lucia 23	25 (21 to 31)	59 (48 to 72)	131.09 (113.96 to 149.59)	1 (1 to 1)	1 (1 to 2)	47.65 (10.86 to 116.72)	36 (29 to 41)	45 (36 to 56)	26.50 (-1.54 to 79.21)
24 <sub>Saint</sub> Vincent 25 26 and the 27 Grenadines	20 (16 to 24)	32 (26 to 39)	63.64 (48.19 to 80.82)	1 (1 to 1)	2 (1 to 2)	54.50 (13.27 to 112.91)	39 (32 to 45)	49 (40 to 62)	27.47 (-3.02 to 72.66)
28 29 <sub>Samoa</sub> 30	6 (5 to 8)	9 (7 to 10)	34.52 (23.82 to 45.98)	1 (1 to 1)	1 (1 to 1)	6.37 (-33.37 to 64.06)	31 (20 to 46)	30 (19 to 45)	-1.06 (-42.04 to
31			,				,	,	65.39)
31 32 33 <sub>San Marino</sub> 34 35	29 (25 to 35)	48 (41 to 57)	65.44 (55.11 to 76.39)	0 (0 to 0)	0 (0 to 0)	167.91 (65.76 to 328.84)	6 (4 to 8)	10 (8 to 14)	65.39) 74.92 (47.44 to 111.54)
32 33 <sub>San Marino</sub> 34 35 36 37 <sup>Sao Tome and 38 Principe</sup>			65.44 (55.11	0 (0 to 0) 0 (0 to 1)	0 (0 to 0) 0 (0 to 1)	167.91 (65.76 to			74.92 (47.44
32 33 San Marino 34 35 36 37 Sao Tome and 38 Principe 39 40 41 Saudi Arabia 42	35)	57) 18 (15 to	65.44 (55.11 to 76.39) 135.19 (118.79 to		0	167.91 (65.76 to 328.84) 3.87 (-41.14	6 (4 to 8)	10 (8 to 14) 16 (11 to	74.92 (47.44 to 111.54) 4.71 (-42.23
32 33 San Marino 34 35 36 37 Sao Tome and 38 Principe 39 40 41 Saudi Arabia 42 43 44 45 Senegal 46	35) 8 (6 to 10) 3748 (3112	57) 18 (15 to 23) 13816 (11338 to	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to	0 (0 to 1)	0 (0 to 1) 27 (18 to	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23	6 (4 to 8) 15 (8 to 24) 1012 (729 to	10 (8 to 14) 16 (11 to 24) 3181 (2284	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to
32 33 San Marino 34 35 36 37 <sup>Sao</sup> Tome and 38 Principe 39 40 41 Saudi Arabia 42 43 44 45 Senegal 46 47 48 49 Serbia 50	35) 8 (6 to 10) 3748 (3112 to 4462) 366 (298 to	57) 18 (15 to 23) 13816 (11338 to 16751) 930 (756 to	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to 301.72) 153.93 (136.66 to	0 (0 to 1) 12 (7 to 20) 23 (10 to	0 (0 to 1) 27 (18 to 38) 37 (22 to	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23 to 337.69) 61.95 (2.65	6 (4 to 8) 15 (8 to 24) 1012 (729 to 1405) 1084 (420 to	10 (8 to 14) 16 (11 to 24) 3181 (2284 to 4376) 1527 (911 to	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to 315.14) 40.90 (-20.02 to
32 33 San Marino 34 35 36 37 <sup>Sao</sup> Tome and 38 Principe 39 40 41Saudi Arabia 42 43 44 45 Senegal 46 47 48 49 Serbia 50 51 52 53 Seychelles 54	35) 8 (6 to 10) 3748 (3112 to 4462) 366 (298 to 449) 12769 (10737 to	57) 18 (15 to 23) 13816 (11338 to 16751) 930 (756 to 1164) 16638 (14322 to	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to 301.72) 153.93 (136.66 to 171.52) 30.30 (20.12	0 (0 to 1) 12 (7 to 20) 23 (10 to 37) 49 (37 to	0 (0 to 1) 27 (18 to 38) 37 (22 to 57) 113 (74 to	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23 to 337.69) 61.95 (2.65 to 184.83) 128.93 (9.06	6 (4 to 8) 15 (8 to 24) 1012 (729 to 1405) 1084 (420 to 1912) 3314 (2528	10 (8 to 14) 16 (11 to 24) 3181 (2284 to 4376) 1527 (911 to 2378) 4741 (3595	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to 315.14) 40.90 (-20.02 to 185.33) 43.04 (-2.81
32 33 San Marino 34 35 36 37 Sao Tome and 38 Principe 39 40 41 Saudi Arabia 42 43 44 45 Senegal 46 47 48 49 Serbia 50 51 52 53 Seychelles	35) 8 (6 to 10) 3748 (3112 to 4462) 366 (298 to 449) 12769 (10737 to 14873)	57) 18 (15 to 23) 13816 (11338 to 16751) 930 (756 to 1164) 16638 (14322 to 19211)	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to 301.72) 153.93 (136.66 to 171.52) 30.30 (20.12 to 43.95) 117.31 (99.80 to	0 (0 to 1) 12 (7 to 20) 23 (10 to 37) 49 (37 to 78)	0 (0 to 1) 27 (18 to 38) 37 (22 to 57) 113 (74 to 147)	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23 to 337.69) 61.95 (2.65 to 184.83) 128.93 (9.06 to 259.34) 28.62 (-7.02	6 (4 to 8) 15 (8 to 24) 1012 (729 to 1405) 1084 (420 to 1912) 3314 (2528 to 4479)	10 (8 to 14) 16 (11 to 24) 3181 (2284 to 4376) 1527 (911 to 2378) 4741 (3595 to 5996)	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to 315.14) 40.90 (-20.02 to 185.33) 43.04 (-2.81 to 78.90) 31.52 (-0.75

2										
3 4		to 1934)	to 3962)	to 116.81)			to 150.34)	490)	838)	to 100.87)
4 5	Slovakia	9361 (8373	10674 (9737	14.02 (8.30	31 (25 to	58 (41 to	88.23 (-3.03	2274 (1743	2856 (2175	25.60 (-5.11
6	SIOVAKIA	to 10336)	to 11684)	to 20.14)	48)	76)	to 176.55)	to 2989)	to 3557)	to 53.77)
7 8	Slovenia	3775 (3318	4739 (4282	25.55 (17.98	10 (8 to 13)	18 (13 to	86.00 (28.56	781 (579 to	977 (726 to	25.10 (7.66
9	Siovenia	to 4289)	to 5219)	to 33.07)	10 (0 10 15)	25)	to 165.93)	1011)	1253)	to 43.50)
10	Solomon		17 (13 to	124.02			64.34 (-3.76	53 (24 to	86 (48 to	63.24 (-5.21
11 12	Islands	8 (6 to 9)	21)	(102.93 to	1 (1 to 2)	2 (1 to 3)	to 176.72)	101)	156)	to 190.03)
13				148.4)			100.55			
14 15	G 1.	237 (190 to	630 (502 to	165.38	10 (7 ( 40)	40 (21 to	109.57	1021 (282 to	1986 (928 to	94.57 (2.46
16	Somalia	293)	786)	(145.60 to 187.38)	19 (7 to 40)	71)	(26.24 to 263.84)	2543)	3988)	to 316.32)
17				122.12			203.84)			26.34
18 199	South Africa	2945 (2438	6542 (5423	(114.01 to	98 (69 to	166 (124 to	69.87 (20.49	4862 (3068	6143 (4966	(-18.56 to
20	Journ Infou	to 3586)	to 7934)	131.25)	123)	196)	to 168.66)	to 7236)	to 7083)	117.23)
21 22							29.68			13.58
	South Sudan	249 (202 to	469 (383 to	88.39 (73.80	22 (9 to 43)	29 (16 to	(-39.27 to	1158 (325 to	1315 (637 to	(-53.56 to
24		307)	576)	to 103.53)		61)	148.37)	2801)	2625)	178.43)
25 26		39276	77822	98.14 (91.73	278 (237 to	377 (303 to	35.79 (8.43	11347 (9316	17466	53.93 (36.17
27	Spain	(37463 to	(74030 to	to 104.75)	304)	600)	to 121.33)	to 13673)	(13535 to	to 79.47)
28		41127)	81685)	10 104.75)	50-1)	000)	10 121.55)	10 15075)	22106)	(0 / ).+/ )
29 30		909 (734 to	2295 (2003	152.54	19 (14 to	21 (15 to	13.97	813 (609 to	895 (684 to	10.11
31	Sri Lanka	1119)	to 2637)	(124.22 to	24)	30)	(-25.92 to	1032)	1147)	(-20.92 to
32 33				186.13)			74.18)			51.47)
34	C	3315 (2684	9292 (7568	180.28	21 (10 to	48 (28 to	123.91 (3.53	1310 (720 to	3003 (2102	129.31 (11.1
35	Sudan	to 4060)	to 11371)	(157.81 to 205.52)	44)	78)	to 380.84)	2866)	to 4130)	to 282.19)
36 37				203.32)						16.97
38	Suriname	79 (66 to	158 (129 to	98.73 (81.35	3 (2 to 3)	4 (3 to 5)	32.93 (-4.19	118 (85 to	138 (109 to	(-14.68 to
39 40		96)	194)	to 117.62)	0 (2 (0 0))	. (0 00 0)	to 91.78)	146)	175)	66.50)
41		30612	40244				-11.38			
42	Sweden	(26350 to	(34733 to	31.46 (23.94	107 (86 to	95 (77 to	(-27.36 to	6158 (4631	7117 (5148	15.58 (4.65
43 44		35136)	46000)	to 40.19)	119)	139)	46.41)	to 7936)	to 9548)	to 28.78)
45		10695 (9668	14969	39.96 (33.88	73 (58 to	123 (97 to	69.01 (36.46	2817 (2268	3807 (2979	35.16 (21.15
46 47	Switzerland	to 11813)	(13688 to	to 46.34)	83)	160)	to 128.96)	to 3429)	to 4738)	to 56.09)
48		10 11015)	16325)	10 +0.5+)	03)	100)	10 120.90)	(0 542))	10 4750)	10 50.07)
49	Syrian Arab	2248 (1819	4862 (3940	116.26	23 (13 to	37 (20 to	57.25	1091 (741 to	1653 (1195	51.58 (7.71
50 51	Republic	to 2734)	to 5871)	(97.13 to	35)	52)	(-10.52 to	1432)	to 2195)	to 137.88)
52				135.91)			184.61)			
53	Taiwan	2221 (1923	9064 (8139	308.12	101 (67 to	199 (152 to	97.46 (44.81	2623 (1919	4338 (3499	65.37 (31.64
54) 55	(Province of	to 2557)	to 10153)	(279.81 to	113)	264)	to 288.02)	to 2947)	to 5416)	to 167.25)
56	China)			342.19) 130.78			-11.19			-2.66
57 58	Tajikistan	2391 (1972	5519 (4623	(115.02 to	21 (11 to	18 (13 to	-11.19 (-54.29 to	1691 (853 to	1646 (1219	-2.00 (-48.60 to
58 59	rujikistali	to 2877)	to 6632)	148.48)	34)	26)	(-34.29 to 82.80)	2831)	to 2185)	(-48.00 to 91.67)
60										)

1 2									
3 4 5 Thailand 6	1734 (1327 to 2180)	3808 (3078 to 4630)	119.65 (96.59 to 151.17)	72 (52 to 95)	111 (80 to 149)	54.05 (-3.23 to 138.51)	2899 (2029 to 3946)	3272 (2453 to 4259)	12.87 (-26.29 to 71.96)
7 8 9 <sup>Timor-Leste</sup> 10	18 (14 to 23)	41 (33 to 50)	122.2 (104.08 to 146.48)	1 (1 to 3)	3 (2 to 5)	107.01 (24.75 to 246.34)	59 (29 to 102)	86 (48 to 138)	47.21 (-28.05 to 185.55)
11 12 <sub>Togo</sub> 13 14	190 (155 to 232)	514 (418 to 634)	170.07 (148.46 to 196.29)	9 (4 to 14)	21 (14 to 30)	142.31 (33.33 to 393.01)	457 (182 to 773)	940 (589 to 1321)	105.73 (15.73 to 366.27)
15 16 <sub>Tokelau</sub> 17 18	0 (0 to 0)	0 (0 to 0)	17.45 (9.66 to 26.52)	0 (0 to 0)	0 (0 to 0)	-38.14 (-61.51 to -1.52)	0 (0 to 1)	0 (0 to 0)	-39.66 (-63.93 to 8.06)
19 20 <sub>Tonga</sub> 21 22	4 (3 to 5)	4 (4 to 5)	14.32 (5.18 to 25.01)	1 (0 to 1)	1 (0 to 1)	0.57 (-36.36 to 55.61)	21 (14 to 30)	19 (13 to 27)	-11.27 (-43.54 to 36.78)
23Trinidad and 24 <sub>Tobago</sub>	275 (226 to 333)	476 (395 to 586)	73.31 (60.64 to 88.40)	3 (2 to 4)	5 (4 to 7)	67.08 (17.69 to 135.28)	143 (110 to 169)	215 (162 to 279)	49.93 (17.59 to 92.29)
25 26 27 <sup>Tunisia</sup> 28	2247 (1845 to 2720)	5382 (4413 to 6568)	139.49 (122.55 to 159.3)	7 (5 to 11)	16 (11 to 23)	124.51 (18.63 to 312.49)	569 (405 to 784)	1215 (890 to 1622)	113.58 (59.27 to 174.73)
29 30 31 <sup>Turkey</sup> 32	24930 (21910 to 28012)	93902 (80596 to 107925)	276.67 (231.04 to 325.07)	261 (159 to 401)	329 (250 to 471)	26.21 (-22.73 to 118.88)	13910 (9268 to 19352)	22488 (17253 to 28896)	61.67 (9.74 to 147.01)
33 34 35 <sup>Turkmenistan</sup> 36	1758 (1463 to 2085)	3806 (3155 to 4551)	116.48 (102.66 to 132.01)	10 (7 to 13)	14 (9 to 20)	45.23 (9.53 to 98.88)	765 (493 to 1049)	1120 (805 to 1438)	46.38 (13.41 to 91.33)
37 38 Tuvalu 39 40	0 (0 to 0)	0 (0 to 1)	27.01 (14.84 to 39.84)	0 (0 to 0)	0 (0 to 0)	-5.17 (-39.67 to 57.04)	3 (1 to 5)	2 (1 to 4)	-16.57 (-50.42 to 58.50)
41 42 Uganda 43 44	569 (462 to 701)	1697 (1381 to 2111)	198.27 (178.98 to 220.89)	48 (30 to 75)	102 (70 to 150)	114.15 (26.45 to 252.91)	2257 (1132 to 4612)	4600 (3084 to 7058)	103.84 (-2.52 to 318.38)
45 46 <sub>Ukraine</sub> 47 48	44470 (37197 to 53622)	42711 (36101 to 51042)	-3.95 (-10.23 to 3.42)	230 (174 to 306)	260 (210 to 315)	12.61 (-17.79 to 52.12)	13419 (10673 to 16857)	14197 (11469 to 17211)	5.80 (-13.37 to 26.77)
49 50 United Arab 51 Emirates 52	595 (477 to 725)	5742 (4546 to 7126)	864.58 (768.02 to 978.3)	1 (1 to 3)	13 (7 to 22)	939.61 (312.54 to 2260.01)	144 (93 to 219)	1401 (971 to 1965)	871.11 (531.13 to 1256.31)
53 United 54 55 Kingdom 56	150003 (132531 to 168508)	194529 (173985 to 215870)	29.68 (26.73 to 33.13)	856 (756 to 1056)	1793 (1533 to 1999)	109.50 (62.60 to 132.89)	37500 (30121 to 46024)	55171 (45323 to 66217)	47.12 (29.39 to 55.47)
57 United 58 Republic of 59 <sub>Tanzania</sub> 60	1121 (914 to 1369)	2891 (2330 to 3566)	157.88 (138.98 to 177.80)	86 (53 to 152)	181 (115 to 259)	111.26 (24.98 to 260.69)	4655 (2090 to 9955)	8565 (4988 to 14089)	83.97 (-7.81 to 290.41)

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2 3 4 United States 5 of America	982982 (846833 to 1129783)	762890 (712357 to 813654)	-22.39 (-29.48 to -14.49)	2171 (1940 to 2662)	5910 (4622 to 6464)	172.17 (80.73 to 199.18)	186357 (137531 to 243644)	215289 (175991 to 256059)	15.53 (-1.97 to 33.87)
7 8 United States 9 Virgin Islands 10	32 (27 to 39)	47 (39 to 58)	46.61 (32.66 to 61.87)	1 (0 to 1)	1 (1 to 1)	11.78 (-24.49 to 72.41)	26 (19 to 32)	23 (18 to 29)	-9.33 (-33.27 to 25.88)
11 12 13 <sup>Uruguay</sup> 14	586 (485 to 711)	685 (564 to 830)	16.85 (7.20 to 26.83)	10 (9 to 14)	22 (19 to 26)	123.02 (68.94 to 165.97)	339 (290 to 426)	572 (496 to 648)	68.83 (35.57 to 94.94)
15 16 Uzbekistan 17 18	10505 (8847 to 12563)	23340 (19452 to 27952)	122.19 (107.43 to 140.58)	48 (31 to 59)	73 (58 to 93)	51.36 (12.53 to 153.54)	4299 (3006 to 5336)	6869 (5391 to 8500)	59.77 (27.87 to 109.54)
19 20 <sub>Vanuatu</sub> 21 22	4 (3 to 5)	9 (7 to 11)	115.45 (98.23 to 135.09)	1 (0 to 1)	2 (1 to 2)	77.85 (12.27 to 189.96)	33 (17 to 55)	57 (33 to 92)	71.58 (-1.00 to 187.82)
<ul> <li>23 Venezuela</li> <li>24 (Bolivarian</li> <li>25 Republic of)</li> <li>26</li> </ul>	3817 (3268 to 4388)	8787 (7406 to 10382)	130.21 (113.08 to 147.54)	28 (19 to 32)	44 (31 to 59)	58.23 (11.55 to 165.19)	1676 (1316 to 1993)	2642 (2032 to 3372)	57.61 (25.64 to 101.69)
26 27 28 Viet Nam 29 30	4754 (3636 to 5967)	20278 (16050 to 25063)	326.50 (284.54 to 376.20)	221 (120 to 327)	177 (119 to 247)	-19.57 (-57.9 to 40.02)	6650 (4129 to 8928)	7419 (5510 to 9604)	11.56 (-26.71 to 73.67)
30 31 32 Yemen 33 34	1826 (1464 to 2237)	6284 (5044 to 7734)	244.20 (216.72 to 270.66)	14 (8 to 25)	44 (30 to 68)	217.58 (89.82 to 463.74)	772 (495 to 1411)	2423 (1790 to 3248)	213.69 (96.39 to 365.86)
35 36 Zambia 37	291 (236 to 350)	971 (790 to 1210)	233.83 (206.24 to 265.39)	35 (18 to 64)	55 (38 to 76)	57.07 (-21.84 to 226.50)	1941 (679 to 4527)	2548 (1621 to 3800)	31.27 (-46.88 to 283.23)
38 39 Zimbabwe 40	524 (430 to 644)	931 (757 to 1165)	77.84 (65.57 to 91.40)	22 (16 to 31)	43 (25 to 65)	98.08 (13.90 to 202.61)	1018 (652 to 1728)	1888 (1075 to 2968)	85.39 (11.43 to 204.97)
41 42	Abbrevia	tions: UI=u	uncertainty in	iterval.					

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Supplementary Table 3 Age-standardised prevalence, death and DALY rates for
inflammatory bower disease (IBD) by 204 countries or territories in 1990 and 2019,
and their temporal trends from 1990 to 2019

6 and their temporal trends from 1990 to 2019										
7	Age-stan	dardised prevale	ence rate	Age-s	tandardized dea	th rate	Age-standardized DALY rate			
8 9 <sub>Characteristics</sub>	per 100,000 population			per	100,000 popula	tion	per 1	100,000 populat	ion	
10	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	
11	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	
12 13 Afghanistan	21.95 (17.75	23.69 (19.05	0.57 (0.40 to	0.44 (0.22 to	0.43 (0.26 to	0.01 (-0.06	15.26 (8.26	14.58 (9.58	0.03 (-0.06	
14	to 26.86)	to 29.24)	0.74)	0.78)	0.64)	to 0.08)	to 26.64)	to 20.47)	to 0.12)	
15 16	119.15	116.19	0.01 (-0.06	1.65 (0.90 to	0.41 (0.27 to	-5.17 (-6.14	110.06	36.18 (25.65	-4.07 (-5.01	
16 Albania 17	(100.27 to	(97.53 to	to 0.09)	2.05)	0.61)	to -4.19)	(47.30 to	to 49.28)	to -3.12)	
18	140.7)	136.91)		2.00)	0.01)		143.55)	(0 1)120)		
19 20 <sup>Algeria</sup>	34.69 (30.01	39.54 (32.16	0.68 (0.53 to	0.25 (0.17 to	0.17 (0.13 to	-1.14 (-1.23	11.17 (8.26	9.93 (7.45 to	-0.28 (-0.38	
20 21	to 40.15)	to 48.88)	0.83)	0.37)	0.23)	to -1.04)	to 15.40)	12.97)	to -0.17)	
22 American	6.24 (5.14 to	6.14 (5.03 to	-0.22 (-0.35	1.54 (0.89 to	0.53 (0.37 to	-4.40 (-4.80	44.49 (26.51	15.67 (10.89	-4.23 (-4.59	
23 Samoa	7.41)	7.38)	to -0.09)	2.28)	0.90)	to -4.01)	to 63.51)	to 28.11)	to -3.86)	
24 25	108.82	112.31 (94.3	0.17 (0.11 to	0.70 (0.49 to	0.69 (0.41 to	0.03 (-0.06	29.98 (22.66	29.68 (20.92	0.02 (-0.03	
26 Andorra	(91.32 to	to 132.64)	0.22)	1.00)	1.01)	to 0.13)	to 38.91)	to 39.03)	to 0.07)	
27	128.78)		(							
28 29 Angola	7.20 (5.93 to	8.85 (7.31 to	0.59 (0.48 to	0.73 (0.43 to	0.62 (0.45 to	-0.60 (-0.66	23.37 (11.91	18.19 (12.6	-0.89 (-0.95	
30	9.02)	10.88)	0.71)	1.16)	0.89)	to -0.54)	to 42.94)	to 26.15)	to -0.83)	
31 Antigua and	31.33 (26.25	31.79 (26.42	0.10 (0.04 to	0.95 (0.70 to	0.67 (0.53 to	-1.77 (-2.08	31.60 (24.03	22.35 (17.9	-1.66 (-1.90	
32 Barbuda 33	to 37.78)	to 38.6)	0.16)	1.12)	0.91)	to -1.46)	to 36.76)	to 28.99)	to -1.42)	
34 Argentina	15.07 (12.24	15.98 (13.09	0.21 (0.19 to	0.27 (0.24 to		-0.10 (-0.25	9.25 (8.00 to	9.02 (7.72 to	-0.13 (-0.22	
35	to 17.99)	to 19.42)	0.23)	0.30)	0.31)	to 0.04)	10.66)	10.63)	to -0.05)	
36 37 <sup>Armenia</sup>	81.15 (67.51	86.67 (72.86	0.29 (0.26 to	0.25 (0.19 to	0.28 (0.21 to	0.72 (0.36 to	19.99 (15.55	20.5 (15.81	0.20 (0.05 to	
38	to 95.76)	to 104.56) 154.35	0.32)	0.30)	0.34)	1.09)	to 25.21)	to 26.35)	0.36)	
39 40 Australia	98.73 (82.47	(134.91 to	1.00 (0.72 to	0.54 (0.47 to	0.78 (0.56 to	2.23 (1.81 to	24.61 (19.22	35.58 (27.28	1.20 (0.98 to	
40 Australia 41	to 116.23)	175.51)	1.27)	0.66)	0.91)	2.66)	to 31.12)	to 45.33)	1.41)	
42	277.06	291.88					•			
43 44 Austria	(243.01 to	(260.14 to	0.19 (-0.09	0.87 (0.77 to	0.52 (0.43 to	-1.59 (-2.15	61.71 (48.41	54.31 (39.35	-0.39 (-0.65	
44 <sup>Austria</sup> 45	307.67)	327.43)	to 0.46)	1.13)	0.81)	to -1.03)	to 77.45)	to 71.37)	to -0.12)	
46	76.23 (63.23	81.93 (68.62	0.35 (0.20 to	0.22 (0.16 to	0.16 (0.11 to	-1.09 (-1.19	17.65 (13.27	16.2 (11.65	-0.36 (-0.44	
47 Azerbaijan	to 90.47)	to 99.02)	0.49)	0.28)	0.23)	to -1.00)	to 23.02)	to 21.65)	to -0.27)	
48 49	32.77 (27.60	28.72 (23.64	-0.27 (-0.39	0.59 (0.50 to	0.49 (0.39 to	-0.66 (-0.78	23.15 (19.78	19.04 (15.33	-0.72 (-0.81	
50 <sup>Bahamas</sup>	to 39.08)	to 35.44)	to -0.15)	0.68)	0.62)	to -0.53)	to 26.78)	to 23.86)	to -0.63)	
51	42.17 (36.27	44.05 (36.4	0.35 (0.18 to	0.26 (0.20 to	0.17 (0.13 to	-1.34 (-1.69	11.98 (9.36	10.05 (7.4 to	-0.53 (-0.63	
52 <sub>Bahrain</sub> 53	to 48.42)	to 53.11)	0.51)	0.33)	0.22)	to -0.99)	to 15.18)	13.28)	to -0.43)	
54	17.19 (13.90	21.62 (17.31	0.65 (0.53 to	1.00 (0.64 to	0.56 (0.35 to	-2.14 (-2.39	31.40 (20.47	18.1 (12.11	-2.03 (-2.15	
55 Bangladesh 56	to 21.66)	to 27)	0.77)	1.64)	0.83)	to -1.89)	to 45.16)	to 25.27)	to -1.92)	
57	70.62 (59.14	69.57 (58.9	0.04 (-0.02	0.42 (0.36 to	0.38 (0.30 to	-0.41 (-0.57	22.21 (18.13	20.02 (15.56	-0.42 (-0.48	
58	to 84.46)	to 83.59)	to 0.09)	0.48)	0.48)	to -0.25)	to 27.15)	to 25.32)	to -0.36)	
59 Belarus 60	82.25 (69.99	87.85 (73.61	0.38 (0.27 to	0.36 (0.26 to	0.38 (0.28 to	0.24 (0.09 to	22.33 (16.76	23.25 (17.89	0.17 (0.09 to	

Belgium

Belize

Benin

Bermuda

Bhutan

Bolivia

State of)

Bosnia and

Botswana

Brazil

Brunei

Darussalam

Bulgaria

39Burkina Faso

Burundi

Cabo Verde

Cambodia

Cameroon

Canada

55 Central African

Republic

Chad

25 Herzegovina

20<sub>(Plurinational</sub>

7.48 (6.20 to

9.10)

34.26 (28.75

to 41.82)

16.74 (13.31

to 21.03)

13.46 (11.31

to 16.36)

102.41

(88.37 to

118.99)

8.58 (7.14 to

10.52)

65.87 (57.91

to 74.92)

53.76 (43.58

to 66.16)

127.47

(108.71 to

149.68)

6.79 (5.57 to

8.47)

6.12 (5.03 to

7.50)

10.12 (8.33

to 12.38)

3.02 (2.34 to

3.74)

8.34 (6.88 to

10.38)

382.53

(367.54 to

397.57)

6.56 (5.39 to

8.20)

6.92 (5.73 to

8.53)

8.88 (7.27 to

10.87)

34.27 (28.46

to 40.73)

22.23 (18.11

to 27.62)

13.54 (11.36

to 16.33)

122.38

(107.08 to

140.67)

10.89 (8.88

to 13.6)

47.78 (41.6

to 54.51)

57.28 (46.33

to 70.04)

120.16

(101.94 to

142.65)

7.81 (6.46 to

9.56)

6.13 (5.06 to

7.50)

12.18 (9.88

to 14.93)

3.77 (3.01 to

4.61)

10.13 (8.33

to 12.46)

357.73

(323.05 to

393.88)

6.92 (5.75 to

8.49)

8.10 (6.65 to

9.90)

0.58 (0.47 to

0.69)

0.17 (0.09 to

0.25)

1.24 (1.11 to

1.38)

0.05 (0.00 to

0.10)

0.58 (0.55 to

0.61)

0.60 (0.44 to

0.76)

-0.87 (-1.09

to -0.65)

0.25 (0.24 to

0.27)

-0.16 (-0.29

to -0.03)

0.59 (0.41 to

0.77)

-0.09 (-0.19

to 0.01)

0.76 (0.65 to

0.88)

0.65 (0.57 to

0.72)

0.79 (0.68 to

0.90)

0.13 (-0.03

to 0.28)

0.16 (0.14 to

0.18)

0.68 (0.57 to

0.80)

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BMJ Open										
to 96.97)	to 104.11)	0.48)	0.48)	0.50)	0.39)	to 28.89)	to 29.87)			
83.42 (76.75 to 90.48)	143.07 (123.44 to 164.68)	1.68 (1.42 to 1.94)	0.76 (0.67 to 0.90)	0.97 (0.76 to 1.12)	0.24 (-0.90 to 1.40)	25.98 (21.36 to 31.07)	36.56 (28.88 to 45.93)			
22.80 (18.88	24.31 (20.10	0.35 (0.25 to	0.70 (0.48 to	0.61 (0.50 to	-1.14 (-1.52	26.21 (19.11	21.80 (18.03			
to 28.09)	to 29.68)	0.45)	0.90)	0.80)	to -0.76)	to 32.42)	to 27.26)			

0.45 (0.30 to

0.65)

0.36 (0.28 to

0.50)

0.55 (0.34 to

1.23)

0.40 (0.30 to

0.52)

0.45 (0.23 to

0.61)

0.64 (0.43 to

0.89)

0.45 (0.41 to

0.52)

1.48 (0.97 to

1.89)

0.33 (0.25 to

0.41)

0.67 (0.38 to

1.00)

0.73 (0.46 to

1.16)

0.25 (0.19 to

0.33)

0.35 (0.23 to

0.45)

0.38 (0.21 to

0.59)

0.56 (0.46 to

0.82)

0.86 (0.53 to

1.36)

0.58 (0.39 to

0.84)

-0.42 (-0.64

to -0.20)

-3.73 (-4.07

to -3.40)

-0.84 (-0.97

to -0.72)

-0.83 (-0.91

to -0.75)

-0.20 (-0.52

to 0.12)

-0.77 (-1.15

to -0.39)

0.01 (-0.16

to 0.19)

0.09 (-0.02

to 0.20)

1.13 (0.73 to

1.54)

0.56 (0.28 to

0.85)

0.15 (-0.07

to 0.37)

-2.05 (-2.56

to -1.54)

-1.44 (-1.54

to -1.34)

-1.69 (-1.94

to -1.43)

-2.43 (-3.11

to -1.75)

0.02 (-0.06

to 0.10)

-0.24 (-0.45

to -0.04)

17.20 (8.03

to 28.30)

28.26 (22.38

to 33.89)

21.23 (11.26

to 43.14)

22.17 (10.30

to 41.41)

27.68 (21.43

to 35.18)

20.94 (14.53

to 29.34)

23.70 (20.23

to 27.67)

36.51 (27.84

to 47.59)

28.31 (21.41

to 36.54)

21.41 (10.66

to 33.67)

22.15 (14.22

to 36.56)

12.86 (8.37

to 17.33)

14.51 (8.27

to 21.45)

18.12 (9.17

to 27.57)

74.34 (56.49

to 95.45)

26.29 (16.24

to 42.90)

20.08 (9.86

to 32.61)

15.67 (9.98

to 22.61)

14.3 (11.3 to

18.41)

15.82 (10.39

to 31.52)

12.73 (9.53

to 16.38)

29.74 (21.21

to 38.84)

20.3 (13.14

to 30.81)

19.51 (16.72

to 22.74)

32.76 (26.62

to 39.71)

27.62 (20.56

to 35.57)

22.52 (12.05

to 34.80)

20.85 (13.56

to 32.18)

8.69 (6.98 to

10.77)

8.98 (6.42 to

11.33)

13.36 (7.77

to 21.03)

64.91 (46.59

to 85.11)

25.47 (14.87

to 41.50)

19.16 (11.97

to 27.44)

0.48 (0.26 to

0.86)

0.89 (0.66 to

1.08)

0.68 (0.35 to

1.53)

0.50 (0.27 to

0.79)

0.46 (0.33 to

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0.70 (0.48 to

1.00)

0.48 (0.42 to

0.52)

1.52 (1.08 to

2.01)

0.26 (0.23 to

0.31)

0.61 (0.37 to

0.89)

0.69 (0.45 to

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0.33 (0.20 to

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0.50 (0.27 to

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0.54 (0.29 to

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0.86 (0.55 to

1.38)

0.58 (0.32 to

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0.25)

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1.28)

-1.22 (-1.49

to -0.95)

-0.50 (-0.70

to -0.30)

-2.73 (-3.00

to -2.46)

-1.18 (-1.27

to -1.10)

-2.04 (-2.15

to -1.94)

0.14 (-0.01

to 0.28)

-0.41 (-0.71

to -0.11)

-0.44 (-0.62

to -0.27)

-0.25 (-0.33

to -0.18)

0.00 (-0.21

to 0.21)

0.38 (0.15 to

0.62)

-0.20 (-0.42

to 0.03)

-2.12 (-2.50

to -1.74)

-1.86 (-1.96

to -1.77)

-1.43 (-1.66

to -1.20)

-0.31 (-0.41

to -0.21)

-0.07 (-0.13

to 0.00)

-0.36 (-0.55

to -0.16)

BMJ Open	
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3	30.30 (25.82	31.66 (27.25	0.29 (-0.09	0.46 (0.37 to	0.30 (0.26 to	-1.75 (-2.10	16.52 (13.59	11.96 (9.91	-1.10 (-1.28
4 Chile 5	to 35.36)	to 36.7)	to 0.67)	0.51)	0.38)	to -1.40)	to 19.03)	to 14.48)	to -0.91)
6	22.85 (18.98	47.06 (40.05	2.80 (2.41 to	0.86 (0.59 to	0.30 (0.24 to	-4.11 (-4.50	24.47 (17.88	13.1 (10.29	-2.36 (-2.54
7 <sup>China</sup>	to 27.15)	to 54.99)	3.19)	1.16)	0.35)	to -3.71)	to 30.19)	to 16.31)	to -2.18)
8 9 Colombia	29.55 (24.81	29.36 (24.89	-0.04 (-0.07	0.28 (0.25 to	0.29 (0.22 to	0.75 (0.38 to	12.89 (10.91	12.53 (9.75	0.36 (0.12 to
9 Colombia 10	to 34.95)	to 34.88)	to -0.01)	0.31)	0.38)	1.12)	to 15.21)	to 15.57)	0.60)
11	7.33 (6.01 to	7.78 (6.38 to	0.36 (0.24 to	0.83 (0.43 to	0.75 (0.48 to	-0.51 (-0.67	23.44 (10.67	20.58 (13.10	-0.63 (-0.84
12 Comoros 13	9.00)	9.69)	0.48)	1.44)	1.19)	to -0.36)	to 39.49)	to 30.54)	to -0.41)
14	9.67 (7.93 to	10.38 (8.57	0.30 (0.16 to	0.79 (0.56 to	0.66 (0.47 to	-0.58 (-0.75	23.58 (16.35	18.36 (13.15	-0.82 (-0.99
15 Congo	11.87)	to 12.74)	0.45)	1.16)	0.93)	to -0.41)	to 34.61)	to 25.90)	to -0.66)
16 170 July J	6.37 (5.18 to	6.17 (5.09 to	-0.21 (-0.35	1.64 (1.17 to	0.81 (0.53 to	-2.70 (-2.90	50.74 (35.37	24.94 (15.58	-2.70 (-2.88
17Cook Islands 18	7.65)	7.51)	to -0.06)	2.20)	1.11)	to -2.50)	to 72.08)	to 36.18)	to -2.51)
19	30.77 (25.88	31.40 (26.47	0.04 (0.03 to	0.14 (0.12 to	0.20 (0.14 to	1.04 (0.82 to	8.60 (6.81 to	10.14 (7.74	0.58 (0.47 to
20 <sup>Costa Rica</sup>	to 36.60)	to 37.15)	0.05)	0.16)	0.26)	1.26)	10.81)	to 12.91)	0.69)
21	8.08 (6.58 to	8.70 (7.15 to	0.43 (0.34 to	0.46 (0.23 to	0.40 (0.26 to	-0.71 (-0.97	15.45 (7.59	13.59 (8.56	-0.63 (-0.86
22 <sub>C ôte</sub> d'Ivoire 23	9.97)	10.96)	0.52)	0.80)	0.58)	to -0.45)	to 24.88)	to 19.48)	to -0.40)
24	166.42	203.79							
25 Croatia	(155.48 to	(188.71 to	0.64 (0.57 to	0.28 (0.24 to	0.41 (0.30 to	1.79 (1.42 to	33.08 (24.90	41.30 (30.43	0.79 (0.65 to
26 27	178.41)	220.14)	0.70)	0.42)	0.52)	2.17)	to 42.82)	to 53.17)	0.93)
28	30.31 (25.30	29.25 (23.94	-0.01 (-0.07	0.35 (0.23 to	0.23 (0.18 to	-2.04 (-2.48	14.22 (10.70	10.45 (8.37	-1.38 (-1.64
29 <sup>Cuba</sup>	to 36.52)	to 35.26)	to 0.06)	0.42)	0.29)	to -1.60)	to 16.97)	to 12.94)	to -1.12)
30 31 <sub>Cyprus</sub>	42.09 (35.82	58.44 (53.02	0.98 (0.85 to	2.09 (1.24 to	1.00 (0.76 to	-3.13 (-3.45	36.43 (25.10	22.06 (17.95	-2.26 (-2.48
31 Cyprus 32	to 49.01)	to 63.85)	1.11)	3.02)	1.32)	to -2.81)	to 47.83)	to 26.41)	to -2.03)
33		152.02				0.00.40			
34 35 <sup>Czechia</sup>	85.23 (71.89	(139.69 to	1.52 (1.33 to	0.54 (0.49 to	0.56 (0.42 to	0.80 (0.45 to	26.65 (21.98	35.40 (27.15	0.98 (0.90 to
36	to 102.44)	164.49)	1.71)	0.63)	0.69)	1.15)	to 32.43)	to 44.74)	1.06)
37 <sub>Democratic</sub>									
38 People's	15.93 (13.23	15.61 (12.96	-0.13 (-0.21	0.57 (0.33 to	0.41 (0.28 to	-1.10 (-1.20	17.24 (9.70	11.10 (8.17	-1.31 (-1.41
39 40 Republic of	to 19.03)	to 18.71)	to -0.06)	0.82)	0.59)	to -1.00)	to 27.63)	to 14.58)	to -1.21)
41 Korea									
42 Democratic	0.00				o <b></b> (o (o				
43 44 <sup>Republic</sup> of the	8.50 (6.93 to	7.80 (6.41 to	-0.45 (-0.71	0.71 (0.50 to	0.57 (0.40 to	-0.78 (-0.91	21.69 (14.31	17.22 (12.20	-0.82 (-0.97
45 Congo	10.44)	9.73)	to -0.20)	1.02)	0.82)	to -0.64)	to 32.28)	to 24.09)	to -0.66)
46	232.13	227.82							
47 48 Denmark	(210.74 to	(208.42 to	0.47 (0.29 to	0.53 (0.48 to	0.59 (0.50 to	0.01 (-0.61	46.68 (35.05	45.17 (34.12	0.13 (-0.02
48	255.89)	250.75)	0.65)	0.62)	0.68)	to 0.63)	to 59.60)	to 58.06)	to 0.29)
50	7.12 (5.93 to	9.07 (7.45 to	1.24 (1.04 to	0.60 (0.37 to	0.54 (0.36 to	-0.56 (-0.67	18.05 (10.87	15.83 (10.31	-0.67 (-0.82
51 Djibouti	8.73)	11.07)	1.45)	1.07)	0.89)	to -0.45)	to 32.37)	to 24.84)	to -0.53)
52 53 <sub>Dominica</sub>	29.23 (24.60	27.29 (22.61	-0.12 (-0.18	1.01 (0.79 to	0.76 (0.57 to	-1.20 (-1.28	34.22 (27.47	26 (20.19 to	-1.17 (-1.27
55 Dominica 54	to 35.45)	to 33.47)	to -0.07)	1.23)	1.02)	to -1.12)	to 41.24)	34.33)	to -1.07)
55 Dominican	25.16 (20.80	24.19 (19.90	0.16 (0.01 to	0.24 (0.19 to	0.24 (0.17 to	0.09 (-0.13	12.08 (9.46	10.73 (7.96	-0.27 (-0.50
56 57 <sup>Republic</sup>	to 30.54)	to 29.50)	0.32)	0.31)	0.32)	to 0.32)	to 15.94)	to 13.99)	to -0.04)
58	17.02 (15.04	19.97 (17.98	0.49 (0.39 to	0.23 (0.18 to	0.23 (0.17 to	0.55 (-0.03	10.90 (8.22	9.02 (6.84 to	-0.33 (-0.74
59 Ecuador	to 19.21)	to 22.11)	0.59)	0.31)	0.30)	to 1.13)	to 13.94)	11.09)	to 0.08)
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2									
3	39.84 (33.94	44.48 (36.34	0.26 (0.20 to	0.22 (0.13 to	0.21 (0.12 to	0.32 (0.07 to	11.25 (7.91	11.49 (8.21	0.19 (0.10 to
4 Egypt 5	to 46.00)	to 55.00)	0.32)	0.47)	0.35)	0.56)	to 16.51)	to 15.51)	0.27)
6	23.89 (19.87	24.71 (20.64	0.12 (0.05 to	0.36 (0.23 to	0.14 (0.11 to	-3.87 (-4.22	15.07 (11.16	7.25 (5.45 to	-2.87 (-3.18
7 El Salvador	to 28.45)	to 29.14)	0.19)	0.45)	0.20)	to -3.52)	to 18.78)	9.54)	to -2.56)
8 9 Equatorial	7.11 (5.84 to	10.89 (9.04	1.66 (1.48 to	0.76 (0.44 to	0.54 (0.33 to	-1.45 (-1.60	23.13 (13.07	14.77 (9.26	-1.89 (-2.04
9 10 Guinea	8.80)	to 13.36)	1.85)	1.28)	0.86)	to -1.30)	to 37.98)	to 22.66)	to -1.73)
11	6.35 (5.28 to	6.98 (5.79 to	0.26 (0.21 to	0.61 (0.39 to	0.77 (0.52 to	0.71 (0.52 to	20.05 (11.19	22.27 (15.26	0.34 (0.20 to
12 Eritrea 13	7.85)	8.43)	0.32)	0.96)	1.12)	0.89)	to 34.57)	to 32.30)	0.49)
13		103.71	1 12 (0 01 )	0.55 (0.46)	0.24 (0.26)	0.05 ( 0.60	20.55 (22.60	24.50 (10.40	1.07 ( 1.00
15 Estonia	71.59 (62.77	(90.72 to	1.12 (0.91 to	0.55 (0.46 to	0.34 (0.26 to	-2.35 (-2.68	28.55 (23.60	24.50 (18.49	-1.07 (-1.32
16 17	to 81.41)	118.15)	1.32)	0.61)	0.47)	to -2.02)	to 33.59)	to 31.62)	to -0.81)
10	8.30 (6.84 to	9.49 (7.76 to	0.49 (0.39 to	0.55 (0.33 to	0.60 (0.42 to	0.53 (0.14 to	17.33 (9.97	17.93 (12.43	0.38 (0.14 to
19	10.21)	11.68)	0.58)	0.83)	0.83)	0.91)	to 26.06)	to 25.37)	0.63)
20 21 Ethionic	5.88 (4.90 to	6.78 (5.64 to	0.53 (0.48 to	0.84 (0.59 to	0.72 (0.42 to	-0.67 (-0.82	26.74 (17.05	19.04 (11.93	-1.33 (-1.48
21 Ethiopia 22	7.15)	8.29)	0.59)	1.34)	1.07)	to -0.52)	to 45.16)	to 28.10)	to -1.18)
23	4.78 (3.90 to	4.70 (3.85 to	-0.12 (-0.34	0.35 (0.26 to	0.26 (0.19 to	-1.16 (-1.28	10.67 (8.31	8.17 (5.94 to	-1.08 (-1.21
24	5.75)	5.71)	to 0.09)	0.45)	0.34)	to -1.03)	to 13.70)	10.77)	to -0.95)
25 26	162.00	286.76	1.86 (1.78 to	0.47 (0.35 to	0.29 (0.25 to	-2.22 (-2.47	33.34 (25.19	47.57 (33.68	1.06 (0.98 to
27 <sup>Finland</sup>	(150.44 to	(256.44 to	1.80 (1.78 to	0.55)	0.29 (0.25 to	-2.22 (-2.47 to -1.96)	to 43.04)	to 63.99)	1.14)
28	173.8)	318.38)	1.74)	0.55)	0.54)	10 -1.90)	10 43.04)	10 03.77)	1.14)
29		136.71							
.30	96.03 (87.62		1.43 (1.34 to	1.08 (0.93 to	1.21 (0.73 to	0.74 (0.46 to	31.92 (26.78	39.44 (31.13	1.07 (0.94 to
30 31 <sup>France</sup>	96.03 (87.62 to 104.59)	(123.31 to	1.43 (1.34 to	1.08 (0.93 to	1.21 (0.73 to	0.74 (0.46 to	31.92 (26.78 to 37.48)	39.44 (31.13 to 48.47)	1.07 (0.94 to
31 <sup>France</sup> 32	96.03 (87.62 to 104.59)	(123.31 to 151.14)	1.43 (1.34 to 1.53)	1.08 (0.93 to 1.20)	1.21 (0.73 to 1.42)	0.74 (0.46 to 1.02)	31.92 (26.78 to 37.48)	39.44 (31.13 to 48.47)	1.07 (0.94 to 1.20)
31 <sup>France</sup> 32 33				1.20) 0.61 (0.41 to					
31 <sup>France</sup> 32	to 104.59)	151.14)	1.53)	1.20)	1.42)	1.02)	to 37.48)	to 48.47)	1.20)
31 France 32 33 34 Gabon 35 36 Cambia	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85
31         France           32         -           33         -           34         Gabon           35         -           36         -           37         Gambia	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28)
31         France           32         -           33         -           34         Gabon           35         -           36         -           37         Gambia           38         -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38
31         France           32         -           33         Gabon           35         -           36         -           37         Gambia           38         -           39         Georgia           40         -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       41	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38
31         France           32         -           33         Gabon           35         -           36         -           37         Gambia           38         -           39         Georgia           40         -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41)
31       France         32       -         33       Gabon         35       -         36       Gambia         37       Georgia         40       -         41       -         42       Germany         43       -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       45	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27
<ul> <li>31 France</li> <li>32</li> <li>33</li> <li>34 Gabon</li> <li>35</li> <li>36</li> <li>37 Gambia</li> <li>38</li> <li>39 Georgia</li> <li>40</li> <li>41</li> <li>42 Germany</li> <li>43</li> <li>44</li> <li>45</li> </ul>	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77)
31France323334Gabon353637Gambia3839Georgia404142434445464748Greece	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82) 0.23 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85
31       France         32       Gabon         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       Germany         45       Ghana         47       Greece         49       Greece	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Georgia         42       Germany         43       Germany         44       Ghana         45       Ghana         47       Greece         49       50         50       51	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82) 0.23 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85
31France323334Gabon353637Gambia3839Georgia4041424344454647484950515152	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to 0.30)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82) 0.23 (0.19 to 0.27)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92 to 0.20)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85 to -0.71)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Georgia         42       Germany         43       Germany         44       Greece         45       Ghana         47       Greece         49       Greenland         50       Greenland         51       Greenland         53       Greenland	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49)	$\begin{array}{c} 1.53)\\ 0.53\ (0.51\ to\\ 0.56)\\ -0.10\ (-0.21\\ to\ 0.01)\\ 0.15\ (0.08\ to\\ 0.22)\\ 1.09\ (0.54\ to\\ 1.64)\\ 0.73\ (0.63\ to\\ 0.83)\\ -0.98\ (-1.20\\ to\ -0.75)\\ 0.34\ (0.27\ to\\ 0.40)\\ \end{array}$	$\begin{array}{c} 1.20 \\ \hline 0.61 & (0.41 \ to \\ 0.96 ) \\ \hline 0.58 & (0.34 \ to \\ 0.92 ) \\ \hline 0.29 & (0.18 \ to \\ 0.39 ) \\ \hline 0.96 & (0.79 \ to \\ 1.60 ) \\ \hline 0.70 & (0.35 \ to \\ 1.24 ) \\ \hline 0.26 & (0.22 \ to \\ 0.30 ) \\ \hline 0.57 & (0.45 \ to \\ 0.71 ) \end{array}$	$\begin{array}{c} 1.42)\\ 0.53\ (0.38\ to\\ 0.76)\\ 0.44\ (0.29\ to\\ 0.60)\\ 0.29\ (0.19\ to\\ 0.37)\\ 1.94\ (1.46\ to\\ 2.20)\\ 0.55\ (0.31\ to\\ 0.82)\\ 0.23\ (0.19\ to\\ 0.27)\\ 0.74\ (0.38\ to\\ 0.96)\\ \end{array}$	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92 to 0.20) 1.07 (0.80 to 1.34)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85 to -0.71) 0.36 (0.24 to 0.47)
31France323334Gabon353637Gambia3839Georgia4041424344454647484950515152	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to $0.01$ ) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to $-0.75$ ) 0.34 (0.27 to 0.40) 0.03 (-0.05	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to 0.30) 0.57 (0.45 to 0.71) 1.34 (1.06 to	1.42) 0.53 (0.38 to) 0.76) 0.44 (0.29 to) 0.60) 0.29 (0.19 to) 0.37) 1.94 (1.46 to) 2.20) 0.55 (0.31 to) 0.82) 0.23 (0.19 to) 0.27) 0.74 (0.38 to) 0.96) 1.24 (1.03 to)	1.02) -0.49 (-0.70) to $-0.28$ ) -1.52 (-1.81) to $-1.24$ ) 0.18 (-1.12) to $1.50$ ) 3.73 (3.26 to 4.20) -0.97 (-1.23) to $-0.70$ ) -0.36 (-0.92) to $0.20$ ) 1.07 (0.80 to 1.34) -0.55 (-0.68)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       Gerece         45       Ghana         47       Greece         50       Greenland         51       Greenland         52       Grenada         53       Grenada         54       Grenada	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74 to 29.02)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03 to 30.13)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75) 0.34 (0.27 to 0.40) 0.03 (-0.05 to 0.12)	$\begin{array}{c} 1.20 \\ 0.61 & (0.41 \text{ to} \\ 0.96 \\ 0.58 & (0.34 \text{ to} \\ 0.92 \\ 0.29 & (0.18 \text{ to} \\ 0.39 \\ 0.29 & (0.18 \text{ to} \\ 0.39 \\ 0.96 & (0.79 \text{ to} \\ 1.60 \\ 0.70 & (0.35 \text{ to} \\ 1.24 \\ 0.26 & (0.22 \text{ to} \\ 0.30 \\ 0.57 & (0.45 \text{ to} \\ 0.71 \\ 1.34 & (1.06 \text{ to} \\ 1.62 \\ ) \end{array}$	$\begin{array}{c} 1.42)\\ 0.53\ (0.38\ to\\ 0.76)\\ 0.44\ (0.29\ to\\ 0.60)\\ 0.29\ (0.19\ to\\ 0.37)\\ 1.94\ (1.46\ to\\ 2.20)\\ 0.55\ (0.31\ to\\ 0.82)\\ 0.23\ (0.19\ to\\ 0.27)\\ 0.74\ (0.38\ to\\ 0.96)\\ 1.24\ (1.03\ to\\ 1.52)\\ \end{array}$	1.02) -0.49 (-0.70) to $-0.28$ ) -1.52 (-1.81) to $-1.24$ ) 0.18 (-1.12) to $1.50$ ) 3.73 (3.26 to) 4.20) -0.97 (-1.23) to $-0.70$ ) -0.36 (-0.92) to $0.20$ ) 1.07 (0.80 to) 1.34) -0.55 (-0.68) to $-0.41$ )	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58 to 52.74)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58 to 46.61)	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73 to $-0.56$ )
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       Greece         45       Ghana         47       Greece         49       Greece         50       Greenland         51       Greenada         52       Greenada         53       Greenada         54       Greenada         55       Greenada         56       Greenada	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74 to 29.02) 6.83 (5.65 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03 to 30.13) 6.54 (5.35 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75) 0.34 (0.27 to 0.40) 0.03 (-0.05 to 0.12) -0.18 (-0.35	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to 0.30) 0.57 (0.45 to 0.71) 1.34 (1.06 to 1.62) 0.33 (0.26 to	1.42) 0.53 (0.38 to) 0.76) 0.44 (0.29 to) 0.29 (0.19 to) 0.29 (0.19 to) 0.37) 1.94 (1.46 to) 2.20) 0.55 (0.31 to) 0.23 (0.19 to) 0.23 (0.19 to) 0.27) 0.74 (0.38 to) 0.96) 1.24 (1.03 to) 1.52) 0.16 (0.12 to)	1.02) -0.49 (-0.70) to $-0.28$ ) -1.52 (-1.81) to $-1.24$ ) 0.18 (-1.12) to $1.50$ ) 3.73 (3.26 to 4.20) -0.97 (-1.23) to $-0.70$ ) -0.36 (-0.92) to $0.20$ ) 1.07 (0.80 to 1.34) -0.55 (-0.68) to $-0.41$ ) -3.00 (-3.55)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58 to 52.74) 9.01 (7.19 to	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58 to 46.61) 5.39 (4.11 to	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73 to $-0.56$ ) -2.12 (-2.65
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Gambia         38       Georgia         40       Georgia         41       Germany         43       Germany         44       Greece         45       Ghana         47       Greece         49       Greenland         50       Greenland         51       Greenada         52       Greenada         53       Greenada         54       Greenada	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74 to 29.02)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03 to 30.13)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75) 0.34 (0.27 to 0.40) 0.03 (-0.05 to 0.12)	$\begin{array}{c} 1.20 \\ 0.61 & (0.41 \text{ to} \\ 0.96 \\ 0.58 & (0.34 \text{ to} \\ 0.92 \\ 0.29 & (0.18 \text{ to} \\ 0.39 \\ 0.29 & (0.18 \text{ to} \\ 0.39 \\ 0.96 & (0.79 \text{ to} \\ 1.60 \\ 0.70 & (0.35 \text{ to} \\ 1.24 \\ 0.26 & (0.22 \text{ to} \\ 0.30 \\ 0.57 & (0.45 \text{ to} \\ 0.71 \\ 1.34 & (1.06 \text{ to} \\ 1.62 \\ ) \end{array}$	$\begin{array}{c} 1.42)\\ 0.53\ (0.38\ to\\ 0.76)\\ 0.44\ (0.29\ to\\ 0.60)\\ 0.29\ (0.19\ to\\ 0.37)\\ 1.94\ (1.46\ to\\ 2.20)\\ 0.55\ (0.31\ to\\ 0.82)\\ 0.23\ (0.19\ to\\ 0.27)\\ 0.74\ (0.38\ to\\ 0.96)\\ 1.24\ (1.03\ to\\ 1.52)\\ \end{array}$	1.02) -0.49 (-0.70) to $-0.28$ ) -1.52 (-1.81) to $-1.24$ ) 0.18 (-1.12) to $1.50$ ) 3.73 (3.26 to) 4.20) -0.97 (-1.23) to $-0.70$ ) -0.36 (-0.92) to $0.20$ ) 1.07 (0.80 to) 1.34) -0.55 (-0.68) to $-0.41$ )	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58 to 52.74)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58 to 46.61)	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73 to $-0.56$ )

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0.32)	0.38)	0.37)	1.92

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Guinea

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to 26.13)	to 28.11)	0.32)	0.38)	0.37)	1.92)	to 18.2)	to 14.91)	1.24)
7.53 (6.18 to	8.61 (7.06 to	0.61 (0.49 to	0.43 (0.18 to	0.40 (0.21 to	-0.36 (-0.50	16.9 (6.31 to	14.41 (7.36	-0.58 (-0.70
9.35)	10.53)	0.74)	0.86)	0.60)	to -0.22)	29.14)	to 21.95)	to -0.47)
7.32 (5.99 to	8.43 (6.92 to	0.63 (0.50 to	0.75 (0.36 to	0.61 (0.4 to	-0.81 (-0.93	26.39 (11.34	20.54 (12.76	-0.94 (-1.07
9.06)	10.32)	0.76)	1.18)	0.85)	to -0.68)	to 44.49)	to 28.9)	to -0.80)
23.56 (19.43	22.95 (18.93	0.06 (-0.03	1.19 (0.97 to	1.02 (0.76 to	-0.53 (-0.70	40.69 (32.87	35.43 (26.51	-0.46 (-0.59
to 28.53)	to 28.26)	to 0.15)	1.41)	1.33)	to -0.35)	to 48.37)	to 46.07)	to -0.32)
20.11 (16.54	19.43 (16.14	0.07 (-0.03	1.41 (0.74 to	1.08 (0.61 to	-0.77 (-0.89	52.02 (22.41	36.86 (19.94	-0.94 (-1.12
to 24.88)	to 24.31)	to 0.17)	2.12)	1.59)	to -0.65)	to 92.43)	to 54.22)	to -0.77)
22.83 (18.97	23.93 (19.84	0.18 (0.14 to	0.72 (0.46 to	0.83 (0.51 to	0.87 (0.73 to	28.54 (19.06	24.37 (15.88	-0.38 (-0.43
to 27.11)	to 28.49)	0.23)	0.99)	1.15)	1.02)	to 38.67)	to 32.67)	to -0.32)
199.20	332.82	2.13 (1.78 to	0 61 (0 59 to	0 56 (0 15 to	0.62 ( 1.04	10 22 (20 21	64 24 (47 60	1 15 (0 95 to
(181.71 to	(309.79 to		0.64 (0.58 to	0.56 (0.45 to	-0.62 (-1.04	48.33 (38.31	64.34 (47.69	1.15 (0.85 to
219.68)	356.72)	2.48)	0.82)	0.71)	to -0.20)	to 59.55)	to 82.55)	1.46)
136.42	210.18	0.84 (0.50 to	0.67 (0.57 to	0.65 (0.51 to	0.14 (-0.01	33.49 (26.34	42.38 (31.83	0 47 (0 22 4-
(115.41 to	(180.43 to	0.84 (0.59 to	0.78)		to 0.29)			0.47 (0.33 to 0.62)
161.21)	243.51)	1.09)	0.78)	0.75)	10 0.29)	to 42.36)	to 54.83)	0.02)
20.68 (16.76	20.34 (16.57	0.18 (-0.03	0.63 (0.43 to	0.40 (0.29 to	-1.93 (-2.11	20.11 (13.58	13.04 (9.44	-1.73 (-1.86
to 25.67)	to 24.97)	to 0.38)	0.91)	0.53)	to -1.74)	to 26.72)	to 16.5)	to -1.61)
3.37 (2.70 to	4.16 (3.37 to	0.74 (0.60 to	0.77 (0.37 to	0.55 (0.33 to	-1.42 (-1.56	19.48 (11.70	11.66 (8.16	-2.04 (-2.17
4.07)	5.00)	0.88)	1.04)	0.70)	to -1.29)	to 24.6)	to 14.98)	to -1.91)
41.07 (33.51	44.80 (36.70	0.29 (0.02 to	0.22 (0.12 to	0.19 (0.08 to	-0.11 (-0.64	11.09 (8.34	11.03 (7.60	0.12 (-0.02
to 50.84)	to 55.07)	0.57)	0.34)	0.24)	to 0.42)	to 14.22)	to 14.22)	to 0.25)
19.71 (16.52	28.11 (23.22	1.43 (1.27 to	0.29 (0.20 to	0.19 (0.15 to	-1.58 (-1.76	13.75 (9.61	10.42 (8.08	-0.96 (-1.14
to 23.39)	to 34.20)	1.59)	0.42)	0.27)	to -1.39)	to 19.18)	to 13.32)	to -0.78)
90.59 (75.89	97.87 (84.83	0.42 (0.35 to	0.87 (0.76 to	0.66 (0.53 to	-1.61 (-2.56	29.44 (24.40	25.50 (20.1	-0.80 (-1.30
to 107.72)	to 112.53)	0.49)	0.96)	0.84)	to -0.66)	to 35.63)	to 32.09)	to -0.30)
70.49 (59.79	70.21 (62.42	-0.08 (-0.20	0.47 (0.41 to	0.38 (0.32 to	-1.01 (-1.36	21.15 (17.17	18.50 (14.69	-0.65 (-0.76
to 83.85)	to 78.72)	to 0.05)	0.53)	0.51)	to -0.66)	to 26.12)	to 23.20)	to -0.54)

8 Guin 9	lea-Dissau	9.06)	10.32)	0.76)	1.18)	0.85)	to -0.68)	to 44.49)	to 28.9)	to -0.80)
10		23.56 (19.43	22.95 (18.93	0.06 (-0.03	1.19 (0.97 to	1.02 (0.76 to	-0.53 (-0.70	40.69 (32.87	35.43 (26.51	-0.46 (-0.59
11	Buyana	to 28.53)	to 28.26)	to 0.15)	1.41)	1.33)	to -0.35)	to 48.37)	to 46.07)	to -0.32)
12 13	TT '.'	20.11 (16.54	19.43 (16.14	0.07 (-0.03	1.41 (0.74 to	1.08 (0.61 to	-0.77 (-0.89	52.02 (22.41	36.86 (19.94	-0.94 (-1.12
14	Haiti	to 24.88)	to 24.31)	to 0.17)	2.12)	1.59)	to -0.65)	to 92.43)	to 54.22)	to -0.77)
15	,	22.83 (18.97	23.93 (19.84	0.18 (0.14 to	0.72 (0.46 to	0.83 (0.51 to	0.87 (0.73 to	28.54 (19.06	24.37 (15.88	-0.38 (-0.43
10	onduras	to 27.11)	to 28.49)	0.23)	0.99)	1.15)	1.02)	to 38.67)	to 32.67)	to -0.32)
17 18		199.20	332.82	0.10 (1.70 )	0 (1 (0 50 )	0.56 (0.45)	0.60 ( 1.04	40.00 (20.01	(1 24 (17 (0	1 15 (0 05 (
	ungary	(181.71 to	(309.79 to	2.13 (1.78 to	0.64 (0.58 to	0.56 (0.45 to	-0.62 (-1.04	48.33 (38.31	64.34 (47.69	1.15 (0.85 to
20		219.68)	356.72)	2.48)	0.82)	0.71)	to -0.20)	to 59.55)	to 82.55)	1.46)
21 22		136.42	210.18	0.84 (0.50 to	0 (7 (0 57 +-	0 (5 (0 51 4-	0.14 ( 0.01	22 40 (26 24	40.00 (21.02	0 47 (0 22 4-
	celand	(115.41 to	(180.43 to	0.84 (0.59 to	0.67 (0.57 to	0.65 (0.51 to	0.14 (-0.01	33.49 (26.34 to 42.26)	42.38 (31.83	0.47 (0.33  to
24		161.21)	243.51)	1.09)	0.78)	0.75)	to 0.29)	to 42.36)	to 54.83)	0.62)
25 26	T., J.'.,	20.68 (16.76	20.34 (16.57	0.18 (-0.03	0.63 (0.43 to	0.40 (0.29 to	-1.93 (-2.11	20.11 (13.58	13.04 (9.44	-1.73 (-1.86
20	India	to 25.67)	to 24.97)	to 0.38)	0.91)	0.53)	to -1.74)	to 26.72)	to 16.5)	to -1.61)
28 In	donasio	3.37 (2.70 to	4.16 (3.37 to	0.74 (0.60 to	0.77 (0.37 to	0.55 (0.33 to	-1.42 (-1.56	19.48 (11.70	11.66 (8.16	-2.04 (-2.17
29 <sup>Inc</sup> 30	donesia	4.07)	5.00)	0.88)	1.04)	0.70)	to -1.29)	to 24.6)	to 14.98)	to -1.91)
31 <sup>Iran</sup>	(Islamic	41.07 (33.51	44.80 (36.70	0.29 (0.02 to	0.22 (0.12 to	0.19 (0.08 to	-0.11 (-0.64	11.09 (8.34	11.03 (7.60	0.12 (-0.02
-	oublic of)	to 50.84)	to 55.07)	0.57)	0.34)	0.24)	to 0.42)	to 14.22)	to 14.22)	to 0.25)
33 34	Iraq	19.71 (16.52	28.11 (23.22	1.43 (1.27 to	0.29 (0.20 to	0.19 (0.15 to	-1.58 (-1.76	13.75 (9.61	10.42 (8.08	-0.96 (-1.14
34 35	naq	to 23.39)	to 34.20)	1.59)	0.42)	0.27)	to -1.39)	to 19.18)	to 13.32)	to -0.78)
36	reland	90.59 (75.89	97.87 (84.83	0.42 (0.35 to	0.87 (0.76 to	0.66 (0.53 to	-1.61 (-2.56	29.44 (24.40	25.50 (20.1	-0.80 (-1.30
37	Icialiu	to 107.72)	to 112.53)	0.49)	0.96)	0.84)	to -0.66)	to 35.63)	to 32.09)	to -0.30)
38 39 j	Israel	70.49 (59.79	70.21 (62.42	-0.08 (-0.20	0.47 (0.41 to	0.38 (0.32 to	-1.01 (-1.36	21.15 (17.17	18.50 (14.69	-0.65 (-0.76
40	Israel	to 83.85)	to 78.72)	to 0.05)	0.53)	0.51)	to -0.66)	to 26.12)	to 23.20)	to -0.54)
41		261.58	227.51	-0.24 (-0.43	0.44 (0.39 to	0.76 (0.55 to	2.55 (2.03 to	49.44 (36.73	46.95 (35.41	0.17 (0.00 to
42 43	Italy	(226.94 to	(200.83 to	to -0.05)	0.70)	0.85)	3.06)	to 63.71)	to 59.78)	0.34)
44		297.14)	254.27)	10 0.057	0.70)	0.057	5.00)	10 05.71)	10 59.10)	0.54)
45 	amaica	29.63 (24.88	29.42 (24.46	0.15 (0.05 to	0.30 (0.23 to	0.24 (0.17 to	-1.45 (-1.78	14.86 (11.53	11.50 (8.84	-1.28 (-1.50
46 <sup>Ja</sup> 47		to 35.60)	to 35.27)	0.25)	0.35)	0.33)	to -1.12)	to 17.70)	to 14.50)	to -1.06)
48		151.17	291.90	1.48 (1.08 to	0.25 (0.18 to	0.11 (0.09 to	-2.39 (-2.83	27.14 (19.46	46.58 (31.41	1.21 (0.88 to
	Japan	(125.74 to	(251.75 to	1.88)	0.27)	0.16)	to -1.95)	to 36.26)	to 63.54)	1.54)
50 51		179.69)	336.57)		•					
52		69.20 (60.07	113.51	2.51 (2.23 to	0.43 (0.30 to	0.23 (0.18 to	-2.62 (-2.98	20.68 (15.47	22.01 (16.06	0.46 (0.34 to
55	ordan	to 79.85)	(95.78 to	2.79)	0.59)	0.30)	to -2.26)	to 26.15)	to 29.65)	0.58)
54 55		,	133.87)	,	,					
	zakhstan	80.02 (67.16	81.77 (68.13	0.12 (0.06 to	0.57 (0.41 to	0.46 (0.37 to	-1.26 (-1.68	30.23 (24.06	26.97 (21.78	-0.74 (-1.02
57		to 96.26)	to 97.46)	0.18)	0.72)	0.56)	to -0.85)	to 37.42)	to 33.61)	to -0.45)
58 50 k	Kenya	6.80 (5.68 to	8.33 (6.99 to	0.31 (0.19 to	0.81 (0.43 to	0.84 (0.50 to	0.31 (0.22 to	21.25 (13.20	21.31 (13.76	0.26 (0.16 to
59 <sup>r</sup> 60		8.23)	10.12)	0.42)	1.44)	1.26)	0.40)	to 36.93)	to 30.78)	0.36)
-										

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1 2									
3	4.05 (3.25 to	3.55 (2.90 to	-0.69 (-0.88	1.81 (0.99 to	1.08 (0.68 to	-2.13 (-2.29	53.42 (24.47	31.83 (17.58	-2.07 (-2.20
4 Kiribati 5	4.96)	4.32)	to -0.51)	2.71)	1.67)	to -1.98)	to 92.59)	to 55.40)	to -1.93)
6	55.67 (51.70	54.34 (45.07	0.09 (-0.06	0.19 (0.14 to	0.15 (0.12 to	-0.66 (-1.06	13.39 (10.47	11.73 (8.74	-0.33 (-0.50
7 <sup>Kuwait</sup>	to 60.02)	to 65.64)	to 0.25)	0.22)	0.20)	to -0.25)	to 16.77)	to 15.53)	to -0.15)
8 9 <sub>Kyrgyzstan</sub>	73.48 (61.75	73.31 (61.61	-0.03 (-0.10	0.42 (0.29 to	0.19 (0.16 to	-3.52 (-3.86	28 (21.04 to	17.37 (13.34	-2.11 (-2.28
10	to 87.12)	to 87.09)	to 0.04)	0.50)	0.25)	to -3.19)	34.06)	to 22.37)	to -1.94)
11 <sub>Lao</sub> People's	2.98 (2.32 to	3.67 (2.95 to	0.79 (0.74 to	0.45 (0.22 to	0.26 (0.14 to	-2.40 (-2.60	13.04 (6.62	6.97 (4.13 to	-2.47 (-2.65
12 13 Democratic	3.69)	4.55)	0.83)	0.43 (0.22 to	0.41)	to -2.19)	to 19.19)	11.24)	to -2.30)
14 Republic	0.07)		0.00)	0.12)	0)				(0 2.00)
15 16 <sub>Latvia</sub>	103.47	123.78	0.42 (0.33 to	0.34 (0.29 to	0.37 (0.30 to	0.22 (-0.08	25.74 (20.10	28.66 (21.84	0.14 (-0.02
10 Latvia 17	(89.32 to	(108.48 to	0.50)	0.42)	0.48)	to 0.51)	to 32.35)	to 36.61)	to 0.29)
18	119.13)	139.23)						,	
19 20 <sup>Lebanon</sup>	33.16 (27.13	46.20 (37.84	1.23 (1.00 to	0.14 (0.10 to	0.15 (0.08 to	0.32 (0.10 to	8.48 (6.32 to	10.18 (7.34	0.79 (0.65 to
20	to 41.07)	to 56.68)	1.47)	0.21)	0.23)	0.55)	11.24)	to 13.75)	0.93)
22 Lesotho	7.67 (6.36 to	8.77 (7.23 to	0.48 (0.40 to	0.55 (0.36 to	0.69 (0.48 to	1.08 (0.85 to	16.56 (10.77	20.29 (13.61	1.06 (0.87 to
23 24	9.34)	10.83)	0.57)	0.8)	0.98)	1.31)	to 23.28)	to 29.06)	1.26)
25 Liberia	7.84 (6.42 to	8.46 (6.99 to	0.57 (0.33 to	0.52 (0.23 to	0.42 (0.26 to	-0.84 (-1.09	19.69 (7.54	13.96 (8.48	-1.16 (-1.44
26	9.75) 23.56 (19.39	10.34) 25.77 (21.21	0.80) 0.56 (0.29 to	0.92) 0.21 (0.13 to	0.62) 0.22 (0.15 to	to -0.60) 0.11 (-0.02	to 32.92) 8.88 (6.41 to	to 21.59) 9.05 (6.69 to	to -0.88) 0.21 (0.11 to
27 <sub>Libya</sub> 28	to 28.73)	to 31.41)	0.30 (0.29 to	0.21 (0.13 to	0.22 (0.15 to	to 0.24)	12.85)	11.82)	0.21 (0.11 to
29	10 20.75)	133.41	0.04)	0.57)	0.31)	10 0.24)	12.03)	11.02)	0.51)
30 21 Lithuania	109.21 (95.7	(123.84 to	0.84 (0.76 to	0.32 (0.24 to	0.33 (0.26 to	0.13 (-0.20	25.36 (19.61	28.75 (21.98	0.49 (0.33 to
31 <sup>Lithuania</sup> 32	to 123.65)	142.65)	0.92)	0.37)	0.42)	to 0.47)	to 31.92)	to 36.27)	0.65)
33	166.34	187.63							
34 35 <sup>Luxembourg</sup>	(145.24 to	(163.86 to	0.37 (0.22 to	0.96 (0.84 to	0.97 (0.72 to	0.55 (0.30 to	42.53 (33.57	43.90 (33.95	0.27 (0.15 to
36	189.85)	213.76)	0.53)	1.10)	1.16)	0.80)	to 52.29)	to 55.68)	0.38)
37	6.62 (5.44 to	7.25 (5.99 to	0.38 (0.29 to	0.53 (0.32 to	0.59 (0.40 to	0.45 (0.34 to	17.91 (8.95	16.98 (11.97	-0.03 (-0.18
38 Madagascar 39	8.22)	9.04)	0.48)	0.88)	0.88)	0.56)	to 28.15)	to 24.64)	to 0.13)
40	5.73 (4.70 to	6.33 (5.28 to	0.44 (0.40 to	0.71 (0.49 to	0.67 (0.46 to	-0.26 (-0.39	24.10 (13.49	19.08 (13.47	-0.85 (-1.02
40 Malawi 41	7.05)	7.8)	0.48)	1.02)	0.97)	to -0.12)	to 42.83)	to 26.73)	to -0.69)
42 43 Malaysia	4.33 (3.64 to	6.56 (5.71 to	1.38 (1.19 to	0.18 (0.14 to	0.17 (0.12 to	-0.75 (-1.06	5.01 (4.15 to	4.92 (3.71 to	-0.54 (-0.73
44	5.05)	7.56)	1.57)	0.22)	0.23)	to -0.43)	6.10)	6.26)	to -0.35)
45 A6 Maldives	4.10 (3.25 to	4.94 (3.96 to	0.74 (0.68 to	0.53 (0.32 to	0.30 (0.23 to	-2.37 (-2.52	13.21 (8.16	7.20 (5.69 to	-2.50 (-2.68
46 <sup>Waldives</sup> 47	4.98)	5.96)	0.80)	0.81)	0.40)	to -2.22)	to 20.38)	9.23)	to -2.32)
48 <sub>Mali</sub>	7.19 (5.85 to	8.08 (6.68 to	0.63 (0.48 to	0.49 (0.20 to	0.47 (0.26 to	-0.28 (-0.46	19.25 (6.81	16.53 (8.45	-0.64 (-0.80
49	8.93)	9.79)	0.79)	0.89)	0.71)	to -0.10)	to 33.36)	to 26.83)	to -0.48)
50 51 Malta	66.69 (57.4	72.00 (63.55	0.11 (0.05 to	0.54 (0.48 to	0.62 (0.48 to	0.78 (0.57 to	20.61 (16.77	22.28 (18.12	0.40 (0.30 to
52	to 76.82)	to 81.87)	0.17)	0.62)	0.74)	0.99)	to 24.94)	to 27.35)	0.50)
53 Marshall	4.22 (3.40 to	4.10 (3.35 to	-0.25 (-0.43	1.32 (0.84 to	0.83 (0.50 to	-1.90 (-2.04	38.63 (23.47	24.94 (14.63	-1.80 (-1.93
54 Islands 55	5.11)	4.93)	to -0.08)	1.88)	1.31)	to -1.76)	to 58.16)	to 40.72)	to -1.68)
56 Mauritania	8.95 (7.32 to	11.87 (9.73	0.85 (0.70 to	0.68 (0.41 to	0.41 (0.28 to	-2.01 (-2.18	22.06 (12.99	13.42 (9.08	-1.97 (-2.14
57	10.94)	to 14.62)	0.99)	0.99)	0.57)	to -1.84)	to 31.74)	to 18.70)	to -1.80)
58 59 <sup>Mauritius</sup>	4.55 (3.68 to 5.63)	5.50 (4.43 to 6.63)	0.68 (0.63 to 0.73)	0.17 (0.14 to 0.19)	0.22 (0.17 to 0.28)	1.44 (1.10 to	5.3 (4.63 to	7.7 (5.86 to 9.69)	1.88 (1.53 to
60	5.05)	0.03)	0.75)	0.17)	0.20)	1.78)	6.29)	9.09)	2.23)

1									
2 3 4 Mexico	47.30 (40.55	36.92 (31.76	-0.82 (-0.97	0.34 (0.31 to	0.45 (0.36 to	1.68 (1.33 to	16.08 (13.61	17.13 (14.12	0.68 (0.41 to
5 6 Micronesia	to 55.27)	to 42.73)	to -0.67)	0.39)	0.54)	2.02)	to 19.12)	to 20.45)	0.96)
<ul><li>6 Micronesia</li><li>7 (Federated</li></ul>	4.44 (3.61 to	4.11 (3.40 to	-0.45 (-0.62	1.36 (0.88 to	0.80 (0.48 to	-2.09 (-2.29	40.59 (25.23	23.88 (12.56	-2.07 (-2.24
8 States of	5.35)	4.96)	to -0.27)	1.97)	1.32)	to -1.88)	to 65.57)	to 43.11)	to -1.89)
9	102.48	110.59							
10 11 <sub>Monaco</sub>	(86.41 to	(93.15 to	0.31 (0.29 to	0.38 (0.27 to	0.36 (0.27 to	-0.07 (-0.15	22.98 (17.18	23.10 (17.08	0.08 (0.06 to
12	120.82)	130.73)	0.33)	0.50)	0.47)	to 0.01)	to 30.02)	to 29.93)	0.10)
13	68.37 (56.95	69.72 (57.44	0.02 (0.01 to	0.73 (0.47 to	0.45 (0.33 to	-2.10 (-2.26	38.19 (25.22	24.75 (19.13	-1.88 (-2.00
14 15 Mongolia	to 82.11)	to 83.84)	0.04)	1.01)	0.61)	to -1.94)	to 51.55)	to 31.11)	to -1.75)
16	135.02	133.80						,	
17 18 <sup>Montenegro</sup>	(114.64 to	(112.95 to	0.02 (0.00 to	0.29 (0.23 to	0.30 (0.23 to	0.27 (0.08 to	29.84 (22.66	28.38 (20.94	-0.08 (-0.14
19	158.46)	156.37)	0.05)	0.37)	0.37)	0.46)	to 38.5)	to 37.02)	to -0.02)
20	15.56 (13.00	17.60 (14.69	0.60 (0.47 to	0.23 (0.14 to	0.21 (0.15 to	-0.17 (-0.38	8.23 (5.69 to	7.60 (5.86 to	-0.09 (-0.21
21 Morocco 22	to 18.49)	to 21.00)	0.72)	0.38)	0.28)	to 0.04)	11.59)	9.68)	to 0.02)
	5.71 (4.71 to	6.30 (5.22 to	0.38 (0.33 to	0.69 (0.45 to	0.84 (0.58 to	0.94 (0.77 to	22.30 (13.46	24.35 (16.57	0.62 (0.41 to
23 24 <sup>Mozambique</sup>	7.03)	7.69)	0.43)	1.04)	1.20)	1.12)	to 36.57)	to 34.27)	0.84)
25 26 <sub>Myanmar</sub>	3.09 (2.42 to	3.71 (3.00 to	0.72 (0.63 to	0.22 (0.13 to	0.13 (0.1 to	-1.95 (-2.07	7.97 (4.53 to	4.34 (3.28 to	-2.29 (-2.41
26 <sub>Myanmar</sub> 27	3.79)	4.59)	0.81)	0.31)	0.17)	to -1.83)	12.88)	6.04)	to -2.17)
28 29 Namibia	9.39 (7.72 to	11.47 (9.48	0.66 (0.54 to	0.72 (0.50 to	0.63 (0.45 to	-0.61 (-0.80	21.26 (13.8	18.09 (12.71	-0.52 (-0.63
29 <sup>Namibia</sup> 30	11.59)	to 14.12)	0.77)	1.00)	0.87)	to -0.41)	to 28.84)	to 26.34)	to -0.41)
31 <sub>Nauru</sub>	5.33 (4.35 to	5.02 (4.11 to	-0.61 (-0.94	1.37 (0.82 to	0.92 (0.54 to	-1.85 (-2.09	42.03 (22.9	27.18 (13.97	-1.87 (-2.08
32	6.41)	6.11)	to -0.28)	2.13)	1.45)	to -1.61)	to 73.19)	to 47.82)	to -1.65)
33 34 Nepal	16.18 (12.92	18.72 (15.04	0.55 (0.50 to	0.98 (0.57 to	0.59 (0.36 to	-1.88 (-2.06	28.52 (18.28	15.65 (10.93	-2.15 (-2.36
35	to 20.54)	to 23.18)	0.59)	1.86)	0.98)	to -1.69)	to 47.84)	to 23.88)	to -1.94)
36	142.28	73.64 (63.08	-2.19 (-2.78	1.43 (1.24 to	2.08 (1.58 to	1.35 (0.87 to	47.17 (39.07	41.11 (35.20	-0.50 (-0.93
37 <sub>Netherlands</sub> 38	(129.20 to	to 85.72)	to -1.60)	1.75)	2.40)	1.84)	to 56.59)	to 47.09)	to -0.06)
39	155.78)								
40	160.29	168.32	0.20 (0.15 to	0.53 (0.45 to	0.38 (0.32 to	-1.70 (-2.05	34.31 (26.39	31.98 (23.24	-0.32 (-0.42
41New Zealand 42	(139.19 to	(152.62 to	0.26)	0.59)	0.46)	to -1.34)	to 43.21)	to 41.73)	to -0.22)
43	182.59)	186.95)	0.00 (0.10 (	0.15 (0.12 )	0.17 (0.12 (	0.49 (0.20.)	7.00 (6.05 )	0.06 (6.41.)	0.12 ( 0.02
44 Nicaragua	23.25 (19.28	26.41 (22.30	0.20 (0.10 to	0.15 (0.12 to	0.17 (0.13 to	0.48 (0.30 to	7.80 (6.25 to	8.26 (6.41 to	0.12 (-0.02
45 46	to 27.88)	to 31.28)	0.31) 0.37 (0.26 to	0.18)	0.21)	0.67) -0.71 (-0.92	9.75)	10.34)	to 0.25)
47 Niger	7.12 (5.75 to 8.74)	7.75 (6.26 to 9.48)	0.37 (0.26 to 0.48)	0.58 (0.28 to 0.99)	0.5 (0.29 to 0.79)	-0.71 (-0.92 to -0.51)	21.59 (8.82 to 38.22)	17.16 (9.15 to 26.85)	-1.08 (-1.30 to -0.86)
48	8.88 (7.36 to	11.03 (9.13	0.48) 0.98 (0.83 to	0.57 (0.28 to	0.73) 0.52 (0.28 to	-0.11 (-0.21	19.98 (11.19	17.08 (10.24	-0.43 (-0.51
49 50 <sup>Nigeria</sup>	10.86)	to 13.41)	1.14)	0.97 (0.28 to	0.83)	to -0.02)	to 32.55)	to 26.72)	to -0.35)
51	5.82 (4.77 to	5.53 (4.56 to	-0.24 (-0.39	0.96 (0.67 to	0.63 (0.38 to	-1.75 (-1.86	29.80 (19.61	19.00 (10.29	-1.92 (-2.07
52 Niue	7.03)	6.74)	to -0.08)	1.38)	0.03 (0.30 to	to -1.63)	to 46.61)	to 29.66)	to -1.78)
53 54	119.00	122.13		1.00)	5.71)				
55 <sup>North</sup>	(100.79 to	(103.27 to	0.14 (0.12 to	0.20 (0.15 to	0.18 (0.13 to	-0.21 (-0.36	23.91 (17.63	23.32 (16.99	0.00 (-0.04
56 Macedonia 57	140.81)	143.78)	0.17)	0.25)	0.23)	to -0.07)	to 31.43)	to 31.08)	to 0.05)
57 58 Northern	6.60 (5.47 to	5.79 (4.80 to	-0.61 (-0.80	1.28 (0.85 to	0.38 (0.26 to	-4.76 (-5.32	34.73 (23.54	11.56 (7.82	-4.28 (-4.78
59 <sub>Mariana</sub>	7.98)	6.96)	to -0.42)	1.82)	0.73)	to -4.19)	to 50.03)	to 20.63)	to -3.78)
60	,	,	,	,	,	,	,	,	,

1 2									
3 Islands									
4	406.73	498.95							
5 6 Norway	(342.53 to	(429.41 to	0.38 (0.24 to	0.43 (0.39 to	0.38 (0.32 to	-0.86 (-1.19	69.15 (49.57	80.37 (56.25	0.17 (0.01 to
7	478.15)	570.55)	0.52)	0.58)	0.52)	to -0.53)	to 92.09)	to 108.56)	0.33)
8	32.04 (26.30	33.81 (27.79	0.24 (0.08 to	0.23 (0.12 to	0.23 (0.15 to	0.58 (0.34 to	10.5 (7.14 to	9.96 (7.66 to	0.17 (0.00 to
9 Oman	to 38.55)	to 40.80)	0.24 (0.08 to	0.23 (0.12 to	0.23 (0.13 to	0.38 (0.34 to	10.3 (7.14 to	12.72)	0.17 (0.00 to
10 11						-0.87 (-0.93	· · · · · ·		
12 Pakistan	13.75 (11.11	16.77 (13.78	0.77 (0.72 to	0.78 (0.39 to	0.62 (0.41 to		21.52 (12.69	17.80 (12.91	-0.71 (-0.77
13	to 17.15)	to 21.25)	0.81)	1.57)	0.99)	to -0.80)	to 38.34)	to 25.37)	to -0.66)
14 15 Palau	5.62 (4.60 to	5.22 (4.30 to	-0.40 (-0.56	0.88 (0.53 to	0.62 (0.29 to	-1.36 (-1.47	26.21 (13.51	19.34 (8.32	-1.21 (-1.31
15 16	6.79)	6.32)	to -0.24)	1.46)	0.97)	to -1.24)	to 47.84)	to 32.27)	to -1.10)
17 Palestine	31.49 (25.86	35.42 (29.15	0.71 (0.52 to	0.33 (0.23 to	0.20 (0.15 to	-2.83 (-3.48	11.67 (8.60	9.47 (7.18 to	-1.16 (-1.42
18	to 38.19)	to 42.61)	0.90)	0.50)	0.29)	to -2.18)	to 16.06)	12.75)	to -0.90)
19 20 <sup>Panama</sup>	30.64 (26.19	31.9 (26.95	0.09 (0.04 to	0.40 (0.33 to	0.59 (0.45 to	2.20 (1.67 to	19.61 (16.04	24.28 (18.4	1.57 (1.10 to
20	to 35.44)	to 37.19)	0.14)	0.57)	0.76)	2.73)	to 24.02)	to 31.52)	2.05)
22 Papua New	4.05 (3.24 to	3.65 (2.96 to	-0.52 (-0.69	0.54 (0.31 to	0.42 (0.27 to	-1.02 (-1.10	19.34 (11.2	14.68 (9.5 to	-1.09 (-1.18
23 Guinea	4.88)	4.45)	to -0.35)	0.80)	0.63)	to -0.93)	to 29.45)	21.87)	to -1.00)
24 25 Paraguay	35.78 (30.69	30.96 (26.24	-0.62 (-0.73	0.16 (0.13 to	0.21 (0.15 to	1.35 (1.08 to	10.62 (8.39	10.30 (7.70	0.12 (-0.06
26	to 41.49)	to 36.59)	to -0.50)	0.21)	0.28)	1.63)	to 13.36)	to 13.16)	to 0.29)
27 <sub>Peru</sub>	17.18 (14.20	16.74 (13.74	-0.14 (-0.17	0.69 (0.47 to	0.23 (0.16 to	-4.20 (-4.68	34.79 (19.65	9.31 (6.89 to	-5.08 (-5.69
28	to 20.56)	to 20.14)	to -0.10)	0.93)	0.32)	to -3.72)	to 53.77)	12.58)	to -4.47)
29 30 Philippines	4.47 (3.59 to	4.96 (4.02 to	0.35 (0.25 to	0.35 (0.16 to	0.16 (0.13 to	-3.25 (-3.54	8.94 (5.36 to	4.87 (4.06 to	-2.61 (-2.86
31	5.38)	6.00)	0.46)	0.46)	0.20)	to -2.95)	11.07)	6.26)	to -2.35)
32	418.60	177.25	-3.73 (-4.52	0.44 (0.41 to	0.53 (0.42 to	0.82 (0.68 to	72.05 (51.85	38.44 (29.32	-2.70 (-3.28
33 Poland	(351.62 to	(157.39 to	-3.73 (-4.32 to -2.94)	0.44 (0.41 to	0.62)	0.82 (0.08 to	to 95.72)	to 49.04)	to -2.11)
34 35	498.71)	199.48)	10 -2.94)	0.51)	0.02)	0.90)	10 95.72)	10 49.04)	10 -2.11)
36	52.37 (46.30	74.24 (66.91	0.72 (0.46 to	0.69 (0.60 to	1.06 (0.57 to	2.38 (1.99 to	20.51 (17.46	27.82 (20.23	1.24 (1.07 to
3/	to 58.76)	to 82.44)	0.99)	0.76)	1.24)	2.77)	to 24.14)	to 33.05)	1.41)
38 39 December Disc	31.12 (29.32	30.88 (28.28	0.00 (-0.04	0.56 (0.43 to	0.27 (0.19 to	-3.70 (-4.28	21.05 (16.43	12.28 (9.43	-2.69 (-3.09
39 Puerto Rico 40	to 33.10)	to 33.59)	to 0.04)	0.64)	0.41)	to -3.10)	to 24.23)	to 16.08)	to -2.29)
41 Octor	38.47 (31.44	44.46 (36.75	0.53 (0.42 to	0.37 (0.24 to	0.34 (0.21 to	0.52 (0.07 to	14.06 (10.55	13.06 (9.28	0.13 (-0.12
42 <sup>Qatar</sup> 43	to 45.79)	to 53.66)	0.64)	0.59)	0.51)	0.98)	to 19.68)	to 17.59)	to 0.37)
43 44 Republic of	37.89 (33.49	70.21 (66.03	1.25 (0.89 to	1.76 (0.56 to	0.30 (0.23 to	-7.96 (-8.67	31.72 (18.30	15 (11.13 to	-3.63 (-4.02
45 Korea	to 42.88)	to 74.79)	1.61)	2.34)	0.39)	to -7.25)	to 38.85)	19.33)	to -3.23)
46 Republic of	67.21 (55.76	66.12 (59.51	0.47 (0.09 to	0.38 (0.32 to	0.33 (0.27 to	-0.60 (-0.96	22.87 (18.45	20.72 (16.98	-0.20 (-0.52
47 48 <sup>Moldova</sup>	to 80.49)	to 73.09)	0.85)	0.47)	0.39)	to -0.25)	to 27.69)	to 25.12)	to 0.13)
49	70.01 (58.65	70.93 (63.66	0.37 (0.16 to	0.27 (0.23 to	0.23 (0.18 to	-0.65 (-1.01	21.99 (17.23	17.97 (13.92	-0.63 (-0.89
50 Romania	to 82.51)	to 79.55)	0.59)	0.31)	0.28)	to -0.29)	to 27.18)	to 22.6)	to -0.37)
51 52 Russian	95.59 (81.25	85.89 (72.98	-0.12 (-0.25	0.57 (0.42 to	0.56 (0.46 to	-0.40 (-0.74	30.76 (24.06	28.04 (22.97	-0.52 (-0.70
52 53 Federation	to 111.84)	to 100.35)	to 0.00)	0.66)	0.66)	to -0.06)	to 37.42)	to 34.48)	to -0.35)
54	6.69 (5.55 to	7.89 (6.47 to	0.57 (0.40 to	0.92 (0.61 to	0.65 (0.42 to	-1.79 (-2.06	29.08 (17.93	19.33 (12.66	-1.92 (-2.15
55 <sup>Rwanda</sup>	8.31)	9.74)	0.74)	1.40)	0.92)	to -1.51)	to 46.16)	to 28.48)	to -1.69)
56 ₅∳aint Kitts and	29.59 (24.68	28.95 (23.75	0.06 (-0.02	2.25 (1.70 to	1.44 (1.06 to	-2.01 (-2.26	67.93 (52.91	42.16 (29.05	-2.07 (-2.32
57 58 Nevis	to 35.93)	to 35.61)	to 0.14)	2.63)	2.05)	to -1.76)	to 79.57)	to 61.00)	to -1.82)
59 Saint Lucia	25.70 (21.15	27.48 (22.74	0.32 (0.22 to	0.99 (0.78 to	0.65 (0.51 to	-2.24 (-2.69	32.61 (26.63	22.26 (17.86	-1.84 (-2.19
60							-		

2									
3 4	to 31.22)	to 33.54)	0.42)	1.15)	0.84)	to -1.78)	to 37.29)	to 28.14)	to -1.49)
5 Saint Vincent	24.91 (20.72	24.40 (20.24	0.24 (0.13 to	1.31 (1.08 to	1.22 (0.98 to	-0.56 (-0.70	44.25 (37.35	38.61 (31.46	-0.80 (-0.94
6 and the 7 Granadinas	to 30.36)	to 29.76)	0.34)	1.57)	1.53)	to -0.41)	to 51.61)	to 48.07)	to -0.67)
<ul><li>Grenadines</li><li>8</li></ul>									
9 <sub>Samoa</sub>	5.60 (4.60 to	4.77 (3.92 to	-0.77 (-1.05	0.98 (0.66 to	0.63 (0.45 to	-1.64 (-1.80	27.95 (18.61	17.97 (11.92	-1.62 (-1.75
10	6.71)	5.78)	to -0.49)	1.49)	0.85)	to -1.47)	to 40.58)	to 26.18)	to -1.49)
11 12	107.02	112.86	0.23 (0.21 to	0.37 (0.27 to	0.36 (0.22 to	0.22 (0.06 to	21.57 (15.79	21.79 (15.52	0.15 (0.11 to
12 San Marino 13	(89.88 to	(94.72 to	0.24)	0.48)	0.53)	0.38)	to 28.34)	to 28.71)	0.19)
14	126.67)	132.67)							
15Sao Tome and	10.50 (8.66	11.85 (9.61	0.59 (0.46 to	0.46 (0.26 to	0.31 (0.21 to	-1.58 (-1.93	15.7 (9.25 to	10.34 (7.41	-1.71 (-2.03
16 Principe 17	to 12.87)	to 14.64)	0.71)	0.73)	0.50)	to -1.24)	23.73)	to 15.57)	to -1.38)
18 <sub>Saudi</sub> Arabia	33.86 (28.47	34.43 (28.66	0.22 (0.09 to	0.19 (0.11 to	0.15 (0.11 to	-0.60 (-0.71	9.73 (6.96 to	8.9 (6.65 to	-0.18 (-0.25
19	to 40.38)	to 41.36)	0.35)	0.31)	0.21)	to -0.48)	13.65)	11.75)	to -0.10)
20 21 Senegal	8.06 (6.57 to	8.84 (7.25 to	0.39 (0.27 to	0.55 (0.29 to	0.43 (0.27 to	-1.00 (-1.21	18.61 (9.28	14.15 (8.71	-1.12 (-1.32
21 Senegui 22	9.88)	11.10)	0.51)	0.93)	0.65)	to -0.78)	to 29.66)	to 21.53)	to -0.91)
23	118.24	151.50	0.43 (0.26 to	0.49 (0.37 to	0.76 (0.50 to	2.49 (2.05 to	31.72 (24.28	39.47 (29.72	0.83 (0.67 to
24 Serbia 25	(99.70 to	(130.14 to	0.61)	0.78)	0.97)	2.94)	to 43.38)	to 49.82)	0.98)
26	138.39)	173.84)	0.01)	0.70)	0.77)	2.5 1)	10 10.00)	10 19:02)	0.90)
27 Savahallas	4.66 (3.75 to	5.45 (4.43 to	0.52 (0.44 to	0.30 (0.19 to	0.22 (0.16 to	-1.44 (-1.65	8.38 (5.69 to	6.28 (4.77 to	-1.35 (-1.51
28	5.71)	6.55)	0.60)	0.38)	0.30)	to -1.23)	10.68)	7.85)	to -1.19)
29 30Sierra Leone	7.33 (6.06 to	8.45 (6.95 to	0.64 (0.51 to	0.42 (0.19 to	0.43 (0.24 to	0.20 (-0.07	15.88 (6.30	15.30 (8.12	0.00 (-0.27
31	9.02)	10.53)	0.77)	0.72)	0.61)	to 0.48)	to 28.04)	to 23.35)	to 0.26)
32 33 Singapore	47.14 (38.3	41.88 (34.28	-0.58 (-0.74	0.18 (0.14 to	0.07 (0.06 to	-3.18 (-3.41	12.19 (9.33	8.16 (5.69 to	-1.52 (-1.73
33 <sup>Singapore</sup> 34	to 56.56)	to 51.91)	to -0.43)	0.20)	0.11)	to -2.95)	to 15.58)	11.25)	to -1.31)
35	165.72	154.57	-0.05 (-0.12	0.54 (0.45 to	0.68 (0.48 to	1.56 (1.21 to	40.62 (31.28	40.31 (30.39	0.34 (0.19 to
36 Slovakia	(148.05 to	(140.40 to	to 0.02)	0.84)	0.90)	1.91)	to 53.36)	to 50.67)	0.49)
37	183.09)	170.08)	10 0.02)	0.04)	0.50)	1.71)	10 55.50)	10 50.07)	0.4))
38 39	167.07	179.18	0.15 (0.08 to	0.44 (0.33 to	0.39 (0.28 to	-1.39 (-2.13	34.68 (25.60	34.27 (24.57	-0.42 (-0.67
40 Slovenia	(146.63 to	(160.70 to	0.13 (0.08 to	0.56)	0.52)	to -0.65)	to 44.77)	to 44.81)	to -0.17)
41	189.8)	199.69)	0.21)	0.50)	0.52)	10 -0.03)	10 44.77)	10 44.01)	10 -0.17)
42 Solomon 43	3.49 (2.80 to	3.35 (2.73 to	-0.31 (-0.46	0.75 (0.42 to	0.53 (0.33 to	-1.42 (-1.56	24.39 (12.55	17.28 (10.22	-1.38 (-1.51
44 Islands	4.25)	4.12)	to -0.15)	1.16)	0.79)	to -1.29)	to 43.26)	to 29.48)	to -1.25)
45 46 Somalia	5.39 (4.41 to	5.28 (4.33 to	-0.09 (-0.12	0.55 (0.29 to	0.48 (0.30 to	-0.45 (-0.53	17.8 (7.75 to	14.47 (8.44	-0.63 (-0.69
40	6.68)	6.56)	to -0.06)	0.91)	0.79)	to -0.37)	34.12)	to 24.4)	to -0.56)
47 48 <sub>South</sub> Africa	11.04 (9.21	12.40 (10.36	0.52 (0.44 to	0.39 (0.30 to	0.39 (0.30 to	0.13 (-0.38	15.07 (10.33	12.17 (9.76	-0.56 (-0.99
49	to 13.55)	to 15.05)	0.60)	0.50)	0.47)	to 0.64)	to 20.06)	to 14.04)	to -0.14)
50 51 South Sudan	6.93 (5.69 to	7.78 (6.41 to	0.35 (0.31 to	0.68 (0.39 to	0.65 (0.36 to	-0.05 (-0.09	22.59 (10.42	19.12 (11.06	-0.45 (-0.58
51 South Sudan 52	8.55)	9.49)	0.40)	1.43)	1.40)	to 0.00)	to 43.44)	to 39.88)	to -0.32)
53	00 11 (96 16	134.10	0.77 (0.60 to	051 (0 16 to	0.25 (0.20 to	216(254	24.01 (20.22	27 21 (20 61	0.26 ( 0.47
54 Spain	90.41 (86.16 to 94.9)	(127.51 to	0.77 (0.60 to 0.95)	0.54 (0.46 to 0.60)	0.35 (0.29 to 0.50)	-2.16 (-2.54 to -1.78)	24.91 (20.33 to 30.25)	27.31 (20.61 to 34.99)	-0.26 (-0.47 to -0.05)
55 56	10 94.9)	141.19)	0.93)	0.00)	0.30)	10-1./8)	10 30.23)	10 34.99)	10 -0.03)
50 57 Sri Lanka	5.98 (4.90 to	9.51 (8.29 to	1.67 (1.38 to	0.18 (0.14 to	0.10 (0.07 to	-2.15 (-2.31	5.73 (4.38 to	3.77 (2.86 to	-1.45 (-1.57
58	7.28)	10.90)	1.96)	0.23)	0.13)	to -1.99)	7.09)	4.79)	to -1.33)
59 <sub>Sudan</sub> 60	25.18 (20.47	30.96 (25.17	0.90 (0.76 to	0.21 (0.10 to	0.25 (0.14 to	0.95 (0.78 to	9.58 (5.87 to	10.84 (7.56	0.71 (0.58 to

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59

60

United

Kingdom

223.81

(197.49 to

240.37

(214.96 to

0.17 (0.12 to

0.21)

1 2									
3	to 31.02)	to 37.98)	1.05)	0.39)	0.43)	1.11)	15.53)	to 15.32)	0.84)
4	25.78 (21.39	25.28 (20.76	0.11 (0.01 to	1.00 (0.77 to	0.66 (0.50 to	-1.99 (-2.24	35.66 (26.78	23.00 (18.20	-1.99 (-2.24
5 Suriname 6	to 31.18)	to 30.88)	0.22)	1.18)	0.86)	to -1.73)	to 43.03)	to 29.10)	to -1.75)
7	294.18	315.22		,			,	,	
8 9 <sup>Sweden</sup>	(253.51 to	(271.18 to	0.31 (0.28 to	0.68 (0.56 to	0.38 (0.31 to	-3.16 (-4.26	56.12 (41.20	53.00 (37.35	-0.35 (-0.54
9 10	336.93)	360.86)	0.34)	0.75)	0.56)	to -2.06)	to 73.41)	to 71.73)	to -0.16)
11	129.02	134.73							
12 12 Switzerland	(116.30 to	(121.98 to	0.09 (0.06 to	0.68 (0.54 to	0.58 (0.47 to	-1.03 (-1.80	32.21 (25.49	29.51 (22.30	-0.56 (-0.82
13 Switzerland	142.70)	148.05)	0.12)	0.77)	0.75)	to -0.26)	to 39.69)	to 37.67)	to -0.31)
15 Syrian Arab	28.71 (23.39	33.67 (27.34	0.96 (0.65 to	0.46 (0.23 to	0.36 (0.19 to	-1.00 (-1.20	14.71 (9.86	12.75 (9.00	-0.46 (-0.53
16 Republic	to 35.03)	to 40.47)	1.26)	0.76)	0.52)	to -0.80)	to 20.18)	to 16.93)	to -0.39)
17 18 <sup>Taiwan</sup>									
19 (Province of	11.23 (9.74	,	4.29 (3.71 to	0.91 (0.57 to	0.50 (0.38 to	-2.08 (-3.37	17.35 (12.32	12.40 (10.06	-0.85 (-1.78
20 China)	to 12.86)	to 31.28)	4.86)	1.04)	0.65)	to -0.78)	to 19.43)	to 15.44)	to 0.10)
21 22 <sub>Tajikistan</sub>	68.84 (56.59	71.19 (59.54	0.12 (0.07 to	0.41 (0.28 to	0.3 (0.22 to	-0.79 (-0.88	30.29 (19.52	20.60 (15.55	-0.89 (-1.10
22 Tajikistan 23	to 83.10)	to 85.49)	0.18)	0.58)	0.41)	to -0.70)	to 43.28)	to 26.90)	to -0.69)
24 Theilend	3.31 (2.57 to	4.28 (3.44 to	0.96 (0.83 to	0.2 (0.14 to	0.12 (0.08 to	-2.46 (-2.78	6.06 (4.39 to	3.64 (2.76 to	-2.40 (-2.71
25 Thailand 26	4.15)	5.22)	1.08)	0.26)	0.15)	to -2.14)	7.89)	4.68)	to -2.09)
27	3.20 (2.51 to	3.90 (3.14 to	0.84 (0.75 to	0.42 (0.17 to	0.36 (0.20 to	-0.57 (-0.70	11.64 (5.58	9.14 (5.17 to	-0.95 (-1.13
27 Timor-Leste 28	3.91)	4.72)	0.94)	0.83)	0.61)	to -0.44)	to 22.42)	14.89)	to -0.77)
29 30 Togo	9.42 (7.74 to	9.00 (7.38 to	0.03 (-0.09	0.49 (0.28 to	0.48 (0.32 to	-0.05 (-0.31	17.29 (9.05	16.30 (10.74	-0.23 (-0.48
30 Togo 31	11.41)	11.07)	to 0.15)	0.76)	0.68)	to 0.21)	to 26.59)	to 22.75)	to 0.01)
32	4.65 (3.78 to	5.36 (4.37 to	0.72 (0.46 to	0.89 (0.57 to	0.58 (0.42 to	-1.72 (-1.88	25.84 (15.77	16.11 (11.19	-1.68 (-1.80
33 <sup>Tokelau</sup>	5.66)	6.54)	0.97)	1.34)	0.78)	to -1.57)	to 38.77)	to 22.98)	to -1.56)
34 35 <sub>Tonga</sub>	5.55 (4.56 to	4.96 (4.08 to	-0.51 (-0.69	1.14 (0.67 to	0.76 (0.56 to	-1.73 (-1.92	31.30 (19.82	21.58 (15.55	-1.63 (-1.83
36	6.66)	5.98)	to -0.32)	1.64)	1.02)	to -1.54)	to 44.12)	to 30.10)	to -1.44)
37 <sub>Trinidad</sub> and	27.68 (22.88	27.49 (22.91	0.31 (0.17 to	0.34 (0.24 to	0.29 (0.21 to	-0.98 (-1.25	14.27 (10.86	12.54 (9.51	-0.66 (-0.84
38 39 <sup>Tobago</sup>	to 33.63)	to 33.71)	0.45)	0.39)	0.39)	to -0.72)	to 16.75)	to 16.14)	to -0.48)
40 Tunisia	35.29 (29.00	40.47 (33.21	0.59 (0.45 to	0.15 (0.1 to	0.14 (0.09 to	-0.05 (-0.15	9.05 (6.50 to	9.36 (6.89 to	0.27 (0.17 to
41	to 42.68)	to 49.35)	0.73)	0.22)	0.20)	to 0.06)	12.22)	12.40)	0.37)
42 43 Turkey	50.66 (44.42	98.87 (84.96	2.04 (1.87 to	0.67 (0.43 to	0.40 (0.30 to	-1.87 (-2.02	27.88 (19.30	25.05 (19.42	-0.61 (-0.70
44	to 56.99)	to 113.45)	2.20)	1.06)	0.56)	to -1.72)	to 38.53)	to 32.24)	to -0.51)
45 Turkmenistan	69.03 (57.31	77.89 (64.42	0.43 (0.32 to	0.37 (0.28 to	0.33 (0.22 to	-0.50 (-0.78	24.59 (17.78	22.90 (16.63	-0.20 (-0.38
46 <sup>Turkmenistan</sup> 47	to 82.24)	to 92.76)	0.54)	0.49)	0.46)	to -0.21)	to 31.67)	to 29.27)	to -0.02)
47 48 <sub>Tuvalu</sub>	4.48 (3.63 to	4.08 (3.38 to	-0.47 (-0.63	1.08 (0.65 to	0.71 (0.47 to	-1.60 (-1.73	33.30 (17.86	21.17 (13.37	-1.65 (-1.76
49	5.44)	4.88)	to -0.30)	1.59)	1.05)	to -1.47)	to 54.06)	to 33.22)	to -1.55)
50 51 Uganda	5.79 (4.75 to	7.14 (5.88 to	1.01 (0.88 to	0.59 (0.37 to	0.61 (0.40 to	-0.03 (-0.17	17.22 (11.39	17.40 (12.18	-0.02 (-0.16
51 Uganda 52	7.14)	8.92)	1.15)	0.91)	0.92)	to 0.10)	to 25.60)	to 25.46)	to 0.13)
53 Ukraine	68.71 (57.64	68 (57.27 to	0.19 (0.03 to	0.34 (0.26 to	0.39 (0.31 to	0.17 (-0.10	21.06 (16.76	23.62 (18.99	0.34 (0.12 to
54	to 82.57)	80.79)	0.35)	0.45)	0.48)	to 0.44)	to 26.65)	to 28.82)	0.56)
55 <sub>United</sub> Arab 56	36.50 (30.28	42.72 (35.58	0.73 (0.60 to	0.21 (0.09 to	0.24 (0.15 to	0.72 (0.25 to	10.79 (6.88	12.40 (8.88	0.73 (0.52 to
57 Emirates	to 44.12)	to 51.97)	0.87)	0.43)	0.43)	1.20)	to 16.90)	to 17.45)	0.94)
59 United	222.81	240.37	0.17(0.12 to	0 97 (0 85 to	1.30(1.12 to	1 22 (0.84 to	52 80 (11 67	50 34 (47 21	0.41 (0.25 to

BMJ Open

1.30 (1.12 to

1.44)

1.22 (0.84 to

1.59)

52.80 (41.67

to 65.37)

59.34 (47.21

to 72.73)

0.41 (0.25 to

0.57)

0.97 (0.85 to

1.18)

BMJ Op
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1 2									
2 3									
4	251.35)	267.14)							
5 <sup>United</sup>	7.20 (5.89 to	7.76 (6.36 to	0.22 (0.10 to	0.58 (0.40 to	0.60 (0.41 to	0.38 (0.19 to	19.56 (13.24	18.91 (12.48	0.25 (0.07 to
6 Republic of	8.90)	9.50)	0.35)	0.81)	0.89)	0.57)	to 32.21)	to 26.55)	0.43)
7 <sub>Tanzania</sub> 8	,	,	,	,	,	,	,	,	,
9 United States	343.12	193.07	-1.59 (-2.08	0.67 (0.60 to	1.02 (0.80 to	1.80 (1.52 to	64.72 (47.50	49.82 (40.25	-0.48 (-0.78
10 11 of America	(295.81 to	(179.65 to	to -1.09)	0.82)	1.11)	2.07)	to 84.88)	to 60.19)	to -0.18)
11	394.51)	206.87)	10 -1.07)	0.82)	1.11)	2.07)	10 04.00)	10 00.17)	10 -0.13)
12 United States	31.96 (26.73	33.22 (27.69	0.23 (0.16 to	0.81 (0.56 to	0.45 (0.34 to	-2.32 (-2.66	26.35 (19.55	15.91 (12.54	-2.03 (-2.27
14 <sup>Virgin Islands</sup>	to 38.19)	to 39.97)	0.31)	1.02)	0.59)	to -1.99)	to 32.66)	to 20.17)	to -1.78)
15 16 Uruguay	17.66 (14.59	17.41 (14.35	-0.17 (-0.21	0.27 (0.23 to	0.41 (0.35 to	1.10 (0.62 to	9.71 (8.22 to	12.78 (11.11	0.63 (0.27 to
16 <sup>Uruguay</sup> 17	to 21.30)	to 21.13)	to -0.13)	0.37)	0.47)	1.58)	12.16)	to 14.58)	0.98)
18 Uzbekistan	74.25 (62.30	75.79 (63.42	-0.02 (-0.05	0.28 (0.20 to	0.29 (0.23 to	-0.33 (-0.58	23.48 (17.64	21.90 (17.37	-0.47 (-0.58
19	to 88.98)	to 90.50)	to 0.01)	0.39)	0.39)	to -0.09)	to 29.48)	to 27.16)	to -0.36)
20 21 Vanuatu	4.27 (3.44 to	3.94 (3.23 to	-0.42 (-0.59	1.22 (0.69 to	0.84 (0.52 to	-1.74 (-1.94	34.45 (18.68	25.36 (15.29	-1.58 (-1.80
21 Vanuatu 22	5.21)	4.77)	to -0.24)	2.03)	1.24)	to -1.54)	to 54.26)	to 38.79)	to -1.36)
23 Venezuela	29.50 (25.29	29.03 (24.54	-0.01 (-0.05	0.25 (0.17 to	0.15 (0.11 to	-2.32 (-2.82	12.00 (9.33	8.87 (6.84 to	-1.36 (-1.66
24 (Bolivarian 25 <sub>Berublia of</sub> )	to 33.94)	to 34.19)	to 0.03)	0.29)	0.21)	to -1.82)	to 14.20)	11.26)	to -1.05)
25 26 <sup>Republic of)</sup>		,		,		,			
27 Viet Nam	9.12 (7.04 to	18.35 (14.68	2.72 (2.05 to	0.58 (0.30 to	0.22 (0.15 to	-3.98 (-4.35	13.87 (8.53	7.60 (5.65 to	-2.48 (-2.72
28	11.43)	to 22.55)	3.39)	0.88)	0.32)	to -3.61)	to 18.99)	9.80)	to -2.23)
29 30 Yemen	23.40 (18.89	28.03 (22.65	0.95 (0.76 to	0.28 (0.15 to	0.33 (0.22 to	0.85 (0.73 to	10.64 (7.11	12.40 (9.18	0.79 (0.66 to
31	to 29.12)	to 34.94)	1.14)	0.52)	0.52)	0.97)	to 15.89)	to 16.77)	0.93)
32 23 Zambia	6.36 (5.26 to	8.42 (6.92 to	0.86 (0.63 to	0.86 (0.60 to	0.70 (0.51 to	-0.86 (-1.04	27.59 (16.02	20.49 (14.47	-1.05 (-1.14
33 <sup>Zambia</sup> 34	7.78)	10.46)	1.10)	1.32)	0.94)	to -0.69)	to 45.42)	to 27.66)	to -0.96)
35 <sub>Zimbabwe</sub>	8.69 (7.15 to	8.91 (7.29 to	0.21 (0.11 to	0.47 (0.36 to	0.58 (0.35 to	0.96 (0.85 to	14.20 (10.79	17.38 (10.28	1.22 (0.99 to
36	10.74)	11.06)	0.30)	0.64)	0.86)	1.06)	to 19.20)	to 25.35)	1.44)
37 38	Abbrevia	ations: CI=	confidence=	interval.	DALY=dis	ability adj	usted life	year.	
39	EAPC=e	stimated and	nual percent	age change.	UI=uncerta	inty interva	1.		
40									
41									
42 43									
44									
45									
46 47									
47 48									
49									
50									
51 52									
53									
54									
55 56									
57									

- 3 4 5		v				YLDs of inf ange from 1	•		
<u>5</u> 6		Incident cases		r r	YLLs			YLDs	
7 8 Characteristics 9 10	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)
11 12 13 13 14 15sex	293572 (257425 to 336651)	404552 (360521 to 456478)	37.80 (33.91 to 41.98)	757137 (557008 to 914270)	895798 (779706 to 999120)	18.31 (-1.81 to 52.08)	491137 (326283 to 678806)	726701 (487015 to 993466)	47.96 (43.96 to 52.28)
16 17 18 <sup>Male</sup> 19 20 21 2 <sup>f</sup> emale	153074 (133344 to 174640) 140498 (123361 to	213814 (189759 to 241304) 190738 (171154 to	39.68 (36.00 to 43.73) 35.76 (31.29	370299 (264345 to 462642) 386839 (242819 to	450214 (368766 to 507382) 445584 (372799 to	21.58 (-1.85 to 53.89) 15.19 (-5.95	230665 (152583 to 318772) 260473 (173833 to	352534 (235403 to 486701) 374167 (251188 to	52.83 (48.57 to 57.83) 43.65 (39.16
22 23 24 <sub>5DI</sub> quintile 25	161173)	213778)	to 39.92)	477114)	510194)	to 67.02)	359493)	513406)	to 48.19)
26 2≯ligh 28 29	171841 (151878 to 195746)	196451 (179556 to 217510)	14.32 (9.64 to 19.56)	139690 (129255 to 171300)	268406 (221318 to 288862)	92.14 (36.87 to 107.98)	275795 (183466 to 378544)	334924 (229615 to 452309)	21.44 (15.85 to 27.66)
30 3 Ħigh-middle 32	71474 (62545 to 81510)	94553 (84101 to 107156)	32.29 (29.05 to 36.06)	149876 (130428 to 171308)	151980 (137423 to 168345)	1.40 (-11.32 to 17.80)	138460 (92476 to 192296)	200814 (133980 to 276597)	45.03 (40.58 to 50.41)
33 34	27459	59817	117.84	201655	167470	-16.95	46484	123619	165.94
35 <sup>Middle</sup>	(23259 to	(50973 to	(108.98 to	(144191 to	(141946 to	(-32.64 to	(30292 to	(80636 to	(155.28 to
36	32310)	70648)	127.40)	243718)	187219)	19.35)	65651)	174495)	177.70)
37 38	17434	36681	110.40	179309	184730	3.02 (-21.85	23711	51855	118.69
39 Low-middle	(14532 to	(30862 to	(104.05 to	(103608 to	(144128 to	to 54.27)	(15318 to	(33811 to	(110.14 to
40	20935)	44031)	116.72)	244139)	223656)	$\mathbf{O}_{\mathbf{A}}$	33814)	73563)	127.95)
41 42 <sub>Low</sub> 43 44	5279 (4395 to 6379)	12215 (10164 to 14793)	131.41 (126.67 to 136.00)	86179 (39359 to 140538)	122638 (86434 to 167342)	42.31 (-5.62 to 150.88)	6540 (4199 to 9362)	15228 (9694 to 22000)	132.87 (123.17 to 142.33)
45GBD region 46 47Andean Latin 48 <sub>America</sub> 49	472 (402 to 550)	1128 (975 to 1314)	138.95 (128.76 to 150.71)	10085 (4860 to 16590)	4311 (3237 to 5564)	-57.25 (-76.23 to -4.50)	682 (439 to 990)	1631 (1060 to 2311)	139.04 (119.92 to 161.86)
50 51 52 53 53	2979 (2556 to 3481)	6446 (5755 to 7212)	116.39 (101.08 to 132.24)	2212 (1997 to 2709)	5448 (4212 to 6156)	146.25 (61.5 to 182.75)	3590 (2340 to 5079)	7879 (5232 to 10860)	119.48 (94.61 to 145.44)
54 55. 56 57	677 (580 to 796)	1312 (1121 to 1571)	93.82 (84.67 to 103.42)	6186 (3853 to 10389)	6861 (4657 to 9603)	10.92 (-26.38 to 51.60)	1266 (836 to 1782)	2038 (1332 to 2893)	61.05 (49.16 to 73.60)
58 59 <sup>Central Asia</sup>	3514 (2995	6461 (5487	83.87 (77.84	9604 (7718	9458 (8184	-1.52	6348 (4181	10778 (7154	69.79 (58.22
60	to 4146)	to 7637)	to 90.36)	to 11578)	to 10959)	(-20.39 to	to 9075)	to 15134)	to 81.49)

1									
2 3						25.90)			
4 5 6 Central Europe 7 8	20997 (18082 to 24170)	14809 (13443 to 16391)	-29.47 (-33.69 to -24.67)	19517 (17440 to 21350)	20261 (17005 to 23354)	3.81 (-12.56 to 21.14)	42029 (28219 to 58172)	34433 (23103 to 46581)	-18.07 (-23.95 to -11.37)
9 <sub>Central</sub> Latin 10 1 <sup>America</sup>	3968 (3402 to 4618)	6754 (5834 to 7826)	70.22 (64.07 to 77.19)	11909 (10476 to 13363)	23887 (19416 to 28208)	100.58 (62.63 to 141.31)	6187 (4023 to 8802)	12291 (8076 to 17492)	98.64 (90.00 to 107.98)
12 13 1∳ub-Saharan 1∱frica	381 (318 to 469)	1150 (955 to 1400)	201.42 (188.00 to 216.18)	9036 (4403 to 17181)	14431 (9735 to 21338)	59.71 (-15.47 to 217.75)	455 (291 to 663)	1142 (725 to 1644)	151.34 (136.85 to 168.27)
16 17	17567	52319	197.82	202402	101852	-49.68	37829	138111	265.09
18 East Asia	(14627 to	(44680 to	(178.88 to	(132058 to	(80904 to	(-63.19 to	(24646 to	(90529 to	(244.38 to
19	20802)	61455)	220.44)	259475)	117925)	-16.68)	53906)	194304)	290.80)
20 21 22 <sup>Eastern Europe</sup> 23	18150 (15600 to 21209)	19500 (16838 to 22671)	7.44 (5.08 to 9.90)	39012 (29086 to 45400)	42550 (36378 to 48906)	9.07 (-8.79 to 41.38)	33920 (22663 to 47811)	34573 (23253 to 48708)	1.92 (-2.34 to 6.15)
2 <del>£</del> astern 25 26 <sup>Sub-Saharan</sup> 26	1092 (908 to 1315)	2938 (2449 to 3538)	168.96 (163.69 to 175.74)	34323 (15796 to 66928)	49854 (36274 to 71146)	45.25 (-23.18 to 204.58)	1157 (736 to 1664)	3074 (1958 to 4469)	165.68 (159.54 to 172.36)
28 2∲Iigh-income 30Asia Pacific 31	18105 (15391 to 21422)	27084 (23870 to 30621)	49.59 (40.22 to 59.35)	14265 (11234 to 15903)	10285 (8672 to 13984)	-27.90 (-41.19 to 11.39)	37434 (24881 to 52603)	68316 (45509 to 94577)	82.50 (67.39 to 99.60)
32 33 <sup>High-income</sup>	107616	99611	-7.44	48899	111196	127.40	160173	134037	-16.32
	(94147 to	(91945 to	(-13.45 to	(45188 to	(90610 to	(58.53 to	(106818 to	(92136 to	(-22.94 to
34North America 35	123884)	109000)	-0.48)	60393)	118997)	147.53)	221989)	178957)	-9.00)
3 North Africa 3 North Middle 38 29 39	8107 (7040 to 9204)	22722 (19277 to 26952)	180.29 (162.24 to 198.18)	21634 (13448 to 31651)	30142 (25222 to 36090)	39.33 (-4.16 to 131.21)	13804 (8984 to 19350)	42612 (27805 to 59873)	208.69 (184.84 to 233.72)
40 4Dceania 42 43	22 (18 to 27)	63 (52 to 77)	181.23 (166.43 to 197.89)	1003 (571 to 1593)	1628 (1040 to 2510)	62.31 (1.40 to 173.45)	33 (20 to 48)	69 (43 to 102)	109.64 (96.04 to 124.81)
44	18439	39705	115.33	146986	170233	15.82	24461	51744	111.54
<b>45</b> outh Asia	(15169 to	(32943 to	(107.88 to	(82781 to	(122056 to	(-12.64 to	(15784 to	(33609 to	(102.18 to
46 47	22582)	48454)	123.07)	202629)	222489)	63.63)	35449)	74915)	121.79)
48	1882 (1527	4980 (4182	164.62	42561	38819	-8.79	2755 (1714	7867 (5022	185.53
4 <b>\$</b> outheast Asia	to 2270)	to 5972)	(151.61 to	(28111 to	(32029 to	(-30.14 to	to 4108)	to 11568)	(161.80 to
50 51			181.06)	54072)	46584)	30.72)			213.61)
51 Southern Latin 52	879 (742 to	1382 (1177	57.15 (49.53	3794 (3293	5362 (4801	41.34 (23.31	1454 (944	2377 (1528	63.53 (47.49
53 <sup>America</sup>	1030)	to 1620)	to 64.67)	to 4092)	to 6325)	to 66.99)	to 2091)	to 3449)	to 82.12)
5 <b>\$</b> outhern 55 <sub>Sub-Saharan 56 5∳frica</sub>	504 (423 to 608)	989 (837 to 1188)	96.29 (90.20 to 103.76)	6007 (3712 to 8927)	7933 (6389 to 9558)	32.06 (-8.55 to 122.99)	608 (390 to 884)	1298 (837 to 1875)	113.43 (105.15 to 123.26)
58 ropical Latin	7826 (6859	12928	65.19 (58.70	16336	29155	78.46 (62.35	11387 (7351	17842	56.68 (48.38
59 <sub>America</sub> 60	to 8976)	(11334 to	to 72.03)	(14276 to	(26876 to	to 103.68)	to 15958)	(11730 to	to 65.76)

1 2 3 4 5 6 Western Europe 7 8 9 Western 1 Sub-Saharan 1 Africa	59081 (53733 to 65529) 1314 (1102 to 1599)	14874) 78645 (71611 to 86709) 3628 (3028 to 4401)	33.11 (30.56 to 35.75) 176.18 (171.94 to 180.47)	18011) 81826 (75154 to 106409) 29540 (12580 to 46343)	33305) 160823 (127602 to 175684) 51309 (30850 to 73337)	96.54 (25.96 to 118.11) 73.69 (23.64 to 200.73)	103907 (69789 to 141113) 1657 (1057 to 2403)	25165) 149868 (101976 to 202986) 4717 (3002 to 6840)	44.23 (39.12 to 49.03) 184.63 (179.19 to 190.47)
12131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960		rtainty inter	D=Global B rval. YLDs= <u>Y</u>	years of life	e lived with	n disability. Y	YLLs=years		

Supplementary Table 5 Age-standardised incidence,	, YLL and YLD rates for
inflammatory bower disease (IBD) in 1990 and 2019 an	d their temporal trends from
1990 to 2019	

7	1990 to Age	-standardised ind	cidence rate	Age-star	ndardized YLL	rate	Ag	ge-standardized	YLD rate
8 9 Characteristics		per 100,000 pop	ulation	per 100	),000 population	1	1	per 100,000 pop	ulation
<sup>9</sup> Characteristics 10	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.
11	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)
<del>12</del> 13									
Global	6.10 (5.35	4.97 (4.43	-0.60 (-0.73	16.47 (12.78	11.35 (9.89	-1.33 (-1.37	10.73 (7.16	8.80 (5.90	-0.62 (-0.70
5	to 6.96)	to 5.59)	to -0.48)	to 19.33)	to 12.70)	to -1.30)	to 14.82)	to 12.05)	to -0.53)
6 Bex									
8	6.39 (5.60	5.30 (4.72	-0.55 (-0.68	17.08 (12.95	11.98 (9.82	-1.29 (-1.32	10.32 (6.91	8.66 (5.80	-0.53 (-0.60
9Male	to 7.29)	to 5.99)	to -0.43)	to 20.96)	to 13.45)	to -1.27)	to 14.27)	to 11.93)	to -0.47)
20 21	5.80 (5.12	4.64 (4.16	-0.65 (-0.78	15.95 (10.70	10.74 (8.88	-1.39 (-1.43	11.15 (7.43	8.96 (6.02	-0.69 (-0.79
21 Female 22	to 6.61)	to 5.20)	to -0.53)	to 19.09)	to 12.44)	to -1.35)	to 15.41)	to 12.30)	to -0.59)
3 SDI region	,	,			,	,	,	,	
5	18.96	17.61 (16.03	-0.16 (-0.30	14.41 (13.34	15.64 (13.09	0.56 (0.41	29.54 (19.66	27.29 (18.55	-0.30 (-0.39
<b>H</b> igh	(16.73 to	to 19.41)	to -0.01)	to 17.57)	to 16.73)	to 0.70)	to 40.6)	to 37.18)	to -0.21)
27 28	21.58)	10 19.41)	10 -0.01)	10 17.37)	10 10.75)	10 0.70)	10 40.0)	10 57.18)	10 -0.21)
9 High-middle	6.12 (5.36	5.58 (4.97	-0.35 (-0.45	13.87 (12.06	8.37 (7.56	-1.99 (-2.11	12.05 (8.08	10.97 (7.26	-0.26 (-0.40
0	to 6.99)	to 6.28)	to -0.24)	to 15.79)	to 9.33)	to -1.88)	to 16.72)	to 15.12)	to -0.13)
1 2Middle	1.83 (1.58	2.27 (1.94	1.07 (0.95	14.68 (11.06	7 (5.95 to	-2.77 (-2.85	3.43 (2.26	4.61 (3.01	1.22 (1.01 to
3	to 2.15)	to 2.68)	to 1.18)	to 17.93)	7.79)	to -2.69)	to 4.84)	to 6.52)	1.43)
4 Low-middle	2.00 (1.70	2.21 (1.88	0.46 (0.35	20.36 (13.37	12.15 (9.66	-1.99 (-2.09	2.93 (1.93	3.22 (2.12	0.50 (0.38 to
	to 2.40)	to 2.65)	to 0.57)	to 27.43)	to 14.61)	to -1.90)	to 4.16)	to 4.56)	0.62)
86 87 <sub>.ow</sub>	1.46 (1.23	1.52 (1.29	0.37 (0.31	20.24 (12.52	15.18 (11.82	-1.08 (-1.14	1.95 (1.26	2.02 (1.32	0.28 (0.19 to
88	to 1.77)	to 1.83)	to 0.44)	to 27.74)	to 19.54)	to -1.02)	to 2.82)	to 2.88)	0.37)
GBD region									
lo Andean Latin	1.63 (1.41	1.82 (1.57	-0.05 (-0.29	23.76 (13.24	7.15 (5.41	-4.50 (-5.07	2.6 (1.67 to	2.68 (1.74	0.05 (0.01 to
America	to 1.91)	to 2.12)	to 0.20)	to 36.33)	to 9.17)	to -3.92)	3.8)	to 3.79)	0.08)
3	13.56	20.03 (17.79	0.94 (0.72	9.98 (9.01	11.54 (8.93	1.11 (0.82 to	16.21 (10.57	23.45 (15.53	0.86 (0.63 to
14 Australasia 15	(11.64 to	to 22.57)	to 1.16)	to 12.07)	to 13.01)	1.41)	to 22.95)	to 32.51)	1.09)
16	15.80)								
7 Caribbean	2.11 (1.83	2.63 (2.24	0.49 (0.34	19.10 (12.84	14.19 (9.36	-1.13 (-1.33	4.28 (2.83	4.02 (2.62	-0.06 (-0.14
18 19	to 2.49)	to 3.14)	to 0.64)	to 29.41)	to 20.49)	to -0.93)	to 6.06)	to 5.72)	to 0.01)
Central Asia	5.99 (5.13	6.9 (5.87 to	0.50 (0.46	14.63 (11.46	10.56 (9.16	-1.41 (-1.54	11.48 (7.62	11.7 (7.77 to	0.08 (0.04 to
1	to 7.07)	8.13)	to 0.53)	to 17.20)	to 12.18)	to -1.29)	to 16.46)	16.39)	0.11)
3	15.78	11.59 (10.51	-1.38 (-1.76	15.87 (13.6	11.95 (10.00	-0.91 (-1.11	30.41 (20.26	23.89 (15.95	-1.16 (-1.53
Central Europe	(13.61 to	to 12.81)	to -0.99)	to 17.59)	to 13.79)	to -0.72)	to 42.11)	to 32.56)	to -0.79)
55	18.19)								
Central Latin	3.16 (2.74	2.64 (2.29	-0.70 (-0.87	9.15 (8.21	9.79 (7.96	0.81 (0.47	5.69 (3.74	4.89 (3.22	-0.50 (-0.58
America	to 3.66)	to 3.06)	to -0.54)	to 10.10)	to 11.55)	to 1.16)	to 8.02)	to 6.96)	to -0.42)
Sentral	1.04 (0.88	1.26 (1.06	0.64 (0.59	20.92 (13.38	16.45 (11.73	-0.84 (-0.92	1.33 (0.87	1.32 (0.85	-0.16 (-0.35
5 <b>S</b> ub-Saharan	to 1.26)	to 1.52)	to 0.70)	to 31.16)	to 22.99)	to -0.75)	to 1.94)	to 1.91)	to 0.04)

1 2 <sup>3</sup> Africa									
-1	1.45 (1.22	2.95 (2.55	2.54 (2.39	20.78 (14.55	6.12 (4.90	-4.52 (-4.79	3.45 (2.26	6.95 (4.57	2.74 (2.37 to
5 <sub>East Asia</sub> 6	to 1.71)	to 3.43)	to 2.69)	to 26.09)	to 7.03)	to -4.24)	to 4.87)	to 9.69)	3.12)
7	7.10 (6.12	7.34 (6.34	0.07 (-0.02	14.85 (11.23	14.46 (12.37	-0.56 (-0.82	12.83 (8.55	12.21 (8.15	0.05 (-0.07
8 Eastern Europe	to 8.29)	to 8.55)	to 0.17)	to 17.29)	to 16.65)	to -0.30)	to 18.05)	to 17.24)	to 0.17)
9 10Eastern	10 0.27)	(0 0.55)	10 0.17)	(0 17.29)	10 10.00)	10 0.50)	10 10.05)	(0 17.21)	(0 0.17)
1 Sub-Saharan	0.89 (0.76	1.04 (0.88	0.55 (0.48	21.56 (15.07	18.27 (13.48	-0.51 (-0.59	1.02 (0.66	1.17 (0.76	0.44 (0.40 to
12 Africa 13	to 1.07)	to 1.25)	to 0.61)	to 32.54)	to 24.41)	to -0.43)	to 1.46)	to 1.67)	0.48)
14High-income	9.25 (7.88	14.93 (13.14	1.10 (0.84	7.85 (6.04	2.74 (2.35	-4.07 (-4.38	18.58 (12.28	31.81 (21.06	1.11 (0.73 to
15Asia Pacific 16	to 10.91) 34.88	to 16.93)	to 1.37)	to 8.80)	to 3.86)	to -3.77)	to 26.01)	to 44.06)	1.49)
17High-income		24.51 (22.65	-0.82 (-1.20	14.94 (13.84	20.18 (16.54	1.26 (1.03	50.69 (33.71	31.1 (21.34	-1.28 (-1.69
18 <sub>North</sub> America 19	(30.59 to 40.02)	to 26.77)	to -0.45)	to 18.40)	to 21.51)	to 1.50)	to 70.19)	to 41.87)	to -0.86)
20 <sub>North</sub> Africa	2.05 (2.50	2.74 (2.10	0 (2 (0 52	0.00 (5.0)	6.06 (5.09	1 22 ( 1 26		7 01 (4 74	0.00 (0.76 (
21 22 <sup>and</sup> Middle	2.95 (2.59	3.74 (3.19	0.62 (0.53	8.82 (5.96	6.06 (5.08	-1.32 (-1.36	5.55 (3.65	7.21 (4.74	0.88 (0.76 to
2 <b>E</b> ast	to 3.38)	to 4.45)	to 0.72)	to 12.45)	to 7.15)	to -1.29)	to 7.72)	to 10.1)	1.00)
24	0.44 (0.36	0.56 (0.47	0.87 (0.76	19.89 (12.45	14.30 (9.82	-1.32 (-1.41	0.71 (0.45	0.63 (0.40	-0.53 (-0.72
250ceania 26	to 0.52)	to 0.67)	to 0.98)	to 28.10)	to 20.46)	to -1.23)	to 1.03)	to 0.93)	to -0.34)
	2.15 (1.79	2.32 (1.93	0.47 (0.31	18.45 (11.93	10.91 (7.96	-2.10 (-2.23	3.02 (1.97	3.08 (2.01	0.25 (0.09 to
27 South Asia 28	to 2.64)	to 2.84)	to 0.63)	to 26.19)	to 14.27)	to -1.97)	to 4.38)	to 4.49)	0.40)
29	0.46 (0.38	0.70 (0.59	1.45 (1.27	12.43 (7.76	6.35 (5.08	-2.69 (-2.85	0.73 (0.46	1.09 (0.7 to	1.52 (1.22 to
3 <b>®</b> outheast Asia 31	to 0.56)	to 0.84)	to 1.63)	to 15.13)	to 7.61)	to -2.53)	to 1.09)	1.60)	1.83)
32Southern Latin	1.82 (1.54	1.92 (1.63	0.24 (0.15	8.05 (7.00	6.85 (6.15	-0.71 (-0.86	3.05 (1.98	3.21 (2.06	0.23 (0.04 to
33 <sub>America</sub> 34 35 <sup>Southern</sup>	to 2.13)	to 2.26)	to 0.34)	to 8.69)	to 8.08)	to -0.56)	to 4.38)	to 4.68)	0.42)
	1.30 (1.10	1.37 (1.17	0.13 (0.06	13.43 (9.33	11.79 (9.6 to	-0.20 (-0.55	1.67 (1.08	1.87 (1.22	0.48 (0.41 to
3 <b>&amp;</b> ub-Saharan 3⊼ <sub>frica</sub>	to 1.56)	to 1.65)	to 0.20)	to 17.23)	13.95)	to 0.15)	to 2.41)	to 2.70)	0.55)
38 Tropical Latin 39	6.09 (5.40	5.25 (4.60	-0.55 (-0.59	13.65 (11.97	12.09 (11.13	-0.18 (-0.34	9.72 (6.37	7.17 (4.71	-0.83 (-1.04
46 <sup>America</sup>	to 6.93)	to 6.03)	to -0.51)	to 14.87)	to 13.83)	to -0.02)	to 13.54)	to 10.10)	to -0.63)
41	13.98	16.04 (15.00	0 (0 (0 55	16.07 (14.02	10.05 (15.10	0.02 (0.72	00.17 (15.50	07.02 (10.01	0.20 (0.25 )
42 Western Europe	(12.67 to	16.94 (15.33	0.60 (0.55	16.07 (14.83	18.85 (15.12	0.92 (0.72	23.17 (15.52	27.93 (19.01	0.38 (0.26 to
43 <sup>1</sup> 44	15.48)	to 18.73)	to 0.65)	to 20.58)	to 20.42)	to 1.11)	to 31.53)	to 38.12)	0.49)
45Western									
4 Sub-Saharan	1.01 (0.86	1.17 (1.00	0.36 (0.22	18.33 (10.38	15.14 (10.25	-0.69 (-0.80	1.37 (0.89	1.63 (1.06	0.78 (0.66 to
47 48 48	to 1.23)	to 1.41)	to 0.50)	to 29.12)	to 20.82)	to -0.58)	to 1.98)	to 2.34)	0.90)
40	Abbrevia	ations: CI=c	onfidence	interval. EA	PC=estimat	ed annual p	bercentage c	change.	_

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GBD=Global Burden of Disease. SDI=Socio-demographic Index. UI=uncertainty

interval. YLD=years of life lived with disability. YLL=years of life lost.

STROBE Statement-checklist of items that should be included in reports of observational studies

	Item No	Recommendation	Pag No
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the	1
		abstract	
		(b) Provide in the abstract an informative and balanced summary of what	2
		was done and what was found	
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods	-		
Study design	4	Present key elements of study design early in the paper	5
Setting	5	Describe the setting, locations, and relevant dates, including periods of	5
C		recruitment, exposure, follow-up, and data collection	
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods	5
1		of selection of participants. Describe methods of follow-up	
		<i>Case-control study</i> —Give the eligibility criteria, and the sources and	
		methods of case ascertainment and control selection. Give the rationale for	
		the choice of cases and controls	
		Cross-sectional study—Give the eligibility criteria, and the sources and	
		methods of selection of participants	
		(b) Cohort study—For matched studies, give matching criteria and number	
		of exposed and unexposed	
		Case-control study—For matched studies, give matching criteria and the	
		number of controls per case	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders,	5-6
		and effect modifiers. Give diagnostic criteria, if applicable	
Data sources/	8*	For each variable of interest, give sources of data and details of methods of	5-6
measurement		assessment (measurement). Describe comparability of assessment methods if	
		there is more than one group	
Bias	9	Describe any efforts to address potential sources of bias	6
Study size	10	Explain how the study size was arrived at	6
Study size Quantitative variables		Explain how the study size was arrived at Explain how quantitative variables were handled in the analyses. If	
Study size Quantitative variables	10	* · ·	
	10	Explain how quantitative variables were handled in the analyses. If	
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5-6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why ( <i>a</i> ) Describe all statistical methods, including those used to control for	5-6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why ( <i>a</i> ) Describe all statistical methods, including those used to control for confounding	5-6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why(a) Describe all statistical methods, including those used to control for confounding(b) Describe any methods used to examine subgroups and interactions	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed         (d) Cohort study—If applicable, explain how loss to follow-up was	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed         (d) Cohort study—If applicable, explain how loss to follow-up was addressed	5-6 6 6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If         applicable, describe which groupings were chosen and why         (a) Describe all statistical methods, including those used to control for         confounding         (b) Describe any methods used to examine subgroups and interactions         (c) Explain how missing data were addressed         (d) Cohort study—If applicable, explain how loss to follow-up was addressed         Case-control study—If applicable, explain how matching of cases and	5-6 6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If</li> <li>applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for</li> <li>confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> <li>(c) Explain how missing data were addressed</li> <li>(d) Cohort study—If applicable, explain how loss to follow-up was</li> <li>addressed</li> <li><i>Case-control study</i>—If applicable, explain how matching of cases and</li> <li>controls was addressed</li> </ul>	5-6 6 6

Continued on next page

Participants	13*	(a) Report numbers of individuals at each stage of study-eg numbers potentially	6-
		eligible, examined for eligibility, confirmed eligible, included in the study, completing	
		follow-up, and analysed	
		(b) Give reasons for non-participation at each stage	6-
		(c) Consider use of a flow diagram	6-
Descriptive	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and	6-
data		information on exposures and potential confounders	
		(b) Indicate number of participants with missing data for each variable of interest	6-
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)	6-
Outcome data	15*	Cohort study-Report numbers of outcome events or summary measures over time	6-
		Case-control study—Report numbers in each exposure category, or summary	6-
		measures of exposure	
		Cross-sectional study—Report numbers of outcome events or summary measures	6-
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and	6-
		their precision (eg, 95% confidence interval). Make clear which confounders were	
		adjusted for and why they were included	
		(b) Report category boundaries when continuous variables were categorized	6-
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a	6-
		meaningful time period	
Other analyses	17	Report other analyses done-eg analyses of subgroups and interactions, and	6-
		sensitivity analyses	
Discussion			
Key results	18	Summarise key results with reference to study objectives	10
			11
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or	12
		imprecision. Discuss both direction and magnitude of any potential bias	
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations,	10
		multiplicity of analyses, results from similar studies, and other relevant evidence	13
Generalisability	21	Discuss the generalisability (external validity) of the study results	13
Other informati	on		
	22	Circle the second of finding and the rate of the finders for the second study and if	14
Funding	22	Give the source of funding and the role of the funders for the present study and, if	14

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

**BMJ** Open

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## The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019: A systematic analysis based on the Global Burden of Disease Study 2019

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<b>Primary Subject Heading</b> :	Epidemiology				
Secondary Subject Heading:	Gastroenterology and hepatology				
Keywords:	Inflammatory bowel disease < GASTROENTEROLOGY, EPIDEMIOLOGY, Gastroenterology < INTERNAL MEDICINE				





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The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019: A systematic analysis based on the Global Burden of Disease Study 2019

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Running title: Global burden of inflammatory bowel disease

## Abstract

**Objectives** We aimed to provide the most updated estimates on the global burden of inflammatory bowel disease (IBD) to improve management strategies.

**Design** We extracted data from the Global Burden of Disease (GBD) 2019 database to evaluate IBD burden with different measures in 204 countries and territories from 1990 to 2019.

**Setting** Studies from the GBD 2019 database generated by population-representative data sources identified through a literature review and research collaborations were included.

Participants Patients with an IBD diagnosis.

**Outcomes** Total numbers, age-standardised rates of prevalence, mortality and disability-adjusted life years (DALYs), and their estimated annual percentage changes (EAPCs) were the main outcomes.

**Results** In 2019, there were approximately 4.9 million cases of IBD worldwide, with China and the United States having the highest number of cases [911405 and 762890 (66.9 and 245.3 cases per 100 000 people, respectively)]. Between 1990 and 2019, the global age-standardised rates of prevalence, deaths, and DALYs decreased (EAPCs = -0.66, -0.69, and -1.04, respectively). However, the age-standardised prevalence rate increased in 13 out of 21 GBD regions. A total of 147 out of 204 countries or territories experienced an increase in the age-standardised prevalence rate. From 1990 to 2019, IBD prevalent cases, deaths and DALYs were higher among females than among males. A higher sociodemographic index (SDI) was associated with higher age-standardised prevalence rates.

**Conclusions** IBD will continue to be a major public health burden due to increasing numbers of prevalent cases, deaths, and DALYs. The epidemiological trends and disease burden of IBD have changed dramatically at the regional and national levels, so understanding these changes would be beneficial for policy-makers to tackle IBD. **Keywords:** Inflammatory bowel disease; Global burden of disease; Prevalence; Disability-adjusted life years; Estimated annual percentage change.

## Strengths and limitations of this study

This is the most updated estimate on IBD epidemiology worldwide and included 204 countries, some of which have not been assessed before.

GBD 2019 incorporated more studies, adjusted diagnostic criteria, and further improved data reliability, hence presenting data more representative of individuals.

One of the limitations was heterogeneity in population and location between the studies included.

Another limitation is that the variability in study design and data collection methods also affected the precision of the estimates, which is only partially compensated for in our analysis model.

The third limitation is that the results for some geographical regions were severely limited by the paucity of data (not just variability in study design but lack of studies) and should be treated with caution.

#### Introduction

Inflammatory bowel diseases (IBDs), including Crohn's disease and ulcerative colitis, are debilitating and chronic inflammatory disorders of the gastrointestinal tract that have no cure.<sup>1</sup> IBD is characterised by a relapsing-remitting course and a heterogeneous clinical presentation that includes episodes of abdominal pain, chronic diarrhoea, rectal bleeding, and weight loss, which are often associated with systemic symptoms such as fatigue and occasionally fever.<sup>2</sup> Because IBD can cause significant morbidity and lead to complications such as strictures, fistulas, infections, and cancer, this disorder leads to substantial health care costs and places great stress on health care systems.<sup>3,4</sup> Although the cause of IBD remains unknown, the pathogenesis of IBD is suggested to be associated with genetic susceptibility of the host, intestinal microbiota, other environmental factors (e.g., diet, smoking, and physiological stress), and immunological abnormalities.<sup>5</sup>

Traditionally, IBD has been regarded as a disease of the Western world; however, studies over the last two decades have shown a rapidly increasing incidence in newly industrialised countries in the Middle East, Asia, and South America.<sup>6</sup> Conversely, IBD incidence rates appeared to plateau in the Western world in the 21st century.<sup>7</sup> These substantial changes highlight the need for a comparable, consistent and systematic analysis of disease burden and trends concerning IBD in different regions and countries, which can be used to provide convincing evidence for rational allocation of resources and heath care planning in reducing the global burden of IBD.

The Global Burden of Disease (GBD) Study 2019, a systematic worldwide epidemiological study, assessed the prevalence, morbidity, mortality, and disability of 369 diseases by location, sex, age and year,<sup>8</sup> which provides a unique opportunity to understand the state of IBD. The purpose of this study was to use data from the GBD 2019 study to determine the global, regional and national burden of IBD across 204 countries and territories from 1990 to 2019 by age, sex and sociodemographic index (SDI). Our study provides updated estimates on global IBD epidemiology and provides data on some regions not assessed previously or data-scarce locations, of which estimates mainly rely on predictive covariates or global trends with

consideration of SDI level and data from a single country.

### Methods

The general methodology of GBD 2019 has been reported in detail in previous publications.<sup>8-11</sup> In brief, the GBD Study collected data from censuses, household surveys, civil registration and vital statistics, disease registries, health service use, satellite imaging, disease notifications, and other sources.<sup>9</sup> A Bayesian meta-regression modelling tool, DisMod-MR 2.1, was used to model and derive estimates of the burden under several conditions in 204 countries and territories from 1990 to 2019.<sup>9</sup> The model included all of the above available information for each disease and applied a correcting process for known bias to derive country-specific estimates of prevalence and burden of diseases, which have been described in previous studies.<sup>8</sup> Uncertainty intervals (UIs) were generated for every metric using the 25th and 75th ordered 1000 draw values of the posterior distribution.<sup>9</sup>

We extracted yearly crude and age-standardised estimates of different measures of the burden of IBD from the GBD database from 1990 to 2019 and the respective 95% UIs via the Global Health Data Exchange (GHDx) query tool (http://ghdx.healt hdata.org/gbd-results-tool). For the GBD 2019 assessment, IBD was defined according to the 10<sup>th</sup> revision of the International Classification of Diseases (ICD-10 codes: K50-K51.319, K51.5-K52, K52.8-K52.9). The variables obtained from the database included prevalent cases, number of deaths, number of disability-adjusted life years (DALYs), number of years of life lost (YLL), number of years lived with disability (YLD), and their corresponding age-standardised rates (ASRs) at the global, regional, and national levels. The prevalence rate (per 100 000 people) was defined as aggregated cases (including new cases and previously diagnosed cases) divided by the population size; the mortality rate (per 100 000 people) was defined as the number of annual deaths divided by the total population size, and DALYs were calculated as the sum of YLL and YLD. These data were stratified by age (1-4, 5-9, every 5-year age group up to 95 years, and 95 years and older), calendar year (1990-2019), region, and country (or territory). Geographically, the world was classified into 21 regions.

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Moreover, 204 countries and territories were divided into five categories according to the SDI. The SDI was constructed based on the geometric mean of three indicators: the total fertility rate, income per capita, and average years of schooling among people aged 15 years or older, ranging from zero to one.<sup>12</sup> The larger the SDI, the more developed the country.<sup>13</sup>

Estimated average percentage changes (EAPCs) were used to evaluate trends in the age-standardised rates of prevalence, deaths, and DALYs over a specific period. The natural logarithm of the age-standardised rate was assumed to be linear along with time; that is,  $y = \alpha + \beta x + \varepsilon$ , where  $y = \ln$  (rate), x = calendar year, and  $\varepsilon =$  error term. Based on this formula,  $\beta$  represents the positive or negative age-standardised rate trends. The EAPC was calculated as  $100 \times (\exp (\beta) - 1)$ , and its 95% confidence interval (CI) could also be calculated from this model.<sup>14</sup> The age-standardised indicator was recognised to be experiencing an upward trend if the 95% CI of the corresponding EAPC estimation was > 0, to be experiencing a downward trend if the 95% CI was < 0 and to be stable if the 95% CI included 0. All statistical analyses and visualisations were conducted using the R statistical software programme (version 4.1.0). A *P* value < 0.05 was considered statistically significant.

Because this study was based on a publicly available dataset, it was exempted from the informed consent requirement by the ethics committee of the XXX. This study followed the guidelines for a cross-sectional study described in the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER).<sup>15</sup>

#### Patient and public involvement

Patients and/or the public were not involved in the study design, data interpretation, manuscript drafting, or dissemination plans of this research.

#### Results

#### **Prevalence of IBD**

Globally, IBD accounted for 3.32 million estimated cases (95% UI 2.90 to 3.79) in 1990 and 4.90 million cases (4.35 to 5.50) in 2019, corresponding to an increase of 47.45% between 1990 and 2019 (Supplementary Table 1 and Figure 1A). The global

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 age-standardised prevalence rate of IBD decreased from 73.23 per 100 000 people (63.86 to 83.63) in 1990 to 59.25 per 100 000 people (52.78 to 66.47) in 2019, with an EAPC of -0.66 (95% CI -0.75 to -0.57) (Table 1; Figure 1B, 1C; and Figure 2A). Although graphical representation suggested homogeneity of data quality across the globe, this was not the case, and estimates were based on extremely limited data and should be treated with caution in some regions.

At the regional level in 2019, the largest number of prevalent cases was observed in Western Europe [1.03 million (95% UI 0.93 to 1.13)] (Supplementary Table 1), and the highest age-standardised prevalence rate was observed in the high-income Asia Pacific region [210.54 per 100 000 people (183.69 to 239.68)] (Figure 3A). From 1990 to 2019, an increase in total prevalent cases was seen across most GBD regions, as shown in Figure 4A. However, the age-standardised prevalence rate increased in 13 GBD regions and decreased in 5 regions, with the highest upward trend in East Asia [EAPC = 2.79 (95% CI 2.41 to 3.18)] and the largest decrease in high-income North America [EAPC = -1.32 (-1.75 to -0.89)] (Figure 2B).

At the national and territorial levels in 2019, China and the United States of America had the highest number of prevalent cases [911405 (95% UI 776347 to 1069533) and 762890 (712357 to 813654), respectively] (Supplementary Table 2 and Figure 1A). In 2019, the highest age-standardised prevalence rates of IBD were observed in Norway [498.95 (429.41 to 570.55)] (Supplementary Table 3 and Figure 1B). Between 1990 and 2019, age-standardised prevalence rates showed an upward trend in 147 countries or territories, with the greatest increase in Taiwan (Province of China) [EAPC = 4.29 (95% CI 3.71 to 4.86)] (Figure 1C).

Overall, the global number of prevalent cases was higher among females than among males in 2019 (Supplementary Table 1). The age-standardised prevalence rate was similar between males and females in 2019 (Table 1). The highest peak IBD prevalence and age-specific prevalence rates occurred at ages 50-54 years and 60-64 years, respectively, among females and males in 2019 (Figure 5A). From 1990 to 2019, the number of prevalent cases continued to increase for both sexes and was higher among females than among males in all years. The age-standardised

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prevalence rate decreased for both sexes during the same period (Supplementary Figure 1).

#### **Deaths related to IBD**

In 2019, there were 40998 deaths (95% UI 34933 to 44661) due to IBD worldwide, which increased by 68.75% (47.12 to 94.62) from 24295 (20258 to 28376) in 1990 (Supplementary Table 1 and Supplementary Figure 2). The global age-standardised death rate was 0.54 per 100 000 people (0.46 to 0.59) in 2019, which decreased from 0.67 per 100 000 people (0.57 to 0.78) in 1990, with an EAPC of -0.69 (95% CI -0.81 to -0.57) (Table 1, Figure 2C, and Supplementary Figures 3-4).

At the regional level, Western Europe was also the region with the largest number of deaths [11981 (95% UI 9244 to 13315)] and the highest age-standardised death rate [1.11 per 100 000 people (0.87 to 1.23)] in 2019 (Supplementary Table 1 and Figure 3B). From 1990 to 2019, most GBD regions experienced an increase in total deaths from IBD (Figure 4B). However, the age-standardised death rate declined in more than 60% of GBD regions, such as the high-income Asia Pacific region [EAPC = -4.29 (95% CI -4.64 to -3.93)], East Asia [EAPC = -3.98 (-4.33 to -3.63)], and Andean Latin America [EAPC = -2.74 (-3.16 to -2.32)] (Figure 2D).

At the national and territorial levels in 2019, China and the United States of America also had the highest number of deaths [4676 (95% UI 3774 to 5461) and 5910 (4622 to 6464), respectively] (Supplementary Table 2 and Supplementary Figure 2). The Netherlands had the highest age-standardised death rate in 2019 [2.08 per 100 000 people (1.58 to 2.40)] (Supplementary Table 3 and Supplementary Figure 3). Between 1990 and 2019, more than 60% of countries or territories experienced a decrease in the age-standardised death rate of IBD, and the largest decrease was noted in the Republic of Korea [EAPC = -7.96 (-8.67 to -7.25)] (Supplementary Figure 4).

Globally, the number of deaths was higher among females than among males in 2019 (Supplementary Table 1). The age-standardised death rate was 0.56 per 100 000 people (95% UI 0.45 to 0.62) among males and 0.52 per 100 000 people (0.43 to 0.58) among females (Table 1). In 2019, the highest number of deaths was observed among males aged 80-84 years and females aged 85-89 years, and the highest

age-specific death rate was observed in the oldest age group ( $\geq$ 95 years) for both sexes (Figure 5B). Between 1990 and 2019, deaths related to IBD also continued to increase for both sexes and were higher among females than among males in all years. However, the age-standardised death rate decreased for both sexes from 1990 to 2019 (Supplementary Figure 5).

#### **DALYs of IBD**

Globally, 1.62 million (95% UI 1.36 to 1.92) DALYs, 0.73 million (0.49 to 0.99) YLD, and 0.90 million (0.78 to 1.00) YLL were due to IBD in 2019, which increased from 1990 by 29.98%, 47.96%, and 18.31%, respectively (Supplementary Table 1, Supplementary Table 4, and Supplementary Figures 6-9). The global age-standardised DALY rate decreased from 27.20 per 100 000 people (21.70 to 32.39) in 1990 to 20.15 per 100 000 people (16.86 to 23.71) in 2019, with an EAPC of -1.04 (95% CI -1.06 to -1.01) (Table 1, Figure 2E, and Supplementary Figures 10-11). The same downward trend was found in the age-standardised YLL rate [EAPC = -1.33 (-1.37 to -1.30)] and the age-standardised YLD rate [EAPC = -0.62 (-0.70 to -0.53)] (Supplementary Table 5 and Supplementary Figures 12-14).

At the regional level, Western Europe had the greatest number of DALYs [310691 (95% UI 255911 to 371106)] in 2019 (Supplementary Table 1). The highest age-standardised DALY rates in 2019 were observed in high-income North America [51.27 per 100 000 people (95% UI 40.90 to 62.35)] (Figure 3C). As shown in Figure 4C, an increase in total DALYs was found across most GBD regions from 1990 to 2019. Most of the GBD regions had a downward trend in the age-standardised DALY rate, with the largest decrease in Andean Latin America [EAPC = -3.68 (95% CI -4.17 to -3.18)] (Figure 2F).

At the national and territorial levels in 2019, China and the United States of America had the highest number of DALYs [232464 (95% UI 179903 to 291090) and 215289 (175991 to 256059), respectively] (Supplementary Table 2 and Supplementary Figure 6). The highest age-standardised DALY rate was observed in Norway in 2019 [80.37 per 100 000 people (56.25 to 108.56)] (Supplementary Table 3 and Supplementary Figure 10). From 1990 to 2019, more than 65% of countries or

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territories experienced a decrease in the age-standardised DALY rate of IBD, and the largest decrease was found in Peru [EAPC = -5.08 (95% CI -5.69 to -4.47)] (Supplementary Figure 11).

In 2019, the global number of DALYs was also higher among females than among males (Supplementary Table 1). The age-standardised DALY rate was 20.6 per 100 000 people (95% UI 17.2 to 24.3) among males and 19.7 per 100 000 people (16.2 to 23.5) among females (Table 1). The number of DALYs was highest among males aged 50-54 years and females aged 55-59 years (Figure 5C). The highest number of YLL occurred in the group aged 65-69 years [75234, (63865 to 83022)], while the highest number of YLD occurred in the group aged 45-49 years [80776, (53187 to 113688)] (Supplementary Figure 15). As with prevalent cases and deaths, the DALYs continued to increase for both sexes and were higher among females than among males in all years from 1990 to 2019. The age-standardised DALY rate decreased for both sexes between 1990 and 2019 (Supplementary Figure 16).

## Burden of IBD by SDI

A higher SDI was associated with higher age-standardised prevalence rates of IBD, with values that were higher than the global rate in high and high-middle SDI quintiles and lower than the global rate in the other three SDI quintiles (Table 1). The high-SDI quintile had the highest age-standardised prevalence rate, death rate and DALY rate in 2019. Between 1990 and 2019, the age-standardised death rate and age-standardised DALY rate decreased in all SDI quintiles except the high-SDI quintile, where they increased [EAPC = 0.82 (95% CI 0.64 to 1.01)] and remained stable [EAPC = 0.00 (-0.06 to 0.05)], respectively (Table 1 and Figure 2C, 2E). However, the age-standardised prevalence rate decreased in the high and high-middle SDI quintiles and increased in the other three SDI quintiles during the observation period (Table 1 and Figure 2A).

The observed global and regional age-standardised prevalence, death, and DALY rates in relation to SDI are shown in Figure 6, expressed in the annual time series from 1990 to 2019. Regions generally followed the trend of increased death and DALY rates with a higher SDI. However, more than 60% of the regions showed an upward trend in the age-standardised prevalence rate during the study period. At the global level, the age-standardised prevalence, death, and DALY rates dropped with

increasing SDI values but were above the expected levels during the past 30 years.

## Discussion

In this study, we comprehensively analysed the temporal trend in IBD burden at the global, regional, and national levels. GBD 2019 reported 4.90 million IBD cases worldwide in 2019 and 4.79 million in 2017, while GBD 2017 reported 6.85 million in 2017.<sup>16</sup> This discrepancy could be partly attributed to the improved specificity of case definition since GBD 2019 adjusted administrative data inputs towards expected stringent diagnosis using previously published IBD data with ICD codes.<sup>11</sup> In addition, GBD 2019 improved model fit prevalence and incidence by setting more plausible bounds on excess mortality rate and passing less-informative priors to lower levels of the geographical hierarchy in DisMod-MR 2.1.<sup>11</sup> Indeed, the GBD 2019 study provides the most current overview of the burden of IBD. It incorporates more data sources, with some from regions not previously assessed, providing updated estimates on global IBD epidemiology.<sup>11</sup> In addition, GBD 2019 updated the bias adjustment, which further improved data reliability.<sup>11</sup> After these adjustments, our study confirmed two epidemiological shifts in IBD since 1990. The number of prevalent cases has increased globally since 1990, with China and the United States of America having the highest number of cases. The age-standardised rates of death and DALYs decreased, implying substantial improvements in IBD management. The changing trends and geographical patterns have implications for policy-makers to prioritise IBD management, especially in newly industrialised countries.

The highest age-standardised prevalence rates were observed in high-income North America, Western Europe, and the high-income Asia Pacific region. This pattern was also shown in high-SDI countries such as Norway and Canada. This is consistent with several previous meta-analyses<sup>6,17</sup> and might correlate with several risk factors for IBD.<sup>18,19</sup> Heavily processed foods with low fibre and high fat content and sugar are a risk factor for decreased microbial species.<sup>20-22</sup> Other risk factors include smoking, hygiene, and latitude resulting in vitamin D/sun exposure.<sup>23,24</sup> The largest reduction in the age-standardised prevalence rate was also observed in high-income North

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America, which was consistent with the results of some previous reports,<sup>6,25</sup> indicating the shift in the epidemiological stages of IBD in Western countries.<sup>26,27</sup>

Despite increasing numbers of prevalent cases, the global age-standardised prevalence rate showed a downward trend. This discrepancy reflects the denominator effects of an increasing global population and age-specific effects.<sup>28</sup> Coward S and his colleagues<sup>29</sup> reported that the prevalence rate among elderly individuals and adults was ten times greater than that among paediatric patients in Canada. The trend in the age-standardised prevalence rate differed substantially between GBD regions. The greatest upward trend was observed in East Asia. At the national level, China, with a total number of 911405 IBD patients, was a prominent contributor to the total number of global IBD cases. This pattern is consistent with several previous reports,<sup>6,30</sup> which is related mainly to urbanisation, industrialisation, and cultural Westernisation in some areas of China.<sup>31</sup> With epidemiological surveillance strategies shifting from paper records to electronic health care databases using International Classification of Disease (ICD) codes, advances in health care facilities such as the implementation of endoscopy<sup>32</sup> and the detection and diagnosis of IBD have also increased.

IBD causes body disability.<sup>33,34</sup> Consistent with a previous study,<sup>4</sup> the age-standardised DALY and mortality rates showed a downward trend globally, especially in East Asia, likely resulting from improved treatment strategies, such as the early use of biological agents and patient support programs.<sup>35</sup> The introduction of biological agents improved quality of life and reduced the surgery rate.<sup>30,36</sup> Unfortunately, the cost of biologic therapy is considerable, estimated at more than US\$25,000 per year.<sup>37</sup> More attention should be given to optimising patient selection, dosing and withdrawal.

There are some limitations of our study. First, the accuracy of the estimated IBD burden largely depends on the availability and quality of data acquired, which could be partially compensated by statistical methods. However, in regions with scarce data, especially in low-SDI countries, estimates could only rely on predictive covariates or global trends with consideration of SDI level and data from a single country, which is less representative. Extra caution should be taken when interpreting data from these

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areas. Additional high-quality population-based studies should be performed, especially in countries with scarce data. Second, estimate discrepancies compared to the results of some of the previously published studies could be further improved, although GBD 2019 has improved model fit for prevalence and incidence, partly overcoming the discrepancies. For example, the prevalence rate in Canada was only 46 to 57 per 100,000 people in GBD 2017. However, a rate of approximately 520 per 100,000 people was reported by a previous large population-based study in Canada.<sup>38</sup> GBD 2019 reported a rate of 357.73 per 100,000 people after adjustment. Third, UC-specific and CD-specific trends were not assessed due to the lack of relevant data. The association between IBD and certain risk factors should also be included in the future. Nevertheless, GBD 2019 provides the most up-to-date global IBD epidemiology estimates for the last three decades and implications for new hypotheses. It covers 204 countries. Therefore, GBD 2019 generates more representative data and can compensate for biases in individual studies.

## Conclusions

Despite the reduction in age-standardised rates of prevalence, deaths, and DALYs, IBD will continue to be a major public health burden due to increasing numbers of prevalent cases worldwide. However, the trend has shifted substantially since 1990. Although the age-standardised prevalence rate has increased rapidly in newly industrialised countries, especially in East Asia, the incidence has stabilised or even decreased in Western countries such as those in high-income North America. The prevalence of IBD in newly industrialised countries is quickly approaching that in Western countries. More systematic epidemiologic monitoring strategies, especially in low-SDI countries, and the integration of risk factors into the estimate model of the GBD Study would further facilitate IBD management. Our findings might help some policy-makers justify medical resource allocation, especially in low-SDI countries.

## Abbreviations

EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; SDI, socio-demographic index; GBD, Global Burden of Disease, Injuries, and Risk Factors

 Study; DALYs, disability adjusted life years; YLDs, years of life lived with disability; YLLs, years of life lost; IHME, Institute for Health Metrics and Evaluation; GATHER, Guidelines for Accurate and Transparent Health Estimates Reporting; ASR, age-standardised rate; UI, uncertainty interval; CI, confidence interval.

#### Ethics approval and consent to participate

This study did not involve human participants and the study did not need ethics approval because it used publicly available data.

#### **Consent for publication**

Not applicable.

## Data availability statement

All data relevant to the study are included in the article or uploaded as supplementary eliez information.

#### **Declaration of interests**

The authors declare no conflict of interests.

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#### Disclaimer

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## **Author Contributions**

Study concept and design: Decai Zhang and Rui Wang. Acquisition of data: Zhaoqi Li and Shaojun Liu. Data analysis and interpretation: Rui Wang RW, Zhaoqi Li, Shaojun Liu, and Decai Zhang. Drafting the manuscript: Decai Zhang and Rui Wang. Critical revision of manuscript: all authors. All authors had full access to all the data in the study and had final responsibility for the decisions to submit for publication.

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## References

- Seyed Tabib NS, Madgwick M, Sudhakar P, Verstockt B, Korcsmaros T, Vermeire S. Big data in IBD: big progress for clinical practice. *Gut.* 2020;69(8):1520-1532.
- Magro F, Gionchetti P, Eliakim R, et al. Third European Evidence-based Consensus on Diagnosis and Management of Ulcerative Colitis. Part 1: Definitions, Diagnosis, Extra-intestinal Manifestations, Pregnancy, Cancer Surveillance, Surgery, and Ileo-anal Pouch Disorders. J Crohns Colitis. 2017;11(6):649-670.
- Agrawal M, Spencer EA, Colombel JF, Ungaro RC. Approach to the Management of Recently Diagnosed Inflammatory Bowel Disease Patients: A User's Guide for Adult and Pediatric Gastroenterologists. *Gastroenterology*. 2021;161(1):47-65.
- 4. Piovani D, Danese S, Peyrin-Biroulet L, Bonovas S. Inflammatory bowel disease: estimates from the global burden of disease 2017 study. *Aliment Pharmacol Ther*. 2020;51(2):261-270.
- Guan Q. A Comprehensive Review and Update on the Pathogenesis of Inflammatory Bowel Disease. *J Immunol Res.* 2019;2019:7247238.
- Ng SC, Shi HY, Hamidi N, et al. Worldwide incidence and prevalence of inflammatory bowel disease in the 21st century: a systematic review of population-based studies. *Lancet*. 2017;390(10114):2769-2778.
- Khalili H. The Changing Epidemiology of Inflammatory Bowel Disease: What Goes Up May Come Down. *Inflamm Bowel Dis.* 2020;26(4):591-592.
- Collaborators GBDD. Global age-sex-specific fertility, mortality, healthy life expectancy (HALE), and population estimates in 204 countries and territories, 1950-2019: a comprehensive demographic analysis for the Global Burden of Disease Study 2019. *Lancet*.

1		
2		
3 4		2020;396(10258):1160-1203.
5	9.	Diseases GBD, Injuries C. Global burden of 369 diseases and injuries in 204 countries and
6		territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019.
7		Lancet. 2020;396(10258):1204-1222.
8 9	10.	Collaborators GBDUHC. Measuring universal health coverage based on an index of effective
9 10		coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis
11		for the Global Burden of Disease Study 2019. Lancet. 2020;396(10258):1250-1284.
12	11.	Collaborators GBDRF. Global burden of 87 risk factors in 204 countries and territories,
13	11.	1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. <i>Lancet</i> .
14 15		2020;396(10258):1223-1249.
16	12.	Collaborators GBDM. Global, regional, and national under-5 mortality, adult mortality,
17	12.	
18		age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global
19 20	10	Burden of Disease Study 2016. <i>Lancet</i> . 2017;390(10100):1084-1150.
20	13.	Alcohol GBD, Drug Use C. The global burden of disease attributable to alcohol and drug use
22		in 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of
23		Disease Study 2016. Lancet Psychiatry. 2018;5(12):987-1012.
24 25	14.	Deng Y, Zhao P, Zhou L, et al. Epidemiological trends of tracheal, bronchus, and lung cancer
26		at the global, regional, and national levels: a population-based study. J Hematol Oncol.
27		2020;13(1):98.
28	15.	Stevens GA, Alkema L, Black RE, et al. Guidelines for Accurate and Transparent Health
29 30		Estimates Reporting: the GATHER statement. Lancet. 2016;388(10062):e19-e23.
31	16.	Collaborators GBDIBD. The global, regional, and national burden of inflammatory bowel
32		disease in 195 countries and territories, 1990-2017: a systematic analysis for the Global
33		Burden of Disease Study 2017. Lancet Gastroenterol Hepatol. 2020;5(1):17-30.
34 35	17.	Ye Y, Manne S, Treem WR, Bennett D. Prevalence of Inflammatory Bowel Disease in
36		Pediatric and Adult Populations: Recent Estimates From Large National Databases in the
37		United States, 2007-2016. Inflamm Bowel Dis. 2020;26(4):619-625.
38	18.	de Souza HSP, Fiocchi C, Iliopoulos D. The IBD interactome: an integrated view of aetiology,
39		pathogenesis and therapy. <i>Nat Rev Gastroenterol Hepatol.</i> 2017;14(12):739-749.
40 41	19.	Ng SC, Tsoi KK, Kamm MA, et al. Genetics of inflammatory bowel disease in Asia:
42	17.	systematic review and meta-analysis. <i>Inflamm Bowel Dis.</i> 2012;18(6):1164-1176.
43	20.	Ananthakrishnan AN, Khalili H, Konijeti GG, et al. A prospective study of long-term intake
44 45	20.	
45 46		of dietary fiber and risk of Crohn's disease and ulcerative colitis. <i>Gastroenterology</i> .
47	21	2013;145(5):970-977.
48	21.	Suez J, Korem T, Zeevi D, et al. Artificial sweeteners induce glucose intolerance by altering
49		the gut microbiota. <i>Nature</i> . 2014;514(7521):181-186.
50 51	22.	Ananthakrishnan AN. Environmental risk factors for inflammatory bowel diseases: a review.
52		Dig Dis Sci. 2015;60(2):290-298.
53	23.	Kaplan GG, Ng SC. Understanding and Preventing the Global Increase of Inflammatory
54		Bowel Disease. Gastroenterology. 2017;152(2):313-321 e312.
55 56	24.	Piovani D, Danese S, Peyrin-Biroulet L, Bonovas S. Environmental, Nutritional, and
57		Socioeconomic Determinants of IBD Incidence: A Global Ecological Study. J Crohns Colitis.
58		2020;14(3):323-331.
59	25.	Zhao M, Gonczi L, Lakatos PL, Burisch J. The Burden of Inflammatory Bowel Disease in
60		

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3		Europe in 2020. J Crohns Colitis. 2021;15(9):1573-1587.
4	26.	Kaplan GG, Windsor JW. The four epidemiological stages in the global evolution of
5	20.	
6 7		inflammatory bowel disease. <i>Nat Rev Gastroenterol Hepatol.</i> 2021;18(1):56-66.
8	27.	Kaplan GG. The global burden of IBD: from 2015 to 2025. Nat Rev Gastroenterol Hepatol.
9		2015;12(12):720-727.
10	28.	Collaborators GBDM. Global, regional, and national age-sex-specific mortality and life
11		expectancy, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017.
12		Lancet. 2018;392(10159):1684-1735.
13 14	29.	Coward S, Clement F, Benchimol EI, et al. Past and Future Burden of Inflammatory Bowel
15		Diseases Based on Modeling of Population-Based Data. Gastroenterology.
16		2019;156(5):1345-1353 e1344.
17	20	
18	30.	Qiu Y, Ren W, Liu Y, Chen WE, Pan XH, Ren JJ. Disease burden of inflammatory bowel
19		disease in China from 1990 to 2017: Findings from the global burden of diseases 2017.
20 21		EClinicalMedicine. 2020;27:100544.
22	31.	Su HJ, Chiu YT, Chiu CT, et al. Inflammatory bowel disease and its treatment in 2018: Global
23		and Taiwanese status updates. J Formos Med Assoc. 2019;118(7):1083-1092.
24	32.	Pavlovic-Calic N, Salkic NN, Gegic A, Smajic M, Alibegovic E. Crohn's disease in Tuzla
25		region of Bosnia and Herzegovina: a 12-year study (1995-2006). Int J Colorectal Dis.
26		2008;23(10):957-964.
27 28	33.	
29	55.	Shafer LA, Sofia MA, Rubin DT, et al. An International Multicenter Comparison of
30		IBD-Related Disability and Validation of the IBDDI. Clin Gastroenterol Hepatol.
31		2021;19(12):2524-2531.
32	34.	Marinelli C, Zingone F, Inferrera M, et al. Factors associated with disability in patients with
33		ulcerative colitis: A cross-sectional study. <i>J Dig Dis</i> . 2020;21(2):81-87.
34 35	35.	Jones JL, Nguyen GC, Benchimol EI, et al. The Impact of Inflammatory Bowel Disease in
36		Canada 2018: Quality of Life. J Can Assoc Gastroenterol. 2019;2(Suppl 1):S42-S48.
37	36.	Frolkis AD, Lipton DS, Fiest KM, et al. Cumulative incidence of second intestinal resection in
38	200.	Crohn's disease: a systematic review and meta-analysis of population-based studies. $Am J$
39		
40	27	<i>Gastroenterol.</i> 2014;109(11):1739-1748.
41 42	37.	Marchetti M, Liberato NL. Biological therapies in Crohn's disease: are they cost-effective? A
43		critical appraisal of model-based analyses. Expert Rev Pharmacoecon Outcomes Res.
44		2014;14(6):815-824.
45	38.	Benchimol EI, Manuel DG, Guttmann A, et al. Changing age demographics of inflammatory
46		bowel disease in Ontario, Canada: a population-based cohort study of epidemiology trends.
47		Inflamm Bowel Dis. 2014;20(10):1761-1769.
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# **Figure legends**

**Figure 1.** The global prevalence burden of IBD in 204 countries and territories. (A) The absolute number of IBD prevalent cases in 2017. (B) The age-standardised prevalence rate (per 100 000 population) of IBD in 2017. (C) The EAPC of age-standardised prevalence rate for IBD between 1990 and 2019.

EAPC=estimated annual percentage change. IBD=inflammatory bowel disease.

**Figure 2.** The EAPCs in age-standardised rates of prevalence (A, B), deaths (C, D), and DALYs (E, F) due to IBD from 1990 to 2019, both sexes, by GBD region, and by SDI quintile.

DALYs=disability adjusted life years. EAPC=estimated annual percentage change. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Socio-demographic Index.

**Figure 3.** The age-standardised rates of prevalence (A), deaths (B), and DALYs (C) due to IBD by sex, across 21 regions, in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the age-standardised rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

**Figure 4.** The absolute number of prevalent cases (A), deaths (B), and DALYs (C) due to IBD for all GBD regions from 1990 to 2019.

DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease.

**Figure 5.** Age patterns by sex of the total number and age-standardised rates of prevalent cases (A), deaths (B), and DALYs (C) due to IBD at the global level in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the number of cases. Shading indicates the 95% UI for the rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

**Figure 6.** The age-standardised rates of IBD prevalence (A), deaths (B), and DALYs globally and for 21 GBD regions by SDI from 1990 to 2019.

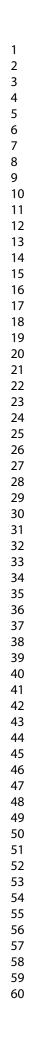
The expected age-standardised rates in 2019 based solely on SDI were represented by the black line. For each region, points from left to right depict estimates from each year from 1990 to 2019. DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Socio-demographic Index.

<u>5</u> 6	disease (IBD) in 1990 and 2019 an Age-standardised prevalence rate per 100,000 population				andardized dea			ndardized DAL	Y rate
7				per 100,000 population			per 100,000 population		
8 Characteristics	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.
9 10	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)
10	()0/001)	()0/001)	()0/001)	()0/001)	()0/001)	()0/001)	()0/001)	()0/001)	()0/001)
12	73.23 (63.86	59.25 (52.78	-0.66 (-0.75	0.67 (0.57	0.54 (0.46	-0.69 (-0.81	27.20 (21.70	20.15 (16.86	-1.04 (-1.06
19 lobal	to 83.63)	to 66.47)	to -0.57)	to 0.78)	to 0.59)	to -0.57)	to 32.39)	to 23.71)	to -1.01)
14 15									
18 <sup>ex</sup>									
17 18 <sup>Male</sup>	71.52 (62.12	59.30 (52.60	-0.56 (-0.64	0.69 (0.56	0.56 (0.45	-0.78 (-0.83	27.40 (21.78	20.64 (17.16	-0.99 (-1.01
18 <sup>nare</sup> 19	to 81.89)	to 66.91)	to -0.49)	to 0.88)	to 0.62)	to -0.72)	to 33.22)	to 24.31)	to -0.97)
2p <sub>emale</sub>	75.01 (65.67	59.33 (52.89	-0.74 (-0.85	0.63 (0.50	0.52 (0.43	-0.64 (-0.80	27.09 (20.30	19.70 (16.16	-1.09 (-1.12
21	to 85.45)	to 66.18)	to -0.64)	to 0.74)	to 0.58)	to -0.47)	to 32.42)	to 23.49)	to -1.06)
28DI quintile									
23 24	200.83	183.14	-0.34 (-0.43	0.72 (0.65	0.84 (0.69	0.82 (0.64	43.95 (34.13	42.93 (33.66	0.00 (-0.06
25 <sup>Jigh</sup>	(176.43 to	(166.58 to	to -0.24)	to 0.85)	to 0.92)	to 1.01)	to 55.06)	to 53.08)	to 0.05)
26	226.92)	201.17)	10 -0.24)	10 0.85)	10 0.92)	w 1.01)	10 55.00)	10 55.08)	10 0.03)
27 2 <b>9</b> tiah middla	82.41 (71.42	73.85 (65.38	-0.32 (-0.47	0.52 (0.46	0.38 (0.34	-1.17 (-1.32	25.92 (21.34	19.34 (15.59	-1.12 (-1.17
2 <b>8</b> igh-middle 29	to 95.06)	to 83.09)	to -0.18)	to 0.60)	to 0.43)	to -1.02)	to 30.93)	to 23.73)	to -1.07)
30	22.50 (19.00	30.57 (25.70	1.25 (1.04 to	0.57 (0.40	0.31 (0.26	-2.44 (-2.59	18.11 (14.29	11.61 (9.70	-1.63 (-1.68
3 <sup>Middle</sup>	to 26.62)	to 36.01)	1.47)	to 0.74)	to 0.34)	to -2.29)	to 21.72)	to 13.71)	to -1.58)
32 3 <sub>2 ow-middle</sub>	19.02 (15.75	20.94 (17.41	0.52 (0.40 to	0.74 (0.47	0.48 (0.38	-1.75 (-1.90	23.29 (16.18	15.37 (12.47	-1.58 (-1.65
34	to 22.93)	to 25.11)	0.64)	to 1.06)	to 0.58)	to -1.60)	to 30.53)	to 18.32)	to -1.51)
35	12.40 (10.21	12.85 (10.64	0.29 (0.19 to	0.67 (0.48	0.55 (0.43	-0.80 (-0.86	22.19 (14.49	17.19 (13.57	-0.94 (-0.99
36 <sup>ow</sup> 37	to 15.06)	to 15.81)	0.39)	to 0.99)	to 0.70)	to -0.74)	to 29.80)	to 21.70)	to -0.89)
36BD region									
3Andean Latin	16.55 (14.08	17.09 (14.60	0.06 (0.03 to	0.54 (0.36	0.26 (0.20	-2.74 (-3.16	26.36 (15.78	9.83 (7.75	-3.68 (-4.17
40 America	to 19.39)	to 19.88)	0.10)	to 0.71)	to 0.32)	to -2.32)	to 38.96)	to 12.19)	to -3.18)
41 42	108.86	156.30	0.02 (0. (1.)	0.54 (0.45	0.50 (0.50	1.55 (1.41	0(10(00.40	24.00 (24.05	0.02 (0.75
4 <b>3</b> ustralasia	(92.21 to	(137.65 to	0.83 (0.61 to	0.54 (0.47	0.72 (0.53	1.77 (1.41	26.19 (20.48	34.98 (26.87	0.93 (0.75
44	126.63)	177.07)	1.05)	to 0.64)	to 0.83)	to 2.13)	to 32.91)	to 44.64)	to 1.12)
45	27.93 (23.96	26.31 (22.13	-0.05 (-0.13	0.56 (0.44	0.42 (0.31	-1.24 (-1.41	23.38 (16.68	18.21 (13.08	-0.91 (-1.06
4 <b>6</b> aribbean 47	to 32.85)	to 31.28)	to 0.03)	to 0.69)	to 0.53)	to -1.08)	to 34.05)	to 24.76)	to -0.76)
48	76.86 (64.98	78.72 (66.39	0.09 (0.05 to	0.39 (0.30	0.32 (0.28	-1.00 (-1.12	26.11 (21.03	22.26 (18.04	-0.70 (-0.76
49entral Asia	to 91.56)	to 93.40)	0.12)	to 0.46)	to 0.37)	to -0.89)	to 31.71)	to 27.31)	to -0.65)
50 51	208.99	160.49							
5¢entral Europe	(179.90 to	(145.58 to	-1.25 (-1.64	0.46 (0.43	0.47 (0.40	0.30 (0.17	46.28 (36.16	35.84 (27.66	-1.08 (-1.37
53	243.75)	176.95)	to -0.87)	to 0.52)	to 0.55)	to 0.44)	to 57.91)	to 44.67)	to -0.78)
54 5Sentral Latin	37.84 (32.42	32.59 (27.93	-0.49 (-0.58	0.32 (0.28	0.37 (0.30	0.98 (0.68	14.84 (12.69	14.68 (12.25	0.32 (0.08
56 merica	to 44.16)	to 38.07)	to -0.41)	to 0.35)	to 0.43)	to 1.28)	to 17.31)	to 17.41)	to 0.56)
5Z <sub>entral</sub>									
58 59 <sup>ub-Saharan</sup>	8.22 (6.76 to	8.21 (6.80	-0.14 (-0.33	0.72 (0.51	0.60 (0.45	-0.69 (-0.77	22.26 (14.75	17.77 (12.98	-0.79 (-0.88
	10.11)	to 10.11)	to 0.06)			to -0.60)			to -0.70)

2									
3	22.51 (18.72	46.22 (39.36	2.79 (2.41 to	0.86 (0.59	0.31 (0.25	-3.98 (-4.33	24.23 (17.74	13.08 (10.31	-2.31 (-2.48
4East Asia 5	to 26.72)	to 53.98)	3.18)	to 1.14)	to 0.35)	to -3.63)	to 29.83)	to 16.19)	to -2.15)
6	88.07 (75.40	82.82 (70.77	0.01 (-0.11 to	0.49 (0.38	0.51 (0.43	-0.25 (-0.53	27.68 (21.86	26.67 (21.96	-0.30 (-0.45
7 <sup>Eastern Europe</sup>	to 103.25)	to 96.45)	0.14)	to 0.56)	to 0.58)	to 0.04)	to 33.71)	to 32.46)	to -0.14)
8 9 <sup>Eastern</sup>	( )7 (5 )5 + 2	7.21 (( 01	0.46 (0.42 +-	0 72 (0 52	0 (0 (0 50	0.12 ( 0.20	22 59 (1( 12	10 44 (14 (0	0 46 ( 0 54
1 <b>0</b> ub-Saharan	6.27 (5.25 to	7.21 (6.01	0.46 (0.42 to	0.72 (0.52	0.69 (0.50	-0.12 (-0.20	22.58 (16.13	19.44 (14.69	-0.46 (-0.54
1Africa	7.68)	to 8.82)	0.50)	to 1.01)	to 0.93)	to -0.05)	to 33.35)	to 25.63)	to -0.39)
12 1≩figh-income	126.18	210.54	1.04 (0.69.44	0 40 (0 24	0.12 (0.11	4 20 ( 4 ( 4	26 42 (10 97	24 55 (22 75	0.25 (0.11
	(105.73 to	(183.69 to	1.04 (0.68 to 1.41)	0.40 (0.24 to 0.47)	0.13 (0.11 to 0.18)	-4.29 (-4.64	26.43 (19.87 to 33.86)	34.55 (23.75	0.35 (0.11
14 Asia Pacific 15	149.32)	239.68)	1.41)	10 0.47)	10 0.18)	to -3.93)	10 55.80)	to 46.76)	to 0.60)
16 1 <b>P</b> /igh-income	346.93	209.60	-1.32 (-1.75	0.68 (0.61	0.97 (0.79	1.43 (1.15	65.62 (48.61	51.27 (40.90	-0.46 (-0.72
	(303.63 to	(195.48 to	to -0.89)	to 0.83)	to 1.05)	to 1.72)	to 84.95)	to 62.35)	to -0.20)
18 North America 19	392.66)	224.46)	10 -0.89)	10 0.85)	10 1.05)	10 1.72)	10 64.93)	10 02.55)	10 -0.20)
20 Africa	36.27 (31.06	48.26 (40.98	0.97 (0.84 to	0.34 (0.24	0.26 (0.22	-0.86 (-0.93	14.36 (10.79	13.26 (10.60	-0.30 (-0.34
21 22 Middle	to 41.91)	to 56.94)	1.10)	to 0.49)	to 0.30)	to -0.80)	to 18.73)	to 16.47)	to -0.25)
2Bast	10 11.91)	10 5 0.5 1	1.10)	(0 0.15)	10 0.20)	10 0.00)	,		10 0.20)
24 29ceania	4.34 (3.51 to	3.87 (3.16	-0.54 (-0.72	0.63 (0.42	0.44 (0.33	-1.41 (-1.50	20.60 (13.34	14.93 (10.45	-1.29 (-1.38
29 <sup>ccunu</sup> 26	5.20)	to 4.71)	to -0.35)	to 0.86)	to 0.60)	to -1.32)	to 28.78)	to 21.01)	to -1.20)
27 South Asia 28	19.68 (15.98	20.11 (16.38	0.26 (0.10 to	0.69 (0.47	0.44 (0.33	-1.91 (-2.07	21.48 (14.77	14.00 (10.70	-1.68 (-1.78
	to 24.40)	to 24.81)	0.42)	to 1.06)	to 0.57)	to -1.74)	to 29.47)	to 17.52)	to -1.58)
29 3 <b>9</b> outheast Asia	4.40 (3.55 to	6.69 (5.52	1.58 (1.27 to	0.50 (0.27	0.28 (0.21	-2.36 (-2.52	13.16 (8.47	7.45 (6.06	-2.29 (-2.44
31	5.35)	to 8.04)	1.90)	to 0.66)	to 0.33)	to -2.19)	to 15.9)	to 8.76)	to -2.15)
32 Southern Latin	19.22 (15.96	20.53 (17.36	0.28 (0.08 to	0.31 (0.27	0.28 (0.25	-0.46 (-0.62	11.10 (9.69	10.06 (8.61	-0.40 (-0.50
33 America 34	to 22.60)	to 24.24)	0.49)	to 0.34)	to 0.34)	to -0.30)	to 12.66)	to 11.94)	to -0.31)
34 35 <sup>outhern</sup>	10.44 (8.67	11.78 (9.83	0.53 (0.45 to	0.42 (0.33	0.44 (0.36	0.25 (-0.16	15.11 (10.88	13.66 (11.37	-0.12 (-0.44
3 <b>S</b> ub-Saharan	to 12.74)	to 14.31)	0.61)	to 0.53)	to 0.51)	to 0.65)	to 18.87)	to 15.90)	to 0.20)
3⊼ <sub>frica</sub> 38								,	
38 Tropical Latin 39	65.14 (57.26	47.34 (41.21	-0.87 (-1.08	0.47 (0.41	0.44 (0.40	0.03 (-0.14	23.37 (19.94	19.26 (16.53	-0.44 (-0.61
40 <sup>merica</sup>	to 74.08)	to 54.02)	to -0.65)	to 0.51)	to 0.51)	to 0.21)	to 27.30)	to 22.44)	to -0.26)
41 42	156.46	188.22	0.37 (0.26 to	0.82 (0.73	1.11 (0.87	1.51 (1.27	39.24 (31.18	46.79 (36.98	0.59 (0.49
42 Western Europe 43	(139.89 to	(169.47 to	0.48)	to 1.04)	to 1.23)	to 1.75)	to 48.16)	to 57.57)	to 0.69)
44	173.69)	207.48)	,	,	,		,	,	,
45Vestern	8.49 (7.03 to	10.09 (8.38	0.78 (0.66 to	0.56 (0.33	0.5 (0.35 to	-0.37 (-0.46	19.69 (11.64	16.77 (11.61	-0.57 (-0.66
4§ub-Saharan 47	10.33)	to 12.23)	0.90)	to 0.91)	0.67)	to -0.28)	to 30.47)	to 22.73)	to -0.48)
47 48 <sup>frica</sup>	411	ional CL or	<u><u> </u></u>		× 1. 1.1.	. 1 1	life war I		

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Abbreviations: CI, confidence interval; DALY, disability adjusted life year; EAPC, estimated annual percentage change; GBD, Global Burden of Disease; SDI, Socio-demographic Index; UI, uncertainty interval.



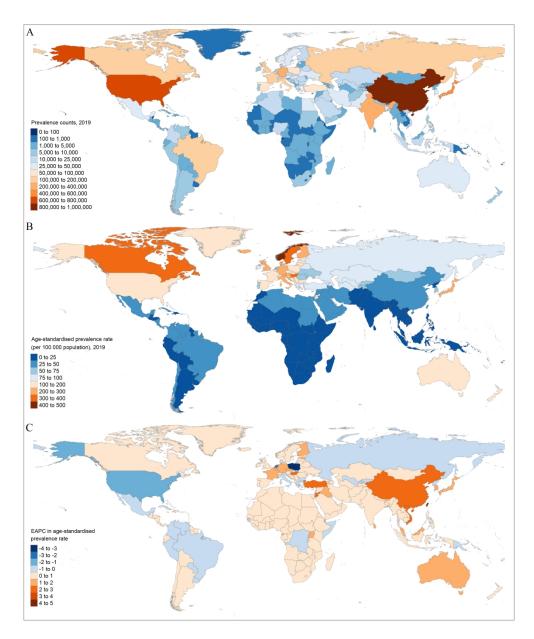
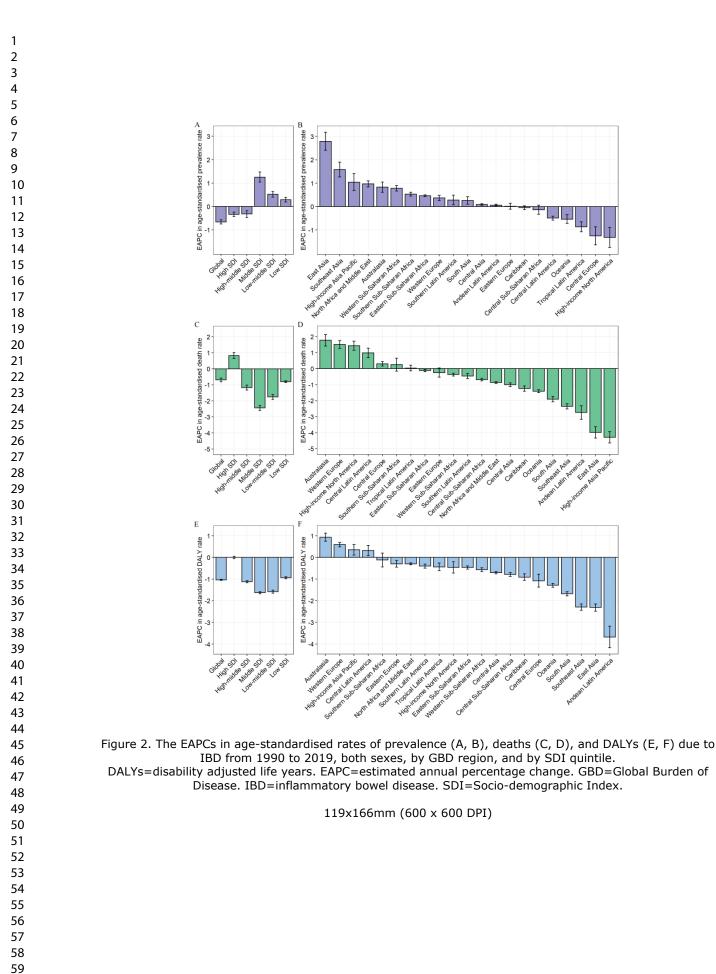


Figure 1. The global prevalence burden of IBD in 204 countries and territories. (A) The absolute number of IBD prevalent cases in 2017. (B) The age-standardised prevalence rate (per 100 000 population) of IBD in 2017. (C) The EAPC of age-standardised prevalence rate for IBD between 1990 and 2019. EAPC=estimated annual percentage change. IBD=inflammatory bowel disease.

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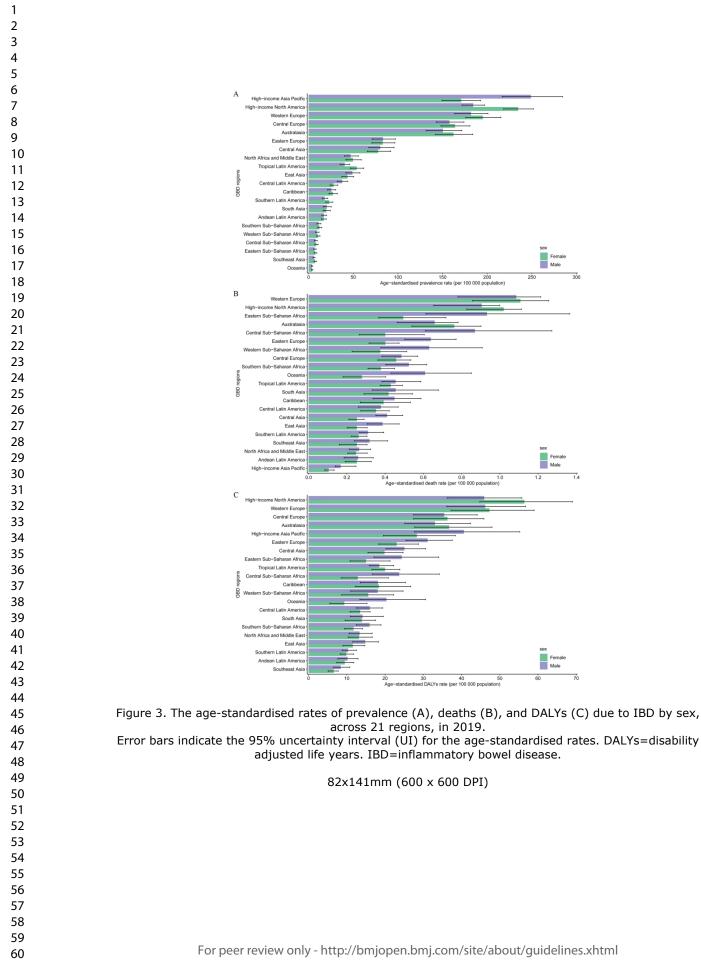
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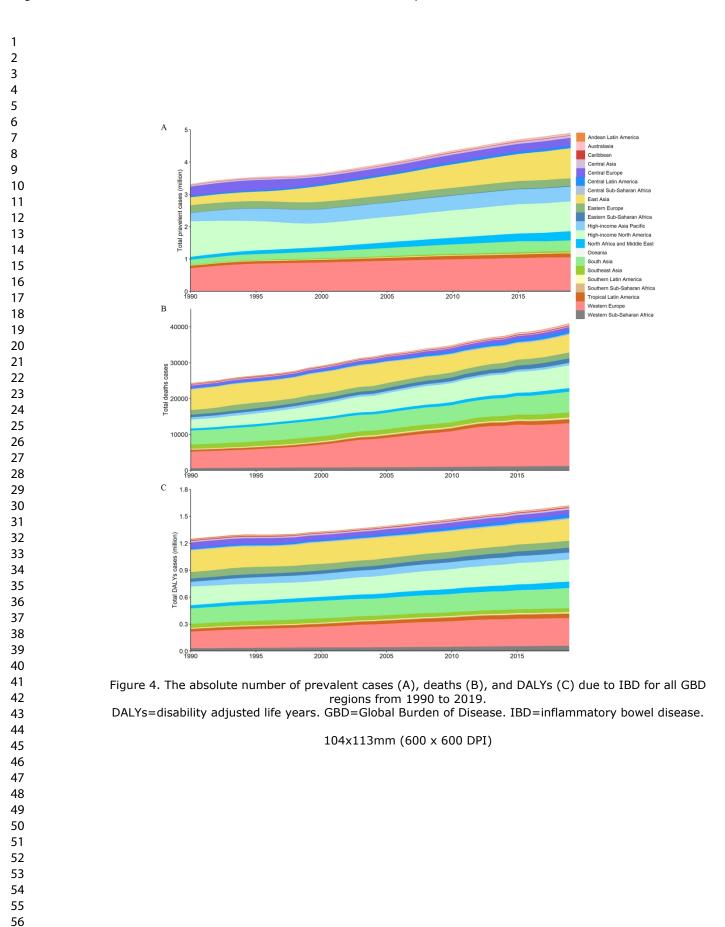
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20 30 40 50 Age-standardised DALYs rate (per 100 000 population)

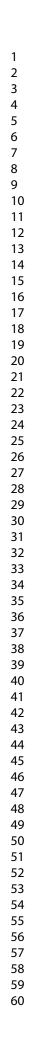
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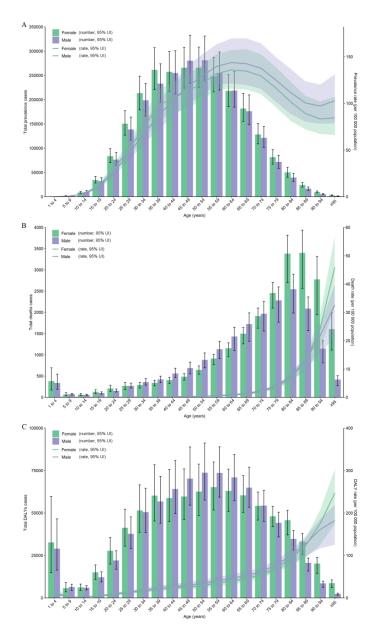
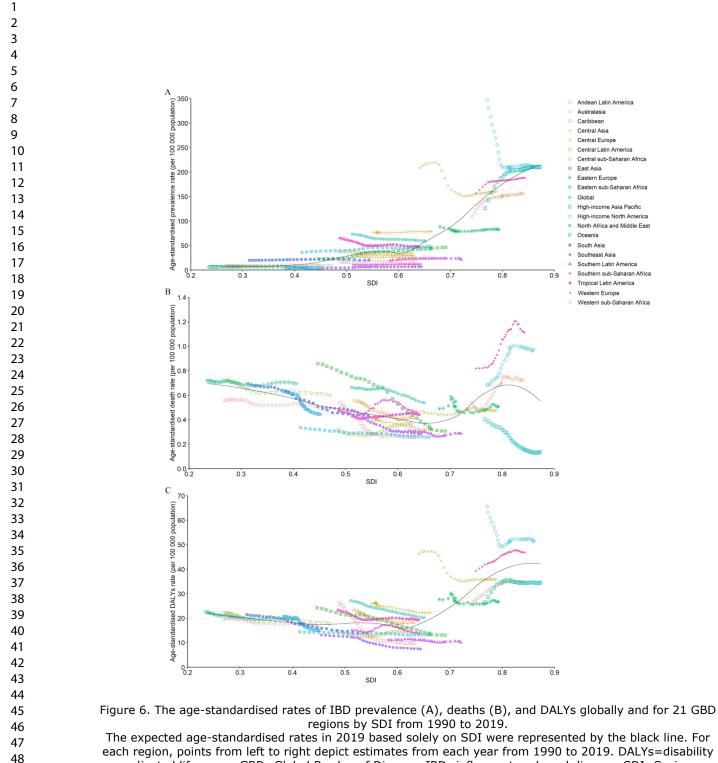


Figure 5. Age patterns by sex of the total number and age-standardised rates of prevalent cases (A), deaths (B), and DALYs (C) due to IBD at the global level in 2019.

Error bars indicate the 95% uncertainty interval (UI) for the number of cases. Shading indicates the 95% UI for the rates. DALYs=disability adjusted life years. IBD=inflammatory bowel disease.

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each region, points from left to right depict estimates from each year from 1990 to 2019. DALYs=disability adjusted life years. GBD=Global Burden of Disease. IBD=inflammatory bowel disease. SDI=Sociodemographic Index.

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Supplement to: The global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019, based on Global Burden Disease Study 2019

**Contents:** 

#### **Supplementary Figures**

Supplementary Figure 1: Trends from 1990 to 2019 in number and age-standardised prevalence rate of IBD at the global level.

Supplementary Figure 2: The absolute number of deaths due to IBD for 204 countries and territories in 2019.

Supplementary Figure 3: The age-standardised death rate (per 100 000 population) of IBD for 204 countries and territories in 2019.

Supplementary Figure 4: The EAPC of age-standardised death rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 5: Trends from 1990 to 2019 in number and age-standardised death rate of IBD at the global level.

Supplementary Figure 6: The absolute number of DALYs due to IBD for 204 countries and territories in 2019.

Supplementary Figure 7: The absolute number of incident cases due to IBD for 204 countries and territories in 2019.

Supplementary Figure 8: The absolute number of YLLs due to IBD for 204 countries and territories in 2019.

Supplementary Figure 9: The absolute number of YLDs due to IBD for 204 countries and territories in 2019.

Supplementary Figure 10: The age-standardised DALY rate (per 100 000 population) of IBD for 204 countries and territories in 2019.

Supplementary Figure 11: The EAPC of age-standardised DALY rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 12: The EAPC of age-standardised incidence rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 13: The EAPC of age-standardised YLL rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 14: The EAPC of age-standardised YLD rate for IBD in 204 countries and territories between 1990 and 2019.

Supplementary Figure 15: Global counts and age-specific rates of YLLs and YLDs due to IBD across age group in 2019.

Supplementary Figure 16: Trends from 1990 to 2019 in number and age-standardised DALY rate of IBD at the global level.

# **Supplementary Tables**

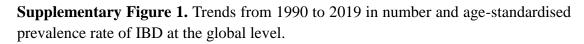
Supplementary Table 1: Prevalent cases, deaths and disability adjusted life years (DALYs) of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019

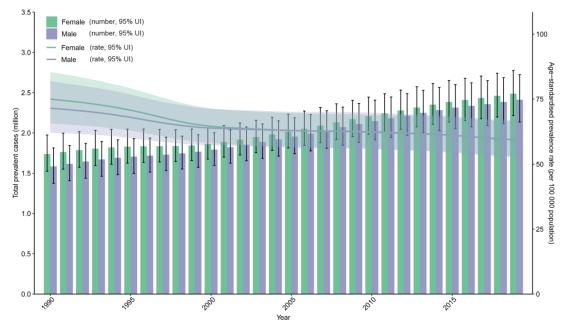
Supplementary Table 2: Prevalent cases, deaths and disability adjusted life years (DALYs) for inflammatory bower disease (IBD) by 204 countries or territories in 2019 and 2019, and their percentage change from 1990 to 2019.

Supplementary Table 3: Age-standardised prevalence, death and DALY rates for inflammatory bower disease (IBD) by 204 countries or territories in 1990 and 2019, and their temporal trends from 1990 to 2019.

Supplementary Table 4: Incident cases, YLLs and YLDs of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019.

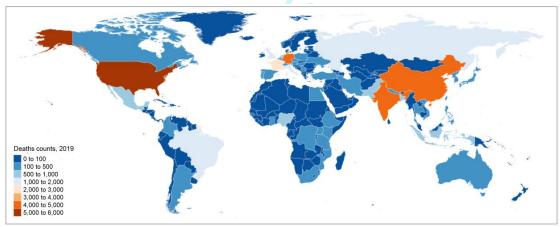
Supplementary Table 5: Age-standardised incidence, YLL and YLD rates for inflammatory bower disease (IBD) in 1990 and 2019 and their temporal trends from 1990 to 2019.





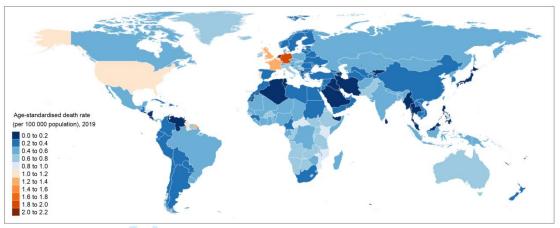
Error bars indicate the 95% uncertainty interval (UI) for number of prevalent cases. Shading indicates the 95% UI for the age-standardised prevalence rate. IBD, inflammatory bowel disease.

**Supplementary Figure 2.** The absolute number of deaths due to IBD for 204 countries and territories in 2019.



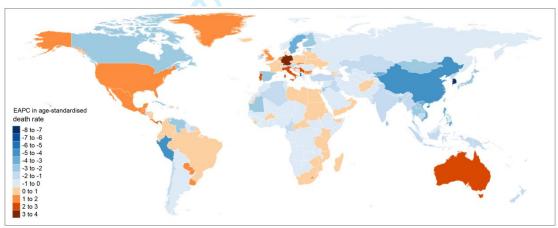
IBD, inflammatory bowel disease.

**Supplementary Figure 3.** The age-standardised death rate (per 100 000 population) of IBD for 204 countries and territories in 2019.



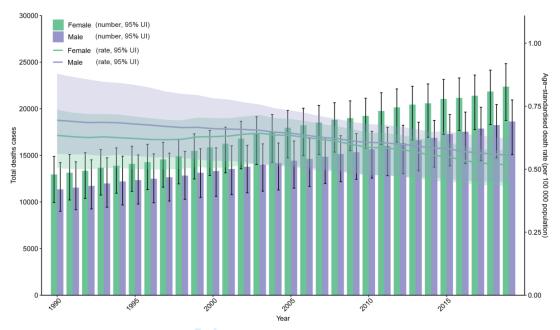
IBD, inflammatory bowel disease.

**Supplementary Figure 4.** The EAPC of age-standardised death rate for IBD in 204 countries and territories between 1990 and 2019.



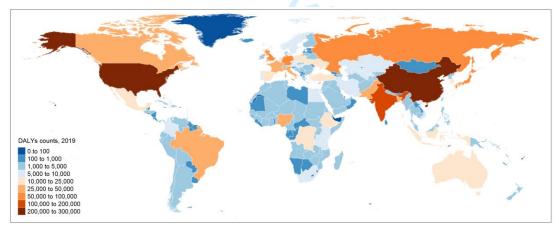
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 5.** Trends from 1990 to 2019 in number and age-standardised death rate of IBD at the global level.



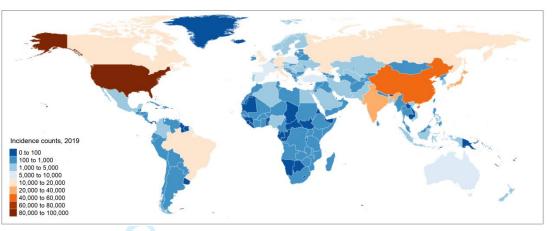
Error bars indicate the 95% uncertainty interval (UI) for number of death cases. Shading indicates the 95% UI for the age-standardised death rate. IBD, inflammatory bowel disease.

**Supplementary Figure 6.** The absolute number of DALYs due to IBD for 204 countries and territories in 2019.



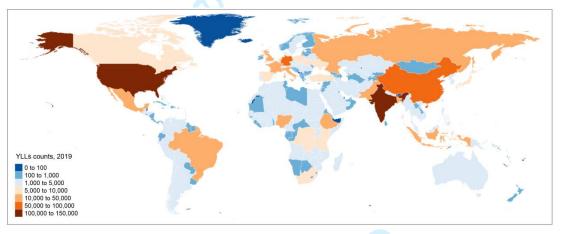
DALYs, disability adjusted life years; IBD, inflammatory bowel disease.

**Supplementary Figure 7.** The absolute number of incident cases due to IBD for 204 countries and territories in 2019.



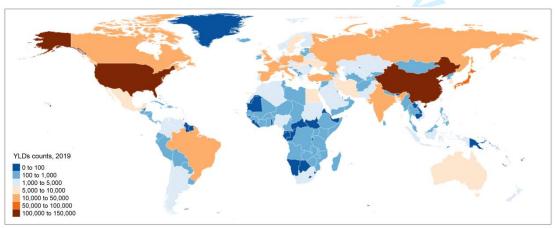
IBD, inflammatory bowel disease.

**Supplementary Figure 8.** The absolute number of YLLs due to IBD for 204 countries and territories in 2019.



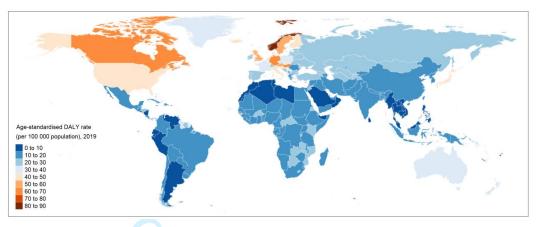
IBD, inflammatory bowel disease; YLLs, years of life lost.

**Supplementary Figure 9.** The absolute number of YLDs due to IBD for 204 countries and territories in 2019.



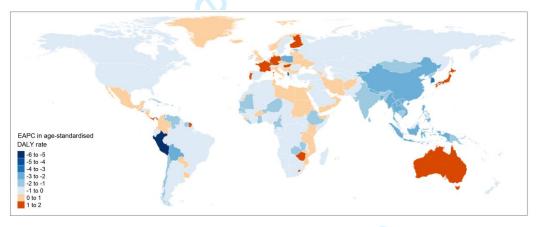
IBD, inflammatory bowel disease; YLDs, years of life lived with disability.

**Supplementary Figure 10.** The age-standardised DALY rate (per 100 000 population) of IBD for 204 countries and territories in 2019.



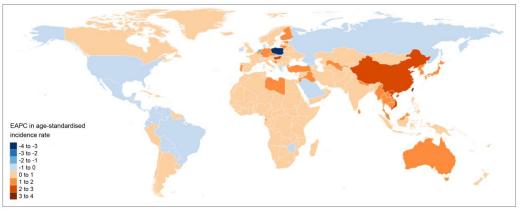
DALY, disability adjusted life year; IBD, inflammatory bowel disease.

**Supplementary Figure 11.** The EAPC of age-standardised DALY rate for IBD in 204 countries and territories between 1990 and 2019.



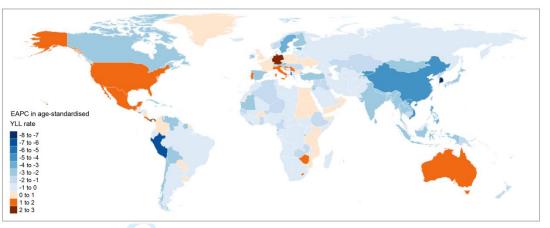
DALY, disability adjusted life year; EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 12.** The EAPC of age-standardised incidence rate for IBD in 204 countries and territories between 1990 and 2019.



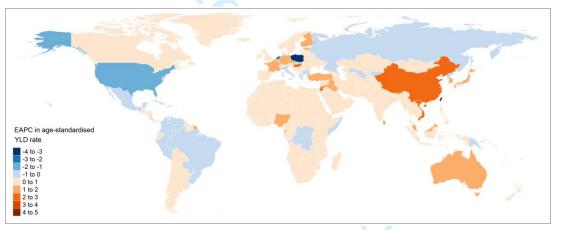
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease.

**Supplementary Figure 13.** The EAPC of age-standardised YLL rate for IBD in 204 countries and territories between 1990 and 2019.



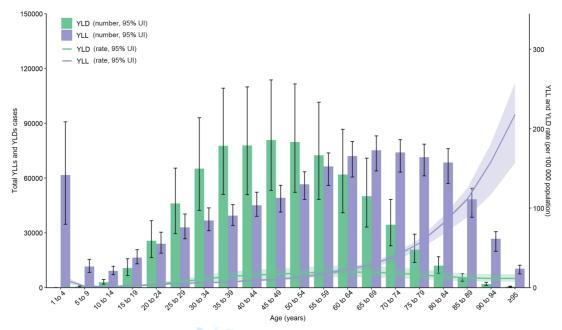
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; YLL, years of life lost.

**Supplementary Figure 14.** The EAPC of age-standardised YLD rate for IBD in 204 countries and territories between 1990 and 2019.



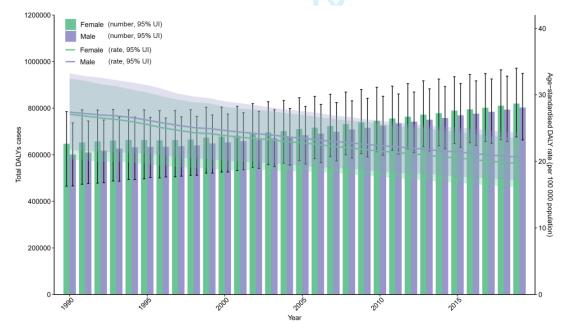
EAPC, estimated annual percentage change; IBD, inflammatory bowel disease; YLD, years of life lived with disability.

**Supplementary Figure 15.** Global counts and age-specific rates of YLLs and YLDs due to IBD across age group in 2019.



Error bars indicate the 95% uncertainty interval (UI) for YLLs and YLDs. Shading indicates the 95% UI for the rates. IBD, inflammatory bowel disease; YLDs, years of life lived with disability; YLLs, years of life lost.

**Supplementary Figure 16.** Trends from 1990 to 2019 in number and age-standardised DALY rate of IBD at the global level.



Error bars indicate the 95% uncertainty interval (UI) for number of DALYs cases. Shading indicates the 95% UI for the age-standardised DALY rate. DALY, disability adjusted life year; IBD, inflammatory bowel disease.

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Supplementary Table 1 Prevalent cases, deaths and disability adjusted life years (DALYs) of inflammatory bower disease (IBD) in 1990 and 2019 and their percentage change from 1990 to 2019

7	Prevalent cases			Deaths			DALYs		
8 9 Characteristics 10 11 <del>12</del>	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)
13 14 15 <sup>Global</sup> 16 17	3322132 (2903627 to 3790430)	4898558 (4353233 to 5499296)	47.45 (43.76 to 51.43)	24295 (20258 to 28376)	40998 (34933 to 44661)	68.75 (47.12 to 94.62)	1248275 (963014 to 1503174)	1622498 (1356296 to 1915042)	29.98 (14.83 to 50.21)
18 <sup>9ex</sup> 19 20 2 Male 22 23	1584462 (1374414 to 1814399)	2411840 (2136219 to 2724369)	52.22 (48.47 to 56.34)	11347 (9002 to 14218)	18633 (15060 to 20938)	64.21 (37.52 to 90.74)	600963 (466033 to 736983)	802748 (663563 to 949342)	33.58 (15.75 to 53.92)
24 25 26 <sub>Female</sub> 27 28 29	1737670 (1523309 to 1974864)	2486718 (2216240 to 2775262)	43.11 (39.03 to 47.31)	12947 (9953 to 14888)	22365 (18759 to 24838)	72.74 (47.65 to 115.99)	647311 (465166 to 785221)	819751 (676700 to 971584)	26.64 (10.70 to 54.99)
29 30 quintile 31 32 3 <sup>High</sup> 34 35	1883348 (1654416 to 2128434)	2283717 (2079286 to 2493360)	21.26 (15.68 to 27.38)	7386 (6656 to 8731)	17801 (14215 to 19552)	141.02 (73.28 to 161.46)	415485 (323781 to 520634)	603330 (489511 to 729627)	45.21 (26.78 to 56.21)
36 37 <sub>High-middle</sub> 38 39	942961 (817123 to 1086707)	1362491 (1206918 to 1538822)	44.49 (40.70 to 48.74)	5045 (4476 to 5782)	7272 (6519 to 8110)	44.13 (24.31 to 65.11)	288336 (236216 to 344578)	352794 (285252 to 432623)	22.36 (12.11 to 32.44)
40 41 <sub>Middle</sub> 42 43	301457 (252149 to 355140)	818871 (688348 to 968484)	171.64 (163.13 to 181.21)	5425 (4146 to 6768)	6598 (5602 to 7341)	21.61 (-2.11 to 58.92)	248139 (184995 to 297495)	291088 (240412 to 345833)	17.31 (-3.67 to 60.14)
44 45_ow-middle 46 47	152118 (124851 to 184061)	335789 (278324 to 403122)	120.74 (115.27 to 126.61)	4533 (3018 to 6152)	6180 (4994 to 7392)	36.34 (9.54 to 81.14)	203020 (126472 to 268417)	236584 (189248 to 283804)	16.53 (-9.40 to 65.68)
48 49_ow 50 51	41264 (33866 to 50406)	95941 (78454 to 116802)	132.51 (127.59 to 136.94)	1893 (1144 to 2626)	3125 (2442 to 4016)	65.06 (21.70 to 141.90)	92718 (45634 to 147570)	137867 (100264 to 180825)	48.69 (1.39 to 148.81)
51 52 <sup>GBD</sup> region 53 54 <sup>Andean</sup> Latin 55 <sup>America</sup> 56	4294 (3643 to 5026)	10380 (8875 to 12027)	141.73 (131.47 to 153.82)	168 (99 to 249)	144 (111 to 182)	-14.37 (-45.71 to 56.11)	10768 (5527 to 17349)	5942 (4666 to 7395)	-44.82 (-67.80 to 12.24)
57 58Australasia 59 60	24135 (20445 to 28083)	53225 (47167 to 59881)	120.53 (104.13 to 137.71)	117 (103 to 139)	400 (291 to 465)	241.68 (120.09 to 298.29)	5802 (4531 to 7299)	13328 (10488 to 16560)	129.69 (92.95 to 151.94)

2 3 4 5 Caribbean	8194 (7012 to 9634)	13360 (11262 to 15892)	63.04 (55.79 to 71.54)	157 (118 to 208)	210 (156 to 264)	33.66 (3.39 to 70.80)	7451 (5008 to 11792)	8900 (6523 to 11709)	19.44 (-16.93 to 53.06)
6 7 8 9 <sup>Central Asia</sup> 10	42100 (35493 to 49944)	72034 (60489 to 86073)	71.10 (65.37 to 77.74)	215 (167 to 251)	249 (218 to 288)	15.70 (-1.33 to 47.63)	15952 (12800 to 19230)	20237 (16357 to 24806)	26.86 (10.10 to 46.33)
11 12 Central Europe 13 14	290304 (249715 to 338920)	236196 (214732 to 259804)	-18.64 (-24.57 to -11.98)	604 (563 to 696)	958 (799 to 1104)	58.66 (24.18 to 83.87)	61546 (47417 to 77414)	54694 (42729 to 67570)	-11.13 (-18.70 to -3.30)
15 16 <sup>C</sup> entral Latin 17America 18	40471 (34451 to 47294)	81606 (69904 to 95542)	101.64 (96.51 to 107.43)	301 (270 to 330)	854 (702 to 997)	183.85 (135.53 to 232.71)	18096 (15456 to 20849)	36178 (30219 to 43014)	99.92 (74.40 to 127.28)
19Central 2Q <sub>Sub-Saharan</sub> 21 22 <sup>Africa</sup>	2781 (2267 to 3400)	7015 (5690 to 8639)	152.29 (138.04 to 168.85)	193 (118 to 301)	355 (254 to 497)	84.05 (16.03 to 200.18)	9491 (4855 to 17734)	15574 (10733 to 22385)	64.1 (-9.96 to 213.74)
23 24 <sub>East</sub> Asia 25 26	244790 (202981 to 291054)	925074 (788347 to 1085238)	277.90 (260.33 to 300.79)	5734 (4169 to 7374)	4983 (4074 to 5769)	-13.11 (-36.64 to 22.31)	240231 (167510 to 299891)	239963 (187123 to 299808)	-0.11 (-25.58 to 54.11)
27 2&Eastern Europe 29 30	233969 (199922 to 274757)	237672 (203164 to 276577)	1.58 (-0.80 to 4.10)	1305 (992 to 1507)	1633 (1370 to 1865)	25.06 (5.75 to 56.78)	72932 (57526 to 88869)	77123 (63287 to 94008)	5.75 (-4.27 to 21.34)
3 <sup>Eastern</sup> 3 <b>2</b> ub-Saharan 33 <sub>Africa</sub> 34	7067 (5804 to 8596)	18830 (15395 to 22997)	166.43 (160.39 to 173.14)	697 (462 to 1111)	1253 (923 to 1678)	79.64 (7.37 to 192.58)	35480 (16916 to 68481)	52928 (39435 to 74044)	49.18 (-19.5 to 202.23)
35 <sub>High</sub> -income 36 37 <sup>Asia Pacific</sup> 38	255028 (213480 to 302123)	459062 (403027 to 520418)	80.00 (65.57 to 95.92)	685 (439 to 789)	694 (556 to 912)	1.33 (-19.66 to 85.83)	51699 (38591 to 66563)	78601 (55261 to 105049)	52.04 (37.02 to 68.81)
39High-income 40 North America 41	1100006 (961428 to 1248970)	920750 (859032 to 982587)	-16.30 (-22.94 to -9.05)	2442 (2189 to 2964)	6314 (5076 to 6886)	158.55 (83.64 to 182.08)	209072 (155328 to 270983)	245234 (200564 to 294018)	17.30 (2.00 to 33.02)
42 <sub>North</sub> Africa 43 44 <sup>and</sup> Middle 45 <sup>cast</sup> 46	89159 (76544 to 102596)	282534 (239506 to 334478)	216.89 (196.52 to 234.98)	592 (407 to 836)	1033 (866 to 1226)	74.43 (20.30 to 164.45)	35438 (25569 to 46318)	72755 (56928 to 91112)	105.30 (56.49 to 171.10)
47 48 49	199 (159 to 240)	417 (338 to 509)	109.69 (96.12 to 124.69)	22 (14 to 31)	36 (26 to 51)	65.38 (12.06 to 142.01)	1036 (602 to 1625)	1696 (1107 to 2576)	63.81 (3.61 to 170.09)
50 51 <sub>South</sub> Asia 52 53	157942 (127077 to 195839)	335746 (272330 to 413946)	112.58 (106.64 to 120.13)	3864 (2533 to 5504)	5702 (4286 to 7410)	47.58 (16.55 to 93.31)	171448 (105178 to 227334)	221978 (166881 to 278494)	29.47 (1.12 to 76.01)
54 55 <sub>Southeast</sub> Asia 56 57	16557 (13040 to 20323)	48152 (39527 to 58063)	190.83 (174.97 to 212.05)	1230 (741 to 1536)	1498 (1139 to 1771)	21.79 (-3.10 to 72.54)	45316 (30762 to 56838)	46686 (38847 to 55186)	3.02 (-20.10 to 46.45)
5&outhern Latin 5America 60	9153 (7618 to 10754)	15243 (12896 to	66.53 (58.55 to 74.68)	139 (123 to 151)	236 (210 to 280)	69.36 (46.49 to 101.01)	5248 (4578 to 5993)	7740 (6670 to 9152)	47.49 (32.63 to 65.73)

1 2 3 4 5 Southern 6 Sub-Saharan 7 Africa 8 9 Tropical Latin 10 America 11 12 13 14 Western Europe 15 16 Western 17 18 Sub-Saharan 19 Africa 20	3760 (3109 to 4581) 74856 (65373 to 85425) 707145 (634121 to 786986) 10222 (8432 to 12421)	18023) 8141 (6736 to 9864) 117653 (102012 to 134397) 1026504 (925440 to 1127578) 28965 (23820 to 35133)	116.54 (109.70 to 124.72) 57.17 (51.82 to 63.44) 45.16 (41.37 to 48.78) 183.36 (178.45 to 188.56)	<ul> <li>138 (99 to</li> <li>169)</li> <li>455 (400 to</li> <li>492)</li> <li>4600 (4132 to 5864)</li> <li>634 (365 to</li> <li>996)</li> </ul>	240 (198 to 278) 1047 (950 to 1217) 11981 (9244 to 13315) 1178 (805 to 1610)	74.44 (31.74 to 161.11) 129.84 (109.36 to 167.46) 160.46 (66.17 to 190.17) 85.67 (40.49 to 177.24)	6615 (4279 to 9518) 27724 (23589 to 32357) 185733 (149509 to 227830) 31197 (14381 to 47867)	9230 (7542 to 10926) 46997 (40115 to 54972) 310691 (255911 to 371106) 56026 (35327 to 78051)	<ul> <li>39.54 (-0.67</li> <li>to 121.74)</li> <li>69.52 (59.16</li> <li>to 83.74)</li> <li>67.28 (34.40</li> <li>to 79.72)</li> <li>79.59 (30.21</li> <li>to 198.66)</li> </ul>
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60		rtainty inter	D=Global E val.						

**Supplementary Table 2** Prevalent cases, deaths and disability adjusted life years (DALYs) for inflammatory bower disease (IBD) by 204 countries or territories in 2019 and 2019, and their percentage change from 1990 to 2019

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6 2019 and 2019, and their percentage change from 1990 to 2019 7 Depths DALVs											
8		Prevalent ca			Death		DALYs				
9 <sub>Characteristics</sub> 10 11	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)		
<del>12</del> 13 14 Afghanistan 15 16	1738 (1410 to 2120)	5699 (4548 to 7113)	228.01 (200.09 to 258.61)	31 (14 to 55)	58 (31 to 89)	88.34 (29.82 to 190.04)	1237 (627 to 2377)	3017 (1879 to 4660)	143.91 (72.00 to 244.29)		
16 17 18 Albania 19	3324 (2792 to 3928)	3896 (3286 to 4630)	17.22 (7.74 to 27.7)	50 (21 to 65)	13 (9 to 19)	-74.70 (-84.65 to -32.21)	3904 (1399 to 5200)	991 (727 to 1300)	-74.62 (-83.28 to -33.39)		
20 21 22 <sup>Algeria</sup> 23 24	5982 (5169 to 6928)	16875 (13593 to 20871)	182.11 (149.55 to 221.44)	28 (18 to 44)	53 (38 to 70)	90.14 (11.64 to 209.90)	1826 (1320 to 2675)	4021 (2997 to 5295)	120.18 (51.51 to 190.24)		
25 American 26 <sub>Samoa</sub> 27	2 (2 to 3)	3 (3 to 4)	48.88 (37.37 to 61.93)	0 (0 to 1)	0 (0 to 0)	-37.72 (-65.35 to 47.30)	15 (9 to 21)	8 (5 to 14)	-47.39 (-70.61 to 25.25)		
28 29 30 31	69 (58 to 81)	133 (111 to 159)	93.79 (79.63 to 110.16)	0 (0 to 0)	1 (1 to 2)	266.11 (124.63 to 467.38)	17 (13 to 23)	36 (26 to 47)	111.42 (66.64 to 167.41)		
32 33 <sub>Angola</sub> 34 35	460 (373 to 573)	1648 (1338 to 2017)	258.10 (233.16 to 285.26)	37 (17 to 76)	78 (52 to 117)	112.25 (2.89 to 349.24)	1913 (713 to 4719)	3662 (2249 to 5786)	91.46 (-19.81 to 397.70)		
36 37 <sup>Antigua</sup> and 38 Barbuda 39	17 (14 to 20)	34 (28 to 41)	102.06 (85.45 to 119.33)	1 (0 to 1)	1 (0 to 1)	17.47 (-15.05 to 92.04)	18 (13 to 20)	22 (18 to 28)	25.07 (-4.44 to 87.07)		
40 41 Argentina	4828 (3926 to 5756)	7825 (6413 to 9484)	62.10 (49.74 to 73.10)	84 (74 to 93)	143 (124 to 169)	71.49 (45.04 to 102.47)	2981 (2577 to 3433)	4556 (3904 to 5373)	52.84 (34.77 to 71.30)		
42 43 Armenia 44	2547 (2109 to 3013)	3263 (2744 to 3956)	28.11 (18.76 to 37.72)	7 (5 to 9)	11 (8 to 13)	51.30 (17.69 to 101.11)	637 (492 to 805)	764 (593 to 979)	19.86 (4.07 to 38.21)		
45 46 <sub>Australia</sub> 47 48	18262 (15282 to 21523)	44624 (39169 to 50438)	144.35 (122.23 to 167.82)	97 (85 to 120)	369 (259 to 430)	279.18 (123.37 to 350.95)	4536 (3533 to 5743)	11569 (9111 to 14334)	155.05 (104.34 to 184.94)		
49 50 <sub>Austria</sub> 51 52	25345 (22242 to 28177)	33080 (29600 to 37293)	30.52 (19.87 to 42.12)	99 (88 to 133)	101 (80 to 165)	2.52 (-14.48 to 30.58)	5699 (4484 to 7140)	6463 (4736 to 8366)	13.41 (1.99 to 27.18)		
53 54 Azerbaijan 55 56	4623 (3817 to 5491)	9463 (7886 to 11458)	104.71 (89.06 to 120.81)	12 (9 to 15)	13 (10 to 18)	12.27 (-26.26 to 63.36)	1080 (815 to 1410)	1829 (1289 to 2470)	69.47 (44.70 to 98.86)		
57 Bahamas 58	65 (55 to 77)	123 (102 to 152)	88.60 (70.75 to 107.18)	1 (1 to 1)	2 (1 to 2)	82.56 (39.32 to 142.99)	49 (41 to 57)	78 (63 to 98)	60.27 (27.44 to 102.98)		
59 <sub>Bahrain</sub> 60	179 (152 to	846 (688 to	373.26	0 (0 to 1)	1 (1 to 2)	178.61	44 (32 to	167 (116 to	283.01		

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3	206)	1035)	(309.51 to			(82.33 to	57)	229)	(204.71 to
4 5			442.36)			326.1)			374.48)
6	11796 (0404	33018	180.14	544 (333 to	713 (431 to	30.90	23781	26354	10.82
7 Bangladesh	11786 (9494	(26285 to	(157.01 to			(-18.82 to	(13440 to	(17363 to	(-35.76 to
8 9	to 14655)	41258)	203.31)	805)	1068)	117.77)	35324)	37248)	104.55)
10	183 (153 to	282 (238 to	54.27 (41.76	1 (1 4- 1)	2(1 + 2)	48.15 (12.33	58 (47 to	81 (62 to	39.17 (18.58
Barbados	218)	340)	to 69.09)	1 (1 to 1)	2 (1 to 2)	to 96.63)	71)	101)	to 61.35)
12 13 Belarus	9910 (8453	11335 (9509	14.38 (6.51	45 (32 to	58 (42 to	29.88 (-8.49	2690 (2011	3063 (2364	13.87 (-6.13
13 Belarus 14	to 11723)	to 13529)	to 23.58)	60)	77)	to 97.40)	to 3484)	to 3923)	to 41.64)
15	9661 (8871	20093	107.97	112 (00 to	272 (206 to	141.39	2207 (2755	6270 (5226	02 62 (55 21
16 <sub>Belgium</sub> 17	to 10430)	(17518 to	(87.58 to	113 (99 to 134)	273 (206 to 319)	(64.63 to	3307 (2755	6370 (5236	92.63 (55.31
18	10 10450)	22821)	131.05)	154)	519)	188.06)	to 3921)	to 7678)	to 116.01)
19	26 (22 to	87 (71 to	230.96			117.53	40 (29 to	77 (64 to	91.51 (43.10
20 <sub>Belize</sub> 21	32)	106)	(204.21 to	1 (1 to 1)	2 (1 to 2)	(55.55 to	40 (29 to 50)	97)	to 212.80)
22	52)	100)	258.71)			286.06)	50)	)))	10 212.00)
23	209 (171 to	685 (549 to	227.98		30 (18 to	116.13	694 (232 to	1437 (773 to	107.25
24 <sub>Benin</sub> 25	253)	838)	(203.9 to	14 (6 to 24)	44)	(28.68 to	1320)	2281)	(11.24 to
25	233)	050)	255.4)			334.23)	1520)	2201)	374.73)
27	23 (19 to	33 (27 to	42.79 (30.81			-15.72	18 (14 to	14 (11 to	-22.33
28 Bermuda	28)	39)	to 55.62)	1 (0 to 1)	0 (0 to 1)	(-38.69 to	21)	18)	(-40.21 to
29 30	20)	37)	(0.55.02)			37.20)	21)	10)	11.58)
31	66 (52 to	158 (128 to	140.27			57.00 (-6.75	86 (38 to	102 (67 to	18.91
32 Bhutan	83)	197)	(120.87 to	2 (1 to 4)	3 (2 to 7)	to 195.84)	160)	202)	(-35.13 to
33 34	/		162.46)			,	/		133.49)
35 <sup>Bolivia</sup>	569 (473 to	1400 (1171	145.90	25 (10 to	34 (26 to	39.57	1552 (546 to	1348 (986 to	-13.09
36(Plurinational	694)	to 1693)	(129.42 to	48)	45)	(-28.99 to	3375)	1772)	(-59.56 to
37 <sub>State of)</sub> 38			165.45)			217.03)			134.61)
39 Bosnia and	4910 (4225	5387 (4726	9.73 (1.15 to	18 (12 to	26 (13 to	40.25	1285 (987 to	1372 (949 to	6.80 (-13.90
40 Herzegovina	to 5717)	to 6247)	17.87)	23)	35)	(-11.49 to	1644)	1778)	to 28.67)
41 42			214.50			108.03)			104 45
43	70 (58 to	221 (179 to	214.79		0 (6 - 12)	104.82	188 (121 to	388 (241 to	106.67
44 Botswana	86)	276)	(189.25 to	4 (3 to 6)	9 (6 to 13)	(14.62 to	269)	620)	(18.10  to)
45 46	72960	115(07	244.24)			221.73)	27207	46250	226.68)
47 Drogil	73860	115697	56.64 (51.18	451 (396 to	1035 (939 to	129.44	27396	46350	69.18 (58.65
48 Brazil	(64511 to	(100339 to	to 62.94)	488)	1207)	(108.60  to)	(23325 to	(39647 to	to 83.50)
49 50	84264)	132222)	12470			167.01)	31992)	54190)	
51 Brunei	126 (100 to	295 (237 to	134.79	1(1 + 2)	$2(2 \pm 2)$	127.20	57 (40 to	114 (89 to	99.44 (53.62
52 Darussalam	155)	361)	(114.54 to 156.55)	1 (1 to 2)	3 (2 to 3)	(58.12 to 237.13)	85)	147)	to 164.86)
53 54	12507					257.15)			7 55
55 <sub>Bulgaria</sub>	13507 (11443 to	11275 (9602	-16.53 (-23.08 to	25 (22 to	41 (32 to	65.55 (22.25	2779 (2081	2569 (1937	-7.55 (-19.78 to
56	15898)	to 13477)	-9.27)	32)	51)	to 118.70)	to 3597)	to 3319)	(-19.78 to 6.98)
57 58	392 (318 to	1098 (901 to	-9.27) 180.10	35 (16 to	81 (41 to	130.36	1781 (607 to	3942 (1729	121.28
58 59 <sup>Burkina Faso</sup>	485)	1347)	(158.26 to	58)	129)	(25.65 to	3594)	to 7006)	(15.32 to
60	TU5)	1377)	(120.2010	50)	127)	(25.05 10	5574)		(13.32 10

1 2									
3			200.27)			350.02)			380.59)
4 5 6 Burundi 7	207 (169 to 255)	459 (369 to 561)	121.41 (105.47 to 137.36)	21 (13 to 37)	38 (24 to 58)	76.44 (-8.52 to 253.21)	1064 (461 to 2387)	1608 (1001 to 2527)	51.13 (-33.49 to 272.32)
8 9 10 Cabo Verde 11 12	23 (19 to 28)	63 (51 to 78)	176.77 (156.29 to 198.45)	1 (0 to 1)	1 (1 to 1)	37.26 (-16.62 to 131.63)	34 (21 to 47)	43 (35 to 54)	28.23 (-15.29 to 118.40)
13 14 <sup>Cambodia</sup> 15	218 (168 to 273)	595 (467 to 730)	172.54 (148.48 to 197.52)	26 (14 to 39)	38 (26 to 48)	46.42 (-4.73 to 167.94)	1175 (547 to 2166)	1222 (890 to 1546)	3.97 (-44.25 to 128.29)
16 17 18 <sup>Cameroon</sup> 19	538 (438 to 666)	1938 (1576 to 2393)	259.93 (232.74 to 288.04)	30 (14 to 46)	58 (30 to 95)	95.05 (-1.81 to 218.33)	1367 (583 to 2134)	2830 (1520 to 4639)	107.06 (11.41 to 245.01)
20 21 22 Canada 23	116922 (112352 to 121655)	157737 (142113 to 173888)	34.91 (23.15 to 47.18)	270 (241 to 302)	403 (323 to 605)	49.15 (24.68 to 106.93)	22694 (17260 to 29101)	29915 (21904 to 38441)	31.82 (19.21 to 46.22)
24 2 <b>£</b> entral African 26 Republic 27	116 (95 to 145)	243 (199 to 299)	109.71 (91.54 to 126.84)	12 (7 to 19)	21 (12 to 35)	80.23 (18.71 to 166.11)	510 (273 to 935)	890 (475 to 1568)	74.48 (9.24 to 167.75)
27 28 29 Chad 30 31	251 (205 to 306)	713 (580 to 881)	184.44 (162.13 to 208.28)	21 (10 to 35)	44 (25 to 64)	108.90 (42.17 to 222.10)	960 (360 to 1689)	2084 (1020 to 3460)	117.09 (31.20 to 260.72)
32 33 Chile	3739 (3165 to 4369)	6732 (5813 to 7788)	80.06 (68.43 to 93.27)	46 (36 to 51)	70 (59 to 89)	53.60 (25.60 to 123.36)	1928 (1573 to 2244)	2612 (2169 to 3169)	35.45 (14.76 to 72.90)
34 35 36 China 37 38	239473 (198363 to 285024)	911045 (776347 to 1069533)	280.44 (262.77 to 303.34)	5560 (4048 to 7203)	4676 (3774 to 5461)	-15.89 (-39.57 to 19.52)	234245 (162916 to 293663)	232464 (179903 to 291090)	-0.76 (-26.71 to 54.23)
39 40 Colombia 41	6732 (5626 to 7997)	15348 (13025 to 18234)	127.99 (113.25 to 144.58)	56 (48 to 61)	154 (116 to 202)	175.73 (106.78 to 258.47)	3215 (2689 to 3798)	6419 (4991 to 7986)	99.66 (64.35 to 143.95)
42 43 44 Comoros 45	21 (17 to 26)	48 (39 to 60)	123.01 (106.31 to 142.32)	2 (1 to 3)	4 (2 to 6)	81.66 (13.33 to 277.77)	77 (29 to 137)	119 (75 to 174)	54.58 (-16.19 to 298.98)
46 47 48 <sup>Congo</sup> 49	145 (120 to 178)	421 (343 to 518)	189.59 (170.45 to 215.68)	9 (6 to 14)	17 (12 to 25)	87.61 (15.68 to 196.61)	396 (237 to 645)	681 (463 to 980)	72.21 (-4.05 to 195.14)
50 51 <sub>Cook</sub> Islands 52 53	1 (1 to 1)	1 (1 to 2)	28.57 (18.27 to 40.87)	0 (0 to 0)	0 (0 to 0)	-14.75 (-42.49 to 32.51)	8 (5 to 11)	5 (3 to 7)	-33.66 (-57.85 to 4.48)
54 55 <sub>Costa</sub> Rica 56 57	670 (560 to 796)	1637 (1380 to 1937)	144.55 (127.55 to 162.48)	3 (2 to 3)	10 (7 to 13)	270.81 (169.90 to 398.49)	190 (150 to 238)	524 (399 to 669)	176.16 (128 to 235.84)
58 59 <sup>C ôte</sup> d'Ivoire 60	578 (465 to 714)	1562 (1251 to 1950)	170.18 (151.08 to	25 (11 to 42)	54 (32 to 79)	111.95 (32.09 to	1324 (535 to 2260)	2583 (1501 to 3952)	95.11 (14.75 to 276.09)

1 2									
3 4			190.01)			290.61)			
5	9449 (8823	10780 (9980	14.09 (9.79	16 (14 to	33 (25 to	106.49	1866 (1411	2288 (1717	22.61 (2.99
6 Croatia 7 8	to 10129)	to 11592)	to 18.67)	24)	42)	(18.11 to 180.74)	to 2410)	to 2898)	to 39.06)
9	3240 (2702	4574 (3750	41.18 (29.72	36 (23 to	42 (33 to	16.33	1518 (1151	1682 (1335	10.76 (-8.18
10 Cuba 11	to 3901)	to 5525)	to 54.70)	43)	53)	(-11.71 to 79.06)	to 1818)	to 2085)	to 38.33)
12 13	344 (292 to	962 (870 to	179.86		16 (12 to	35.72 (-8.18	257 (180 to	370 (303 to	43.92 (7.35
14 Cyprus	400)	1050)	(151.26 to	12 (7 to 16)	20)	to 121.22)	333)	444)	to 105.55)
15 16		20802	216.30) 103.57						
17 18 <sup>Czechia</sup>	10218 (8616	(19084 to	(74.68 to	71 (64 to	114 (87 to	59.45 (13.25	3246 (2697	5259 (4127	62.01 (34.95
19	to 12269)	22519)	138.01)	82)	141)	to 100.62)	to 3932)	to 6597)	to 90.03)
20 <sub>Democratic</sub>	2005 (2554		<b>(0.00)</b> (10.10)	<b>7</b> 4 (41 )	100 (75.)		22 (2 (1 (2) 7	21 (1 (2222	-5.99
22 People's 23 Republic of	3097 (2554 to 3714)	4965 (4120 to 5978)	60.33 (48.19 to 72.89)	74 (41 to 114)	108 (75 to 147)	45.76 (-9.28 to 166.1)	3363 (1697 to 6033)	3161 (2323 to 4117)	(-46.37 to
24 Korea	00011)	60 0 9 1 0 9	(0 /2.03)	,	117)	10 100.1)	10 0000)	(0 1117)	81.39)
25 26 Democratic	1975 (1605	4445 (3597	125.06	130 (79 to	231 (159 to	77.23 (4.65	6456 (3284	10018 (6738	55.18
2 <sup>₱</sup> Pepublic of the	to 2418)	to 5502)	(107.08 to	207)	336)	to 194.58)	to 12595)	to 15367)	(-21.39 to
28 Congo 29	13729	15310	145.69)						209.02)
30 31 <sup>Denmark</sup>	(12468 to	(13920 to	11.51 (5.37	43 (38 to	70 (60 to	65.35 (42.63	2893 (2227	3391 (2644	17.21 (8.04
32	15154)	16882)	to 17.43)	50)	83)	to 92.58)	to 3654)	to 4239)	to 27.16)
33 34	20 (16 to	90 (72 to	342.41	1 (1 ( 2)		190.20	60 (27 to	144 (88 to	138.93
35 Djibouti 36	25)	111)	(307.26 to 378.51)	1 (1 to 2)	3 (2 to 5)	(72.46 to 408.23)	121)	236)	(25.91 to 367.14)
37	19 (16 to	22 (18 +-	17.43 (7.09			-9.08	23 (19 to	21 (16 +-	-11.16
38 39 Dominica	23)	22 (18 to 27)	to 28.52)	1 (1 to 1)	1 (0 to 1)	(-35.39 to	28)	21 (16 to 27)	(-34.54 to
40 41	,	,				27.05)	,	,	19.86)
42 Dominican	1239 (1022	2521 (2070	103.40 (87.28 to	11 (9 to 16)	22 (16 to	99.41 (29.65	732 (527 to	1109 (821 to	51.44 (0.42
43 Republic 44	to 1507)	to 3084)	121.86)		30)	to 202.38)	1060)	1450)	to 118.17)
45	1159 (1021	3315 (2981	186.04	16 (12 to	34 (24 to	107.95	982 (705 to	1475 (1120	50.25 (3.59
46 <sub>Ecuador</sub> 47	to 1302)	to 3667)	(172.00 to 200.27)	21)	44)	(37.86 to 223.02)	1302)	to 1823)	to 124.68)
48 49	17107	39271	129.56						109.10
50 <sub>Egypt</sub>	(14592 to	(31782 to	(97.49 to	59 (35 to 119)	119 (70 to 186)	100.85 (5.49 to 238.69)	4521 (3160 to 6354)	9453 (6709 to 12613)	(57.59 to
51 52	19726)	48388)	159.21)	11))	100)	,	10 0004)	(0 12013)	171.14)
53 54 El Salvador	842 (701 to	1478 (1239	75.42 (62.88	13 (8 to 16)	9 (7 to 12)	-28.67 (-54.13 to	661 (461 to	437 (329 to	-33.83 (-55.24 to
55	998)	to 1741)	to 87.97)	15 (0 10 10)	> (1 10 12)	18.21)	881)	574)	-1.58)
56 57 <sub>Equatorial</sub>	19 (16 to	95 (79 to	397.19			66.29 (-6.86	73 (37 to	119 (73 to	63.28
58 59 <sup>Guinea</sup>	24)	117)	(353.40 to	2 (1 to 3)	3 (2 to 4)	to 195.01)	135)	119 (73 10	(-22.44 to
60			443.01)						233.97)

1 2 3 4 5 6	Eritrea	114 (93 to 141)	327 (263 to 398)	186.49 (164.83 to 210.17)	9 (4 to 17)	23 (15 to 34)	165.47 (22.99 to 516.12)	474 (168 to 1107)	1017 (645 to 1643)	114.61 (-12.62 to 493.09)
7 8 9 10	Estonia	1311 (1148 to 1494)	1821 (1593 to 2066)	38.90 (26.62 to 51.17)	10 (9 to 12)	9 (6 to 11)	-17.88 (-40.41 to 15.88)	511 (425 to 601)	448 (341 to 573)	-12.32 (-28.71 to 9.89)
11 12 13 14	Eswatini	38 (31 to 47)	80 (65 to 98)	109.48 (95.32 to 125.52)	2 (1 to 3)	4 (2 to 5)	72.30 (1.22 to 254.21)	106 (47 to 206)	153 (101 to 227)	44.21 (-27.03 to 242.69)
15 16 17 18	Ethiopia	1763 (1447 to 2135)	4457 (3634 to 5454)	152.76 (143.58 to 162.31)	219 (128 to 398)	325 (197 to 489)	48.24 (-33.27 to 200.06)	11296 (4911 to 25054)	12866 (8426 to 19913)	13.90 (-51.97 to 197.17)
19 20 21 22	Fiji	28 (23 to 34)	42 (35 to 52)	50.29 (36.12 to 66.63)	1 (1 to 2)	2 (1 to 2)	27.79 (-16.31 to 91.11)	59 (45 to 80)	68 (49 to 91)	14.67 (-24.77 to 72.54)
23 24 25 26	Finland	9450 (8777 to 10150)	19960 (17972 to 22078)	111.22 (94.08 to 127.73)	33 (24 to 39)	39 (33 to 46)	18.82 (-5.40 to 68.55)	2012 (1537 to 2571)	3465 (2517 to 4569)	72.24 (51.93 to 93.91)
27 28 29 30	France	60982 (55563 to 66348)	101092 (91225 to 111418)	65.77 (54.06 to 77.24)	943 (807 to 1043)	2181 (1253 to 2615)	131.25 (51.63 to 168.76)	23073 (19741 to 26699)	40856 (30081 to 48291)	77.07 (34.58 to 97.82)
31 32 33	Gabon	65 (54 to 80)	163 (134 to 201)	150.81 (132.67 to 173.19)	4 (2 to 6)	5 (4 to 8)	52.52 (-4.74 to 134.04)	144 (85 to 223)	205 (137 to 294)	42.02 (-13.99 to 140.73)
34 35 36 37	Gambia	49 (39 to 60)	130 (105 to 161)	162.91 (142.17 to 186.15)	3 (1 to 5)	5 (3 to 7)	85.18 (3.78 to 214.51)	132 (63 to 243)	215 (140 to 298)	62.69 (-6.86 to 192.83)
38 39 40 41	Georgia	5100 (4308 to 6037)	4210 (3545 to 5060)	-17.45 (-22.85 to -11.71)	16 (10 to 22)	17 (10 to 22)	3.41 (-22.82 to 40.33)	1222 (911 to 1581)	991 (741 to 1269)	-18.96 (-30.33 to -5.81)
42 43 44 45	Germany	101153 (87240 to 117946)	236048 (208508 to 266966)	133.36 (115.87 to 150.36)	1201 (987 to 2011)	4286 (3156 to 4903)	256.72 (63.30 to 351.66)	37493 (30500 to 51704)	92002 (74718 to 107721)	145.38 (51.12 to 187.04)
46 47 48 49	Ghana	982 (800 to 1189)	2894 (2355 to 3533)	194.61 (176.45 to 216.26)	56 (24 to 95)	103 (57 to 155)	84.24 (5.66 to 242.87)	2633 (1097 to 4201)	4506 (2554 to 6654)	71.16 (2.12 to 227.26)
50 51 52 53	Greece	12180 (10236 to 14240)	10403 (9422 to 11537)	-14.59 (-23.98 to -3.38)	35 (30 to 40)	66 (54 to 80)	86.77 (51.57 to 131.14)	2407 (1790 to 3170)	2424 (1911 to 3027)	0.69 (-13.02 to 15.85)
54 55 56 57	Greenland	78 (64 to 92)	108 (92 to 125)	39.24 (25.78 to 55.52)	0 (0 to 0)	0 (0 to 1)	147.84 (18.45 to 275.98)	17 (13 to 23)	25 (19 to 33)	49.12 (13.65 to 82.39)
58 59 60	Grenada	16 (13 to 19)	28 (23 to 35)	76.27 (60.87 to 93.49)	1 (1 to 1)	1 (1 to 2)	29.20 (-4.73 to 79.53)	33 (27 to 39)	43 (36 to 52)	30.86 (1.58 to 68.87)

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2 3 4 5 Guam 6	8 (6 to 9)	12 (10 to 14)	49.19 (36.21 to 64.35)	0 (0 to 0)	0 (0 to 0)	21.60 (-20.17 to 84.57)	9 (7 to 12)	9 (7 to 13)	2.91 (-31.52 to 53.3)
7 8 9 Guatemala 10	1041 (867 to 1243)	3192 (2680 to 3791)	206.76 (185.26 to 227.66)	13 (8 to 22)	35 (27 to 45)	180.16 (34.43 to 377.94)	866 (522 to 1506)	1761 (1381 to 2210)	103.35 (6.31 to 246.71)
11 12 13 14	309 (251 to 384)	677 (543 to 826)	119.23 (103.12 to 138.21)	19 (6 to 34)	29 (14 to 46)	49.62 (-7.31 to 159.78)	1008 (272 to 2032)	1414 (609 to 2445)	40.38 (-20.12 to 170.29)
15 16 <sub>Guinea</sub> -Bissau 17 18	44 (36 to 54)	103 (83 to 126)	134.63 (116.21 to 153.25)	4 (2 to 7)	6 (3 to 8)	39.91 (-18.84 to 175.43)	201 (66 to 403)	265 (152 to 392)	31.85 (-30.36 to 186.15)
19 20 <sub>Guyana</sub> 21 22	126 (103 to 152)	170 (139 to 210)	35.00 (24.45 to 45.80)	5 (4 to 6)	6 (5 to 9)	20.04 (-18.42 to 74.53)	239 (189 to 291)	257 (191 to 336)	7.22 (-25.07 to 53.03)
23 24 Haiti 25 26	860 (708 to 1057)	1916 (1570 to 2384)	122.68 (105.23 to 142.3)	58 (24 to 105)	85 (45 to 125)	45.78 (-11 to 148.4)	3030 (946 to 6879)	3782 (1875 to 6104)	24.85 (-33.53 to 156.75)
27 28 Honduras 29 30	619 (513 to 734)	1803 (1499 to 2141)	191.20 (171.74 to 211.20)	22 (14 to 31)	50 (31 to 69)	128.99 (47.94 to 251.69)	1240 (712 to 1929)	1816 (1191 to 2508)	46.37 (-11.95 to 139.27)
31 32 Hungary 33	24215 (21977 to 26809)	42233 (39099 to 45377)	74.41 (64.26 to 86.04)	84 (76 to 109)	100 (80 to 128)	19.27 (-4.55 to 45.83)	5849 (4647 to 7201)	8339 (6257 to 10544)	42.56 (25.99 to 56.19)
34 35 36 Iceland 37	357 (301 to 420)	872 (752 to 1007)	144.33 (123.25 to 167.58)	2 (2 to 2)	4 (3 to 5)	107.81 (52.43 to 151.5)	90 (71 to 113)	187 (142 to 239)	107.79 (81.26 to 131.98)
38 39 40 India 41	133927 (107800 to 166434)	270719 (219873 to 332264)	102.14 (95.94 to 110.29)	2770 (1783 to 3802)	4214 (2950 to 5531)	52.13 (19.29 to 98.65)	127568 (77798 to 169843)	164416 (117527 to 208276)	28.89 (1.40 to 72.21)
42 43 44 Indonesia 45	5025 (3974 to 6141)	11410 (9158 to 13704)	127.09 (115.15 to 141.04)	704 (401 to 910)	913 (582 to 1179)	29.58 (2.63 to 76.95)	26026 (16965 to 34445)	24943 (18268 to 32252)	-4.16 (-31.91 to 42.06)
46 47Iran (Islamic 48 <sub>Republic</sub> of) 49	14964 (12153 to 18513)	40493 (32952 to 49751)	170.60 (160.28 to 181.00)	51 (33 to 68)	132 (55 to 164)	158.02 (43.67 to 247.65)	4022 (3121 to 5103)	9481 (6679 to 12439)	135.71 (84.19 to 177.03)
50 51 Iraq 52 53	2270 (1890 to 2694)	10029 (8221 to 12199)	341.76 (303.6 to 377.49)	34 (21 to 51)	51 (38 to 67)	52.37 (-14.19 to 162.33)	2135 (1267 to 3447)	3719 (2808 to 4931)	74.13 (2.20 to 190.75)
54 55 <sup>Ireland</sup> 56	3253 (2736 to 3869)	5762 (4988 to 6655)	77.13 (58.69 to 97.43)	33 (29 to 37)	51 (41 to 65)	53.61 (25.28 to 93.62)	1106 (922 to 1332)	1623 (1294 to 2033)	46.76 (29.96 to 67.57)
57 58 Israel 59 60	3274 (2767 to 3882)	6640 (5924 to 7451)	102.78 (76.8 to 132.02)	22 (18 to 24)	46 (38 to 63)	111.01 (70.80 to 199.17)	1000 (812 to 1229)	1851 (1484 to 2306)	85.14 (61.05 to 116.46)

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2 3 4 5 Italy 6	183929 (159353 to 209220)	186447 (165268 to 209019)	1.37 (-2.84 to 6.10)	351 (310 to 581)	1305 (944 to 1468)	272.23 (70.52 to 339.63)	33890 (24913 to 43884)	44427 (34629 to 54814)	31.09 (5.26 to 46.90)
7 8 9 <sup>Jamaica</sup> 10	543 (455 to 648)	884 (737 to 1059)	62.81 (49.97 to 76.46)	6 (4 to 7)	7 (5 to 10)	21.88 (-16.58 to 110.45)	304 (231 to 367)	343 (264 to 432)	12.67 (-13.90 to 66.78)
11 12 <sub>Japan</sub> 13 14	236120 (196281 to 281825)	408632 (353858 to 468152)	73.06 (59.11 to 88.73)	367 (270 to 394)	452 (350 to 629)	23.32 (1.39 to 112.57)	41769 (30062 to 56026)	67424 (46877 to 91495)	61.42 (48.32 to 75.54)
15 16 <sub>Jordan</sub> 17 18	1611 (1394 to 1851)	11508 (9646 to 13565)	614.12 (540.91 to 683.77)	6 (4 to 8)	13 (10 to 17)	135.70 (49.91 to 281.75)	452 (339 to 570)	2155 (1536 to 2953)	376.81 (274.79 to 495.45)
19 20 <sub>Kazakhstan</sub> 21 22	11689 (9797 to 14063)	15823 (13219 to 18930)	35.36 (26.10 to 46.10)	76 (56 to 95)	82 (66 to 100)	7.52 (-17.29 to 48.48)	4458 (3567 to 5515)	5172 (4164 to 6466)	16.03 (-1.28 to 37.13)
23 24 <sub>Kenya</sub> 25	868 (711 to 1056)	2870 (2364 to 3474)	230.72 (219.85 to 242.5)	74 (46 to 125)	180 (111 to 265)	144.03 (82.74 to 228.15)	3011 (1930 to 4593)	6453 (4376 to 9370)	114.3 (40.66 to 213.60)
26 27 <sub>Kiribati</sub> 28	2 (2 to 3)	4 (3 to 4)	60.33 (46.38 to 76.77)	1 (0 to 1)	1 (0 to 1)	5.25 (-33.24 to 73.45)	28 (11 to 58)	30 (14 to 55)	4.10 (-35.53 to 92.08)
29 30 31 <sup>Kuwait</sup> 32	863 (798 to 937)	2857 (2338 to 3483)	230.91 (174.37 to 298.63)	1 (1 to 2)	4 (3 to 5)	195.71 (125.48 to 314.39)	188 (140 to 241)	558 (391 to 755)	197.49 (143.44 to 262.68)
33 34 35 Kyrgyzstan 36	2526 (2126 to 3008)	4283 (3592 to 5083)	69.58 (59.46 to 81.49)	15 (10 to 19)	10 (8 to 12)	-36.11 (-51.26 to 14.99)	1109 (784 to 1376)	1031 (789 to 1325)	-7.05 (-27.91 to 29.99)
37 <sub>Lao</sub> People's 38 39 40 Republic	90 (70 to 113)	241 (191 to 300)	167.27 (144.93 to 193.03)	10 (5 to 15)	11 (6 to 17)	8.81 (-34.31 to 91.32)	385 (177 to 639)	387 (234 to 610)	0.50 (-45.77 to 106.92)
41 42 <sub>Latvia</sub> 43 44	3273 (2810 to 3770)	3226 (2843 to 3623)	-1.44 (-8.09 to 5.70)	12 (10 to 14)	14 (11 to 17)	18.35 (-5.77 to 47.79)	811 (632 to 1017)	779 (605 to 981)	-4.01 (-15.43 to 8.10)
45 46 <sub>Lebanon</sub> 47 48	881 (721 to 1091)	2494 (2037 to 3050)	182.89 (160.10 to 205.97)	3 (2 to 4)	8 (4 to 12)	146.92 (25.25 to 359.10)	220 (161 to 297)	545 (394 to 737)	148.06 (90.21 to 219.00)
49 50 Lesotho 51 52	95 (78 to 115)	150 (122 to 185)	58.00 (46.76 to 69.06)	6 (4 to 8)	9 (6 to 12)	51.75 (-12.69 to 142.65)	222 (137 to 323)	326 (210 to 480)	46.51 (-15.14 to 129.83)
52 53 54 Liberia 55 56	104 (85 to 129)	288 (233 to 354)	176.51 (154.41 to 199.50)	7 (3 to 12)	11 (6 to 17)	46.34 (-18.23 to 235.23)	360 (108 to 705)	490 (271 to 833)	35.96 (-36.97 to 268.26)
56 57 58 Libya 59 60	629 (514 to 759)	1910 (1557 to 2333)	203.80 (175.90 to 233.83)	4 (3 to 7)	11 (7 to 15)	159.15 (33.45 to 345.08)	229 (166 to 324)	595 (436 to 782)	160.02 (65.02 to 262.55)

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3 4 5	Lithuania	4535 (3980 to 5145)	4848 (4481 to 5210)	6.90 (-3.51 to 20.95)	14 (10 to 16)	18 (14 to 23)	26.29 (-2.24 to 67.72)	1054 (817 to 1321)	1105 (861 to 1375)	4.77 (-8.66 to 20.85)
6	Luxembourg	775 (680 to 879)	1503 (1318 to 1707)	93.98 (81.65 to 107.23)	5 (4 to 6)	11 (8 to 13)	124.41 (55.78 to 172.33)	202 (162 to 247)	376 (297 to 471)	85.81 (59.15 to 105.40)
10	Madagascar	490 (401 to 604)	1330 (1089 to 1651)	171.16 (153.22 to 190.88)	36 (17 to 60)	69 (48 to 103)	92.10 (5.72 to 331.04)	1875 (646 to 3722)	3000 (2035 to 4374)	60.01 (-23.07 to 329.63)
14 15 16 17	Malawi	336 (273 to 415)	741 (603 to 910)	120.33 (105.3 to 136.64)	39 (19 to 76)	55 (38 to 78)	39.48 (-33.91 to 218.89)	2236 (716 to 5491)	2323 (1541 to 3545)	3.89 (-57.34 to 225.03)
18 19 20 21		638 (533 to 747)	2165 (1879 to 2498)	239.19 (213.74 to 272.55)	16 (13 to 20)	41 (30 to 56)	157.56 (64.69 to 265.74)	612 (503 to 742)	1434 (1090 to 1814)	134.26 (68.55 to 208.48)
22 23 24 25		6 (5 to 7)	27 (21 to 33)	357.26 (319.05 to 402.53)	0 (0 to 1)	1 (1 to 1)	97.39 (13.04 to 268.14)	19 (10 to 33)	29 (23 to 38)	58.10 (-20.10 to 218.81)
26 27 28	Mali	396 (321 to 489)	1033 (841 to 1256)	161.12 (141.84 to 182.05)	29 (9 to 53)	55 (26 to 93)	90.14 (10.52 to 338.68)	1569 (384 to 3318)	2748 (1107 to 5138)	75.21 (-6.44 to 320.25)
29 30 31 32	Malta	275 (237 to 318)	390 (346 to 441)	42.03 (32.40 to 52.30)	2 (2 to 2)	6 (5 to 7)	182.23 (117.73 to 248.53)	84 (68 to 102)	149 (123 to 178)	77.16 (51.73 to 106.18)
33 34 35 36	Marshall Islands	1 (1 to 1)	2 (2 to 3)	81.58 (65.63 to 99.90)	0 (0 to 0)	0 (0 to 0)	14.19 (-33.41 to 79.45)	10 (6 to 17)	12 (6 to 20)	15.49 (-36.36 to 90.92)
37 38 39 40	Mauritania	118 (96 to 144)	330 (270 to 405)	179.57 (158.4 to 202.27)	8 (4 to 11)	9 (6 to 13)	19.95 (-22.88 to 109.37)	322 (167 to 487)	376 (245 to 543)	16.93 (-28.24 to 120.07)
41 42 43 44	Mauritius	47 (37 to 58)	86 (69 to 102)	81.67 (65.36 to 99.25)	1 (1 to 1)	3 (3 to 4)	176.18 (101.94 to 258.21)	50 (43 to 61)	117 (90 to 147)	134.12 (70.2 to 198.45)
45 46 47 48	Mexico	25697 (21937 to 30082)	46570 (40040 to 53889)	81.22 (75.62 to 87.02)	157 (142 to 176)	519 (408 to 622)	229.87 (156.16 to 297.06)	9626 (8180 to 11411)	21132 (17386 to 25318)	119.55 (86.73 to 154.33)
	Micronesia (Federated	3 (2 to 4)	4 (3 to 5)	26.76 (16.02 to 38.96)	1 (0 to 1)	1 (0 to 1)	-23.01 (-59.09 to 31.38)	28 (16 to 49)	20 (10 to 38)	-27.22 (-62.97 to 22.93)
53 54	Monaco	43 (36 to 51)	59 (50 to 69)	37.31 (28.37 to 47.29)	0 (0 to 0)	0 (0 to 1)	37.96 (-4.38 to 94.10)	11 (8 to 14)	14 (11 to 18)	30.63 (10.51 to 53.62)
55 56 57 58	Mongolia	961 (801 to 1153)	2328 (1907 to 2810)	142.14 (124.80 to 161.08)	11 (6 to 15)	12 (9 to 16)	11.41 (-26.46 to 89.38)	690 (380 to 1073)	814 (620 to 1028)	17.92 (-26.45 to 100.76)

3 (2 to 3)

48.81 (1.77

191 (145 to

221 (165 to

15.74 (1.68

2 (1 to 2)

59 <sub>Montenegro</sub> 60

879 (744 to

1051 (890 to

19.54 (12.1

1 2									
2 3 4	1032)	1240)	to 27.53)			to 101.73)	247)	288)	to 30.37)
5 6 Morocco 7	3007 (2487 to 3582)	6614 (5488 to 7909)	119.98 (105.44 to 135.91)	31 (19 to 48)	59 (41 to 77)	91.82 (30.18 to 192.53)	1438 (989 to 2101)	2615 (1988 to 3373)	81.81 (30.04 to 139.60)
8 9 10Mozambique 11	487 (397 to 601)	1111 (897 to 1347)	128.31 (112.18 to 146.62)	52 (30 to 88)	107 (71 to 154)	107.07 (16.28 to 270.37)	2567 (1058 to 5668)	4503 (2907 to 7196)	75.44 (-18.50 to 319.21)
12 13 14 Myanmar 15	1024 (797 to 1272)	2062 (1656 to 2558)	101.31 (83.73 to 120.83)	60 (34 to 95)	59 (44 to 82)	-0.68 (-40.07 to 64.77)	2820 (1386 to 5128)	2258 (1680 to 3215)	-19.94 (-57.94 to 48.65)
16 17 18 <sup>Namibia</sup> 19	87 (72 to 108)	217 (175 to 268)	148.34 (130.13 to 167.81)	6 (4 to 8)	9 (6 to 13)	61.81 (0.64 to 190.79)	218 (129 to 344)	333 (223 to 498)	52.64 (-12.57 to 213.41)
20 21 22 <sup>Nauru</sup> 23	0 (0 to 0)	0 (0 to 0)	12.57 (3.45 to 21.62)	0 (0 to 0)	0 (0 to 0)	-34.79 (-63.12 to 6.11)	3 (1 to 6)	2 (1 to 4)	-34.16 (-60.95 to 18.41)
24 25 <sub>Nepal</sub> 26 27	2180 (1726 to 2758)	5036 (4049 to 6194)	131.04 (112.62 to 151.30)	93 (56 to 165)	115 (71 to 190)	23.09 (-15.11 to 93.10)	3780 (2183 to 5903)	3819 (2683 to 5781)	1.05 (-34.25 to 65.01)
28 29 <sub>Netherlands</sub> 30 31	24401 (22175 to 26704)	16251 (13975 to 18987)	-33.4 (-41.14 to -24.18)	278 (240 to 344)	782 (582 to 906)	180.66 (78.32 to 230.31)	8234 (6818 to 9979)	12100 (10246 to 13731)	46.95 (10.86 to 70.21)
32 33 <sup>New Zealand</sup>	5873 (5089 to 6670)	8600 (7850 to 9491)	46.45 (37.95 to 57.06)	20 (17 to 22)	31 (26 to 39)	58.14 (32.29 to 109.75)	1267 (976 to 1592)	1758 (1327 to 2254)	38.84 (26.73 to 54.82)
34 35 36 Nicaragua 37 38	500 (414 to 598)	1453 (1218 to 1720)	190.37 (167.53 to 212.17)	3 (2 to 3)	7 (6 to 9)	177.21 (99.51 to 267.74)	187 (149 to 245)	444 (340 to 555)	137.59 (85.21 to 192.36)
39 40 Niger 41	321 (256 to 395)	942 (760 to 1154)	193.63 (171.22 to 216.83)	27 (9 to 54)	55 (26 to 95)	106.00 (18.53 to 313.02)	1564 (379 to 3724)	2835 (1120 to 5521)	81.21 (-7.73 to 318.21)
42 43 44 <sup>Nigeria</sup> 45	5162 (4259 to 6269)	14578 (11955 to 17708)	182.41 (176.97 to 187.98)	314 (165 to 514)	560 (306 to 909)	78.53 (23.85 to 168.11)	15139 (7194 to 24017)	26794 (15017 to 42474)	76.98 (13.30 to 185.01)
46 47 48 <sup>Niue</sup> 49	0 (0 to 0)	0 (0 to 0)	-12.86 (-20.01 to -3.97)	0 (0 to 0)	0 (0 to 0)	-42.22 (-65.13 to -10.86)	1 (0 to 1)	0 (0 to 1)	-45.91 (-68.37 to -8.78)
50 North 51 Macedonia 52 Northern	2473 (2098 to 2927)	3374 (2855 to 3973)	36.41 (27.51 to 46.86)	4 (3 to 4)	5 (3 to 6)	37.22 (1.2 to 83.42) -44.77	490 (358 to 648)	635 (459 to 844)	29.55 (14.26 to 46.45) -57.52
54 Mariana 55 <sub>Islands</sub> 56	3 (2 to 3)	3 (3 to 4)	17.67 (3.72 to 33.96)	0 (0 to 0)	0 (0 to 0)	(-70.47 to 26.41)	12 (8 to 19)	5 (4 to 9)	(-77.38 to -4.80)
57 58 Norway 59 60	20686 (17395 to 24323)	33097 (28492 to 37859)	60.00 (50.85 to 68.77)	29 (26 to 41)	38 (32 to 55)	30.65 (17.07 to 54.59)	3551 (2585 to 4687)	5414 (3835 to 7244)	52.44 (44.12 to 61.59)

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3 4 5 6	Oman	431 (347 to 517)	1575 (1266 to 1924)	265.15 (237.03 to 297.09)	2 (1 to 3)	4 (3 to 5)	135.73 (37.95 to 331.56)	122 (85 to 178)	375 (271 to 496)	206.46 (111.98 to 320.55)
7 8 9 10	Pakistan	9984 (7995 to 12369)	26815 (21768 to 33849)	168.59 (154.72 to 184.98)	454 (240 to 866)	657 (447 to 993)	44.84 (-2.73 to 133.76)	16234 (9791 to 26748)	27286 (18727 to 38379)	68.08 (19.36 to 148.68)
11 12 13 14	Palau	1 (1 to 1)	1 (1 to 1)	58.71 (43.16 to 76.15)	0 (0 to 0)	0 (0 to 0)	23.28 (-26.34 to 101.05)	3 (2 to 7)	4 (2 to 6)	14.99 (-29.80 to 103.99)
15 16 17 18	Palestine	374 (305 to 450)	1351 (1104 to 1621)	261.47 (229.04 to 293.11)	3 (2 to 4)	4 (3 to 6)	49.80 (-14.64 to 127.75)	132 (92 to 195)	320 (235 to 443)	142.19 (82.43 to 220.08)
19 20 21 22	Panama	553 (471 to 638)	1338 (1131 to 1560)	141.92 (123.11 to 161.72)	7 (6 to 10)	25 (19 to 32)	239.99 (135.70 to 373.74)	436 (347 to 538)	1002 (763 to 1297)	129.97 (65.87 to 224.87)
23	Papua New Guinea	116 (92 to 140)	285 (229 to 350)	145.64 (124.56 to 168.38)	13 (7 to 20)	25 (16 to 38)	95.85 (20.41 to 222.69)	661 (335 to 1140)	1258 (758 to 2034)	90.40 (5.88 to 270.52)
27 28 29	Paraguay	996 (853 to 1165)	1956 (1652 to 2324)	96.35 (82.38 to 111.71)	4 (4 to 5)	12 (8 to 16)	171.03 (73.55 to 302.03)	327 (263 to 404)	647 (481 to 831)	97.76 (55.83 to 147.82)
30 31 32 33	Peru	2566 (2121 to 3079)	5665 (4638 to 6822)	120.79 (105.66 to 138.38)	128 (74 to 194)	76 (54 to 105)	-40.28 (-66.32 to 19.96)	8234 (3972 to 13912)	3118 (2308 to 4194)	-62.13 (-79.74 to -11.96)
37	Philippines	2067 (1630 to 2519)	5073 (4044 to 6166)	145.40 (135.48 to 156.45)	98 (54 to 125)	117 (95 to 155)	19.59 (-15.39 to 149.06)	3743 (2419 to 4551)	4556 (3797 to 5981)	21.71 (-7.83 to 121.46)
38 39 40 41	Poland	177477 (149170 to 211629)	88307 (77909 to 99826)	-50.24 (-54.72 to -45.27)	180 (168 to 211)	361 (281 to 426)	99.98 (43.08 to 136.68)	30297 (21831 to 40254)	20081 (15602 to 25064)	-33.72 (-41.18 to -24.23)
42 43 44 45	Portugal	6035 (5365 to 6750)	9894 (8866 to 11003)	63.94 (50.98 to 79.42)	81 (72 to 90)	306 (158 to 363)	277.16 (96.34 to 355.45)	2425 (2073 to 2832)	5332 (3507 to 6256)	119.87 (37.89 to 153.53)
49	Puerto Rico	1123 (1058 to 1194)	1442 (1320 to 1565)	28.41 (21.63 to 35.32)	20 (15 to 22)	18 (13 to 28)	-9.54 (-38.39 to 73.14)	755 (589 to 869)	592 (456 to 801)	-21.63 (-40.46 to 23.39)
50 51 52 53	Qatar	154 (123 to 187)	1446 (1178 to 1746)	838.58 (770.76 to 916.51)	0 (0 to 1)	2 (1 to 3)	413.11 (169.07 to 853.64)	41 (29 to 57)	296 (205 to 412)	628.10 (423.39 to 857.49)
56 57	Republic of Korea	17167 (15174 to 19498)	46956 (44197 to 49997)	173.52 (147.67 to 206.09)	313 (143 to 399)	234 (183 to 313)	-25.35 (-46.63 to 58.97)	9498 (6903 to 11454)	10451 (7829 to 13343)	10.04 (-17.52 to 63.35)
58 59 60	Republic of Moldova	3098 (2561 to 3712)	3166 (2836 to 3521)	2.20 (-11.58 to 19.64)	17 (14 to 21)	18 (14 to 21)	4.75 (-16.20 to 31.59)	1046 (844 to 1266)	999 (820 to 1209)	-4.45 (-18.23 to

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2 3 4 5 6 Romania 7	17947 (15104 to 21254)	17043 (15232 to 19020)	-5.04 (-15.24 to 7.37)	64 (55 to 76)	74 (59 to 93)	15.86 (-8.37 to 45.57)	5269 (4206 to 6540)	4364 (3404 to 5459)	13.21) -17.18 (-29.98 to -2.13)
8 9 Russian 10 11 Federation	167371 (141580 to 195591)	170565 (145182 to 199143)	1.91 (-0.13 to 4.04)	977 (726 to 1128)	1257 (1021 to 1464)	28.65 (6.46 to 62.61)	53401 (41640 to 64977)	56533 (46127 to 69324)	5.86 (-5.94 to 23.29)
12 13 14 Rwanda 15	288 (237 to 355)	726 (584 to 888)	152.30 (132.10 to 172.65)	34 (20 to 59)	42 (27 to 62)	21.96 (-36.82 to 143.44)	1761 (735 to 3717)	1838 (1153 to 3012)	4.34 (-55.16 to 173.20)
16 1 <b>T</b> aint Kitts and 18 <sub>Nevis</sub> 19	10 (8 to 12)	21 (17 to 26)	106.61 (90.32 to 126.13)	1 (1 to 1)	1 (1 to 1)	9.71 (-25.03 to 72.10)	25 (19 to 29)	28 (19 to 41)	14.61 (-24.18 to 78.38)
20 21 22 Saint Lucia 23	25 (21 to 31)	59 (48 to 72)	131.09 (113.96 to 149.59)	1 (1 to 1)	1 (1 to 2)	47.65 (10.86 to 116.72)	36 (29 to 41)	45 (36 to 56)	26.50 (-1.54 to 79.21)
24 <sub>Saint</sub> Vincent 25 26 and the 27 Grenadines	20 (16 to 24)	32 (26 to 39)	63.64 (48.19 to 80.82)	1 (1 to 1)	2 (1 to 2)	54.50 (13.27 to 112.91)	39 (32 to 45)	49 (40 to 62)	27.47 (-3.02 to 72.66)
28 29 <sub>Samoa</sub> 30	6 (5 to 8)	9 (7 to 10)	34.52 (23.82 to 45.98)	1 (1 to 1)	1 (1 to 1)	6.37 (-33.37 to 64.06)	31 (20 to 46)	30 (19 to 45)	-1.06 (-42.04 to
31			,				,	,	65.39)
31 32 33 <sub>San Marino</sub> 34 35	29 (25 to 35)	48 (41 to 57)	65.44 (55.11 to 76.39)	0 (0 to 0)	0 (0 to 0)	167.91 (65.76 to 328.84)	6 (4 to 8)	10 (8 to 14)	65.39) 74.92 (47.44 to 111.54)
32 33 <sub>San Marino</sub> 34 35 36 37 <sup>Sao Tome and 38 Principe</sup>			65.44 (55.11	0 (0 to 0) 0 (0 to 1)	0 (0 to 0) 0 (0 to 1)	167.91 (65.76 to			74.92 (47.44
32 33 San Marino 34 35 36 37 Sao Tome and 38 Principe 39 40 41 Saudi Arabia 42	35)	57) 18 (15 to	65.44 (55.11 to 76.39) 135.19 (118.79 to		0	167.91 (65.76 to 328.84) 3.87 (-41.14	6 (4 to 8)	10 (8 to 14) 16 (11 to	74.92 (47.44 to 111.54) 4.71 (-42.23
32 33 San Marino 34 35 36 37 Sao Tome and 38 Principe 39 40 41 Saudi Arabia 42 43 44 45 Senegal 46	35) 8 (6 to 10) 3748 (3112	57) 18 (15 to 23) 13816 (11338 to	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to	0 (0 to 1)	0 (0 to 1) 27 (18 to	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23	6 (4 to 8) 15 (8 to 24) 1012 (729 to	10 (8 to 14) 16 (11 to 24) 3181 (2284	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to
32 33 San Marino 34 35 36 37 <sup>Sao</sup> Tome and 38 Principe 39 40 41 Saudi Arabia 42 43 44 45 Senegal 46 47 48 49 Serbia 50	35) 8 (6 to 10) 3748 (3112 to 4462) 366 (298 to	57) 18 (15 to 23) 13816 (11338 to 16751) 930 (756 to	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to 301.72) 153.93 (136.66 to	0 (0 to 1) 12 (7 to 20) 23 (10 to	0 (0 to 1) 27 (18 to 38) 37 (22 to	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23 to 337.69) 61.95 (2.65	6 (4 to 8) 15 (8 to 24) 1012 (729 to 1405) 1084 (420 to	10 (8 to 14) 16 (11 to 24) 3181 (2284 to 4376) 1527 (911 to	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to 315.14) 40.90 (-20.02 to
32 33 San Marino 34 35 36 37 <sup>Sao</sup> Tome and 38 Principe 39 40 41Saudi Arabia 42 43 44 45 Senegal 46 47 48 49 Serbia 50 51 52 53 Seychelles 54	35) 8 (6 to 10) 3748 (3112 to 4462) 366 (298 to 449) 12769 (10737 to	57) 18 (15 to 23) 13816 (11338 to 16751) 930 (756 to 1164) 16638 (14322 to	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to 301.72) 153.93 (136.66 to 171.52) 30.30 (20.12	0 (0 to 1) 12 (7 to 20) 23 (10 to 37) 49 (37 to	0 (0 to 1) 27 (18 to 38) 37 (22 to 57) 113 (74 to	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23 to 337.69) 61.95 (2.65 to 184.83) 128.93 (9.06	6 (4 to 8) 15 (8 to 24) 1012 (729 to 1405) 1084 (420 to 1912) 3314 (2528	10 (8 to 14) 16 (11 to 24) 3181 (2284 to 4376) 1527 (911 to 2378) 4741 (3595	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to 315.14) 40.90 (-20.02 to 185.33) 43.04 (-2.81
32 33 San Marino 34 35 36 37 Sao Tome and 38 Principe 39 40 41 Saudi Arabia 42 43 44 45 Senegal 46 47 48 49 Serbia 50 51 52 53 Seychelles	35) 8 (6 to 10) 3748 (3112 to 4462) 366 (298 to 449) 12769 (10737 to 14873)	57) 18 (15 to 23) 13816 (11338 to 16751) 930 (756 to 1164) 16638 (14322 to 19211)	65.44 (55.11 to 76.39) 135.19 (118.79 to 152.91) 268.63 (237.42 to 301.72) 153.93 (136.66 to 171.52) 30.30 (20.12 to 43.95) 117.31 (99.80 to	0 (0 to 1) 12 (7 to 20) 23 (10 to 37) 49 (37 to 78)	0 (0 to 1) 27 (18 to 38) 37 (22 to 57) 113 (74 to 147)	167.91 (65.76 to 328.84) 3.87 (-41.14 to 89.85) 131.24 (9.23 to 337.69) 61.95 (2.65 to 184.83) 128.93 (9.06 to 259.34) 28.62 (-7.02	6 (4 to 8) 15 (8 to 24) 1012 (729 to 1405) 1084 (420 to 1912) 3314 (2528 to 4479)	10 (8 to 14) 16 (11 to 24) 3181 (2284 to 4376) 1527 (911 to 2378) 4741 (3595 to 5996)	74.92 (47.44 to 111.54) 4.71 (-42.23 to 108.14) 214.41 (119.36 to 315.14) 40.90 (-20.02 to 185.33) 43.04 (-2.81 to 78.90) 31.52 (-0.75

2										
3 4		to 1934)	to 3962)	to 116.81)			to 150.34)	490)	838)	to 100.87)
4 5	Slovakia	9361 (8373	10674 (9737	14.02 (8.30	31 (25 to	58 (41 to	88.23 (-3.03	2274 (1743	2856 (2175	25.60 (-5.11
6	SIOVAKIA	to 10336)	to 11684)	to 20.14)	48)	76)	to 176.55)	to 2989)	to 3557)	to 53.77)
7 8	Slovenia	3775 (3318	4739 (4282	25.55 (17.98	10 (8 to 13)	18 (13 to	86.00 (28.56	781 (579 to	977 (726 to	25.10 (7.66
9	Siovenia	to 4289)	to 5219)	to 33.07)	10 (0 10 15)	25)	to 165.93)	1011)	1253)	to 43.50)
10	Solomon		17 (13 to	124.02			64.34 (-3.76	53 (24 to	86 (48 to	63.24 (-5.21
11 12	Islands	8 (6 to 9)	21)	(102.93 to	1 (1 to 2)	2 (1 to 3)	to 176.72)	101)	156)	to 190.03)
13				148.4)			100.55			
14 15	G 1.	237 (190 to	630 (502 to	165.38	10 (7 ( 40)	40 (21 to	109.57	1021 (282 to	1986 (928 to	94.57 (2.46
16	Somalia	293)	786)	(145.60 to 187.38)	19 (7 to 40)	71)	(26.24 to 263.84)	2543)	3988)	to 316.32)
17				122.12			203.84)			26.34
18 199	South Africa	2945 (2438	6542 (5423	(114.01 to	98 (69 to	166 (124 to	69.87 (20.49	4862 (3068	6143 (4966	(-18.56 to
20	Journ Infou	to 3586)	to 7934)	131.25)	123)	196)	to 168.66)	to 7236)	to 7083)	117.23)
21 22							29.68			13.58
	South Sudan	249 (202 to	469 (383 to	88.39 (73.80	22 (9 to 43)	29 (16 to	(-39.27 to	1158 (325 to	1315 (637 to	(-53.56 to
24		307)	576)	to 103.53)		61)	148.37)	2801)	2625)	178.43)
25 26		39276	77822	98.14 (91.73	278 (237 to	377 (303 to	35.79 (8.43	11347 (9316	17466	53.93 (36.17
27	Spain	(37463 to	(74030 to	to 104.75)	304)	600)	to 121.33)	to 13673)	(13535 to	to 79.47)
28		41127)	81685)	(0 104.75)	50-1)	000)	10 121.55)	10 15075)	22106)	(0 / ).+/ )
29 30		909 (734 to	2295 (2003	152.54	19 (14 to	21 (15 to	13.97	813 (609 to	895 (684 to	10.11
31	Sri Lanka	1119)	to 2637)	(124.22 to	24)	30)	(-25.92 to	1032)	1147)	(-20.92 to
32 33				186.13)			74.18)			51.47)
34	C	3315 (2684	9292 (7568	180.28	21 (10 to	48 (28 to	123.91 (3.53	1310 (720 to	3003 (2102	129.31 (11.1
35	Sudan	to 4060)	to 11371)	(157.81 to 205.52)	44)	78)	to 380.84)	2866)	to 4130)	to 282.19)
36 37				203.32)						16.97
38	Suriname	79 (66 to	158 (129 to	98.73 (81.35	3 (2 to 3)	4 (3 to 5)	32.93 (-4.19	118 (85 to	138 (109 to	(-14.68 to
39 40		96)	194)	to 117.62)	0 (2 (0 0))	. (0 00 0)	to 91.78)	146)	175)	66.50)
41		30612	40244				-11.38			
42	Sweden	(26350 to	(34733 to	31.46 (23.94	107 (86 to	95 (77 to	(-27.36 to	6158 (4631	7117 (5148	15.58 (4.65
43 44		35136)	46000)	to 40.19)	119)	139)	46.41)	to 7936)	to 9548)	to 28.78)
45		10695 (9668	14969	39.96 (33.88	73 (58 to	123 (97 to	69.01 (36.46	2817 (2268	3807 (2979	35.16 (21.15
46 47	Switzerland	to 11813)	(13688 to	to 46.34)	83)	160)	to 128.96)	to 3429)	to 4738)	to 56.09)
48		10 11015)	16325)	10 +0.5+)	03)	100)	10 120.90)	(0 542))	10 4750)	10 50.07)
49	Syrian Arab	2248 (1819	4862 (3940	116.26	23 (13 to	37 (20 to	57.25	1091 (741 to	1653 (1195	51.58 (7.71
50 51	Republic	to 2734)	to 5871)	(97.13 to	35)	52)	(-10.52 to	1432)	to 2195)	to 137.88)
52				135.91)			184.61)			
53	Taiwan	2221 (1923	9064 (8139	308.12	101 (67 to	199 (152 to	97.46 (44.81	2623 (1919	4338 (3499	65.37 (31.64
54) 55	(Province of	to 2557)	to 10153)	(279.81 to	113)	264)	to 288.02)	to 2947)	to 5416)	to 167.25)
56	China)			342.19) 130.78			-11.19			-2.66
57 58	Tajikistan	2391 (1972	5519 (4623	(115.02 to	21 (11 to	18 (13 to	-11.19 (-54.29 to	1691 (853 to	1646 (1219	-2.00 (-48.60 to
58 59	rujikistali	to 2877)	to 6632)	148.48)	34)	26)	(-34.29 to 82.80)	2831)	to 2185)	(-48.00 to 91.67)
60										)

1 2									
3 4 5 Thailand 6	1734 (1327 to 2180)	3808 (3078 to 4630)	119.65 (96.59 to 151.17)	72 (52 to 95)	111 (80 to 149)	54.05 (-3.23 to 138.51)	2899 (2029 to 3946)	3272 (2453 to 4259)	12.87 (-26.29 to 71.96)
7 8 9 <sup>Timor-Leste</sup> 10	18 (14 to 23)	41 (33 to 50)	122.2 (104.08 to 146.48)	1 (1 to 3)	3 (2 to 5)	107.01 (24.75 to 246.34)	59 (29 to 102)	86 (48 to 138)	47.21 (-28.05 to 185.55)
11 12 <sub>Togo</sub> 13 14	190 (155 to 232)	514 (418 to 634)	170.07 (148.46 to 196.29)	9 (4 to 14)	21 (14 to 30)	142.31 (33.33 to 393.01)	457 (182 to 773)	940 (589 to 1321)	105.73 (15.73 to 366.27)
15 16 <sub>Tokelau</sub> 17 18	0 (0 to 0)	0 (0 to 0)	17.45 (9.66 to 26.52)	0 (0 to 0)	0 (0 to 0)	-38.14 (-61.51 to -1.52)	0 (0 to 1)	0 (0 to 0)	-39.66 (-63.93 to 8.06)
19 20 <sub>Tonga</sub> 21 22	4 (3 to 5)	4 (4 to 5)	14.32 (5.18 to 25.01)	1 (0 to 1)	1 (0 to 1)	0.57 (-36.36 to 55.61)	21 (14 to 30)	19 (13 to 27)	-11.27 (-43.54 to 36.78)
23Trinidad and 24 <sub>Tobago</sub>	275 (226 to 333)	476 (395 to 586)	73.31 (60.64 to 88.40)	3 (2 to 4)	5 (4 to 7)	67.08 (17.69 to 135.28)	143 (110 to 169)	215 (162 to 279)	49.93 (17.59 to 92.29)
25 26 27 <sup>Tunisia</sup> 28	2247 (1845 to 2720)	5382 (4413 to 6568)	139.49 (122.55 to 159.3)	7 (5 to 11)	16 (11 to 23)	124.51 (18.63 to 312.49)	569 (405 to 784)	1215 (890 to 1622)	113.58 (59.27 to 174.73)
29 30 31 <sup>Turkey</sup> 32	24930 (21910 to 28012)	93902 (80596 to 107925)	276.67 (231.04 to 325.07)	261 (159 to 401)	329 (250 to 471)	26.21 (-22.73 to 118.88)	13910 (9268 to 19352)	22488 (17253 to 28896)	61.67 (9.74 to 147.01)
33 34 35 <sup>Turkmenistan</sup> 36	1758 (1463 to 2085)	3806 (3155 to 4551)	116.48 (102.66 to 132.01)	10 (7 to 13)	14 (9 to 20)	45.23 (9.53 to 98.88)	765 (493 to 1049)	1120 (805 to 1438)	46.38 (13.41 to 91.33)
37 38 Tuvalu 39 40	0 (0 to 0)	0 (0 to 1)	27.01 (14.84 to 39.84)	0 (0 to 0)	0 (0 to 0)	-5.17 (-39.67 to 57.04)	3 (1 to 5)	2 (1 to 4)	-16.57 (-50.42 to 58.50)
41 42 Uganda 43 44	569 (462 to 701)	1697 (1381 to 2111)	198.27 (178.98 to 220.89)	48 (30 to 75)	102 (70 to 150)	114.15 (26.45 to 252.91)	2257 (1132 to 4612)	4600 (3084 to 7058)	103.84 (-2.52 to 318.38)
45 46 <sub>Ukraine</sub> 47 48	44470 (37197 to 53622)	42711 (36101 to 51042)	-3.95 (-10.23 to 3.42)	230 (174 to 306)	260 (210 to 315)	12.61 (-17.79 to 52.12)	13419 (10673 to 16857)	14197 (11469 to 17211)	5.80 (-13.37 to 26.77)
49 50 United Arab 51 Emirates 52	595 (477 to 725)	5742 (4546 to 7126)	864.58 (768.02 to 978.3)	1 (1 to 3)	13 (7 to 22)	939.61 (312.54 to 2260.01)	144 (93 to 219)	1401 (971 to 1965)	871.11 (531.13 to 1256.31)
53 United 54 55 Kingdom 56	150003 (132531 to 168508)	194529 (173985 to 215870)	29.68 (26.73 to 33.13)	856 (756 to 1056)	1793 (1533 to 1999)	109.50 (62.60 to 132.89)	37500 (30121 to 46024)	55171 (45323 to 66217)	47.12 (29.39 to 55.47)
57 United 58 Republic of 59 <sub>Tanzania</sub> 60	1121 (914 to 1369)	2891 (2330 to 3566)	157.88 (138.98 to 177.80)	86 (53 to 152)	181 (115 to 259)	111.26 (24.98 to 260.69)	4655 (2090 to 9955)	8565 (4988 to 14089)	83.97 (-7.81 to 290.41)

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2 3 4 United States 5 of America	982982 (846833 to 1129783)	762890 (712357 to 813654)	-22.39 (-29.48 to -14.49)	2171 (1940 to 2662)	5910 (4622 to 6464)	172.17 (80.73 to 199.18)	186357 (137531 to 243644)	215289 (175991 to 256059)	15.53 (-1.97 to 33.87)
7 8 United States 9 Virgin Islands 10	32 (27 to 39)	47 (39 to 58)	46.61 (32.66 to 61.87)	1 (0 to 1)	1 (1 to 1)	11.78 (-24.49 to 72.41)	26 (19 to 32)	23 (18 to 29)	-9.33 (-33.27 to 25.88)
11 12 13 <sup>Uruguay</sup> 14	586 (485 to 711)	685 (564 to 830)	16.85 (7.20 to 26.83)	10 (9 to 14)	22 (19 to 26)	123.02 (68.94 to 165.97)	339 (290 to 426)	572 (496 to 648)	68.83 (35.57 to 94.94)
15 16 Uzbekistan 17 18	10505 (8847 to 12563)	23340 (19452 to 27952)	122.19 (107.43 to 140.58)	48 (31 to 59)	73 (58 to 93)	51.36 (12.53 to 153.54)	4299 (3006 to 5336)	6869 (5391 to 8500)	59.77 (27.87 to 109.54)
19 20 <sub>Vanuatu</sub> 21 22	4 (3 to 5)	9 (7 to 11)	115.45 (98.23 to 135.09)	1 (0 to 1)	2 (1 to 2)	77.85 (12.27 to 189.96)	33 (17 to 55)	57 (33 to 92)	71.58 (-1.00 to 187.82)
<ul> <li>23 Venezuela</li> <li>24 (Bolivarian</li> <li>25 Republic of)</li> <li>26</li> </ul>	3817 (3268 to 4388)	8787 (7406 to 10382)	130.21 (113.08 to 147.54)	28 (19 to 32)	44 (31 to 59)	58.23 (11.55 to 165.19)	1676 (1316 to 1993)	2642 (2032 to 3372)	57.61 (25.64 to 101.69)
26 27 28 Viet Nam 29 30	4754 (3636 to 5967)	20278 (16050 to 25063)	326.50 (284.54 to 376.20)	221 (120 to 327)	177 (119 to 247)	-19.57 (-57.9 to 40.02)	6650 (4129 to 8928)	7419 (5510 to 9604)	11.56 (-26.71 to 73.67)
30 31 32 Yemen 33 34	1826 (1464 to 2237)	6284 (5044 to 7734)	244.20 (216.72 to 270.66)	14 (8 to 25)	44 (30 to 68)	217.58 (89.82 to 463.74)	772 (495 to 1411)	2423 (1790 to 3248)	213.69 (96.39 to 365.86)
35 36 Zambia 37	291 (236 to 350)	971 (790 to 1210)	233.83 (206.24 to 265.39)	35 (18 to 64)	55 (38 to 76)	57.07 (-21.84 to 226.50)	1941 (679 to 4527)	2548 (1621 to 3800)	31.27 (-46.88 to 283.23)
38 39 Zimbabwe 40	524 (430 to 644)	931 (757 to 1165)	77.84 (65.57 to 91.40)	22 (16 to 31)	43 (25 to 65)	98.08 (13.90 to 202.61)	1018 (652 to 1728)	1888 (1075 to 2968)	85.39 (11.43 to 204.97)
41 42	Abbrevia	tions: UI=u	uncertainty in	iterval.					

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Supplementary Table 3 Age-standardised prevalence, death and DALY rates for
inflammatory bower disease (IBD) by 204 countries or territories in 1990 and 2019,
and their temporal trends from 1990 to 2019

6 and their temporal trends from 1990 to 2019										
7	Age-stan	dardised prevale	ence rate	Age-s	tandardized dea	th rate	Age-standardized DALY rate			
8 9 <sub>Characteristics</sub>	per 100,000 population			per	100,000 popula	tion	per 1	100,000 populat	ion	
10	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	
11	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	
12 13 Afghanistan	21.95 (17.75	23.69 (19.05	0.57 (0.40 to	0.44 (0.22 to	0.43 (0.26 to	0.01 (-0.06	15.26 (8.26	14.58 (9.58	0.03 (-0.06	
14	to 26.86)	to 29.24)	0.74)	0.78)	0.64)	to 0.08)	to 26.64)	to 20.47)	to 0.12)	
15 16	119.15	116.19	0.01 (-0.06	1.65 (0.90 to	0.41 (0.27 to	-5.17 (-6.14	110.06	36.18 (25.65	-4.07 (-5.01	
16 Albania 17	(100.27 to	(97.53 to	to 0.09)	2.05)	0.61)	to -4.19)	(47.30 to	to 49.28)	to -3.12)	
18	140.7)	136.91)		2.00)	0.01)		143.55)	(0 1)120)		
19 20 <sup>Algeria</sup>	34.69 (30.01	39.54 (32.16	0.68 (0.53 to	0.25 (0.17 to	0.17 (0.13 to	-1.14 (-1.23	11.17 (8.26	9.93 (7.45 to	-0.28 (-0.38	
20 21	to 40.15)	to 48.88)	0.83)	0.37)	0.23)	to -1.04)	to 15.40)	12.97)	to -0.17)	
22 American	6.24 (5.14 to	6.14 (5.03 to	-0.22 (-0.35	1.54 (0.89 to	0.53 (0.37 to	-4.40 (-4.80	44.49 (26.51	15.67 (10.89	-4.23 (-4.59	
23 Samoa	7.41)	7.38)	to -0.09)	2.28)	0.90)	to -4.01)	to 63.51)	to 28.11)	to -3.86)	
24 25	108.82	112.31 (94.3	0.17 (0.11 to	0.70 (0.49 to	0.69 (0.41 to	0.03 (-0.06	29.98 (22.66	29.68 (20.92	0.02 (-0.03	
26 Andorra	(91.32 to	to 132.64)	0.22)	1.00)	1.01)	to 0.13)	to 38.91)	to 39.03)	to 0.07)	
27	128.78)		(							
28 29 Angola	7.20 (5.93 to	8.85 (7.31 to	0.59 (0.48 to	0.73 (0.43 to	0.62 (0.45 to	-0.60 (-0.66	23.37 (11.91	18.19 (12.6	-0.89 (-0.95	
30	9.02)	10.88)	0.71)	1.16)	0.89)	to -0.54)	to 42.94)	to 26.15)	to -0.83)	
31 Antigua and	31.33 (26.25	31.79 (26.42	0.10 (0.04 to	0.95 (0.70 to	0.67 (0.53 to	-1.77 (-2.08	31.60 (24.03	22.35 (17.9	-1.66 (-1.90	
32 Barbuda 33	to 37.78)	to 38.6)	0.16)	1.12)	0.91)	to -1.46)	to 36.76)	to 28.99)	to -1.42)	
34 Argentina	15.07 (12.24	15.98 (13.09	0.21 (0.19 to	0.27 (0.24 to		-0.10 (-0.25	9.25 (8.00 to	9.02 (7.72 to	-0.13 (-0.22	
35	to 17.99)	to 19.42)	0.23)	0.30)	0.31)	to 0.04)	10.66)	10.63)	to -0.05)	
36 37 <sup>Armenia</sup>	81.15 (67.51	86.67 (72.86	0.29 (0.26 to	0.25 (0.19 to	0.28 (0.21 to	0.72 (0.36 to	19.99 (15.55	20.5 (15.81	0.20 (0.05 to	
38	to 95.76)	to 104.56) 154.35	0.32)	0.30)	0.34)	1.09)	to 25.21)	to 26.35)	0.36)	
39 40 Australia	98.73 (82.47	(134.91 to	1.00 (0.72 to	0.54 (0.47 to	0.78 (0.56 to	2.23 (1.81 to	24.61 (19.22	35.58 (27.28	1.20 (0.98 to	
40 Australia 41	to 116.23)	175.51)	1.27)	0.66)	0.91)	2.66)	to 31.12)	to 45.33)	1.41)	
42	277.06	291.88					•			
43 44 Austria	(243.01 to	(260.14 to	0.19 (-0.09	0.87 (0.77 to	0.52 (0.43 to	-1.59 (-2.15	61.71 (48.41	54.31 (39.35	-0.39 (-0.65	
44 <sup>Austria</sup> 45	307.67)	327.43)	to 0.46)	1.13)	0.81)	to -1.03)	to 77.45)	to 71.37)	to -0.12)	
46	76.23 (63.23	81.93 (68.62	0.35 (0.20 to	0.22 (0.16 to	0.16 (0.11 to	-1.09 (-1.19	17.65 (13.27	16.2 (11.65	-0.36 (-0.44	
47 Azerbaijan	to 90.47)	to 99.02)	0.49)	0.28)	0.23)	to -1.00)	to 23.02)	to 21.65)	to -0.27)	
48 49	32.77 (27.60	28.72 (23.64	-0.27 (-0.39	0.59 (0.50 to	0.49 (0.39 to	-0.66 (-0.78	23.15 (19.78	19.04 (15.33	-0.72 (-0.81	
50 <sup>Bahamas</sup>	to 39.08)	to 35.44)	to -0.15)	0.68)	0.62)	to -0.53)	to 26.78)	to 23.86)	to -0.63)	
51	42.17 (36.27	44.05 (36.4	0.35 (0.18 to	0.26 (0.20 to	0.17 (0.13 to	-1.34 (-1.69	11.98 (9.36	10.05 (7.4 to	-0.53 (-0.63	
52 <sub>Bahrain</sub> 53	to 48.42)	to 53.11)	0.51)	0.33)	0.22)	to -0.99)	to 15.18)	13.28)	to -0.43)	
54	17.19 (13.90	21.62 (17.31	0.65 (0.53 to	1.00 (0.64 to	0.56 (0.35 to	-2.14 (-2.39	31.40 (20.47	18.1 (12.11	-2.03 (-2.15	
55 Bangladesh 56	to 21.66)	to 27)	0.77)	1.64)	0.83)	to -1.89)	to 45.16)	to 25.27)	to -1.92)	
57	70.62 (59.14	69.57 (58.9	0.04 (-0.02	0.42 (0.36 to	0.38 (0.30 to	-0.41 (-0.57	22.21 (18.13	20.02 (15.56	-0.42 (-0.48	
58	to 84.46)	to 83.59)	to 0.09)	0.48)	0.48)	to -0.25)	to 27.15)	to 25.32)	to -0.36)	
59 Belarus 60	82.25 (69.99	87.85 (73.61	0.38 (0.27 to	0.36 (0.26 to	0.38 (0.28 to	0.24 (0.09 to	22.33 (16.76	23.25 (17.89	0.17 (0.09 to	

Belgium

Belize

Benin

Bermuda

Bhutan

Bolivia

State of)

Bosnia and

Botswana

Brazil

Brunei

Darussalam

Bulgaria

39Burkina Faso

Burundi

Cabo Verde

Cambodia

Cameroon

Canada

55 Central African

Republic

Chad

25 Herzegovina

20<sub>(Plurinational</sub>

7.48 (6.20 to

9.10)

34.26 (28.75

to 41.82)

16.74 (13.31

to 21.03)

13.46 (11.31

to 16.36)

102.41

(88.37 to

118.99)

8.58 (7.14 to

10.52)

65.87 (57.91

to 74.92)

53.76 (43.58

to 66.16)

127.47

(108.71 to

149.68)

6.79 (5.57 to

8.47)

6.12 (5.03 to

7.50)

10.12 (8.33

to 12.38)

3.02 (2.34 to

3.74)

8.34 (6.88 to

10.38)

382.53

(367.54 to

397.57)

6.56 (5.39 to

8.20)

6.92 (5.73 to

8.53)

8.88 (7.27 to

10.87)

34.27 (28.46

to 40.73)

22.23 (18.11

to 27.62)

13.54 (11.36

to 16.33)

122.38

(107.08 to

140.67)

10.89 (8.88

to 13.6)

47.78 (41.6

to 54.51)

57.28 (46.33

to 70.04)

120.16

(101.94 to

142.65)

7.81 (6.46 to

9.56)

6.13 (5.06 to

7.50)

12.18 (9.88

to 14.93)

3.77 (3.01 to

4.61)

10.13 (8.33

to 12.46)

357.73

(323.05 to

393.88)

6.92 (5.75 to

8.49)

8.10 (6.65 to

9.90)

0.58 (0.47 to

0.69)

0.17 (0.09 to

0.25)

1.24 (1.11 to

1.38)

0.05 (0.00 to

0.10)

0.58 (0.55 to

0.61)

0.60 (0.44 to

0.76)

-0.87 (-1.09

to -0.65)

0.25 (0.24 to

0.27)

-0.16 (-0.29

to -0.03)

0.59 (0.41 to

0.77)

-0.09 (-0.19

to 0.01)

0.76 (0.65 to

0.88)

0.65 (0.57 to

0.72)

0.79 (0.68 to

0.90)

0.13 (-0.03

to 0.28)

0.16 (0.14 to

0.18)

0.68 (0.57 to

0.80)

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BMJ Open										
to 96.97)	to 104.11)	0.48)	0.48)	0.50)	0.39)	to 28.89)	to 29.87)			
83.42 (76.75 to 90.48)	143.07 (123.44 to 164.68)	1.68 (1.42 to 1.94)	0.76 (0.67 to 0.90)	0.97 (0.76 to 1.12)	0.24 (-0.90 to 1.40)	25.98 (21.36 to 31.07)	36.56 (28.88 to 45.93)			
22.80 (18.88	24.31 (20.10	0.35 (0.25 to	0.70 (0.48 to	0.61 (0.50 to	-1.14 (-1.52	26.21 (19.11	21.80 (18.03			
to 28.09)	to 29.68)	0.45)	0.90)	0.80)	to -0.76)	to 32.42)	to 27.26)			

0.45 (0.30 to

0.65)

0.36 (0.28 to

0.50)

0.55 (0.34 to

1.23)

0.40 (0.30 to

0.52)

0.45 (0.23 to

0.61)

0.64 (0.43 to

0.89)

0.45 (0.41 to

0.52)

1.48 (0.97 to

1.89)

0.33 (0.25 to

0.41)

0.67 (0.38 to

1.00)

0.73 (0.46 to

1.16)

0.25 (0.19 to

0.33)

0.35 (0.23 to

0.45)

0.38 (0.21 to

0.59)

0.56 (0.46 to

0.82)

0.86 (0.53 to

1.36)

0.58 (0.39 to

0.84)

-0.42 (-0.64

to -0.20)

-3.73 (-4.07

to -3.40)

-0.84 (-0.97

to -0.72)

-0.83 (-0.91

to -0.75)

-0.20 (-0.52

to 0.12)

-0.77 (-1.15

to -0.39)

0.01 (-0.16

to 0.19)

0.09 (-0.02

to 0.20)

1.13 (0.73 to

1.54)

0.56 (0.28 to

0.85)

0.15 (-0.07

to 0.37)

-2.05 (-2.56

to -1.54)

-1.44 (-1.54

to -1.34)

-1.69 (-1.94

to -1.43)

-2.43 (-3.11

to -1.75)

0.02 (-0.06

to 0.10)

-0.24 (-0.45

to -0.04)

17.20 (8.03

to 28.30)

28.26 (22.38

to 33.89)

21.23 (11.26

to 43.14)

22.17 (10.30

to 41.41)

27.68 (21.43

to 35.18)

20.94 (14.53

to 29.34)

23.70 (20.23

to 27.67)

36.51 (27.84

to 47.59)

28.31 (21.41

to 36.54)

21.41 (10.66

to 33.67)

22.15 (14.22

to 36.56)

12.86 (8.37

to 17.33)

14.51 (8.27

to 21.45)

18.12 (9.17

to 27.57)

74.34 (56.49

to 95.45)

26.29 (16.24

to 42.90)

20.08 (9.86

to 32.61)

15.67 (9.98

to 22.61)

14.3 (11.3 to

18.41)

15.82 (10.39

to 31.52)

12.73 (9.53

to 16.38)

29.74 (21.21

to 38.84)

20.3 (13.14

to 30.81)

19.51 (16.72

to 22.74)

32.76 (26.62

to 39.71)

27.62 (20.56

to 35.57)

22.52 (12.05

to 34.80)

20.85 (13.56

to 32.18)

8.69 (6.98 to

10.77)

8.98 (6.42 to

11.33)

13.36 (7.77

to 21.03)

64.91 (46.59

to 85.11)

25.47 (14.87

to 41.50)

19.16 (11.97

to 27.44)

0.48 (0.26 to

0.86)

0.89 (0.66 to

1.08)

0.68 (0.35 to

1.53)

0.50 (0.27 to

0.79)

0.46 (0.33 to

0.58)

0.70 (0.48 to

1.00)

0.48 (0.42 to

0.52)

1.52 (1.08 to

2.01)

0.26 (0.23 to

0.31)

0.61 (0.37 to

0.89)

0.69 (0.45 to

1.02)

0.33 (0.20 to

0.46)

0.50 (0.27 to

0.71)

0.54 (0.29 to

0.88)

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0.86 (0.55 to

1.38)

0.58 (0.32 to

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0.82 (0.35 to

1.28)

-1.22 (-1.49

to -0.95)

-0.50 (-0.70

to -0.30)

-2.73 (-3.00

to -2.46)

-1.18 (-1.27

to -1.10)

-2.04 (-2.15

to -1.94)

0.14 (-0.01

to 0.28)

-0.41 (-0.71

to -0.11)

-0.44 (-0.62

to -0.27)

-0.25 (-0.33

to -0.18)

0.00 (-0.21

to 0.21)

0.38 (0.15 to

0.62)

-0.20 (-0.42

to 0.03)

-2.12 (-2.50

to -1.74)

-1.86 (-1.96

to -1.77)

-1.43 (-1.66

to -1.20)

-0.31 (-0.41

to -0.21)

-0.07 (-0.13

to 0.00)

-0.36 (-0.55

to -0.16)

BMJ Open	
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3	30.30 (25.82	31.66 (27.25	0.29 (-0.09	0.46 (0.37 to	0.30 (0.26 to	-1.75 (-2.10	16.52 (13.59	11.96 (9.91	-1.10 (-1.28
4 Chile 5	to 35.36)	to 36.7)	to 0.67)	0.51)	0.38)	to -1.40)	to 19.03)	to 14.48)	to -0.91)
6	22.85 (18.98	47.06 (40.05	2.80 (2.41 to	0.86 (0.59 to	0.30 (0.24 to	-4.11 (-4.50	24.47 (17.88	13.1 (10.29	-2.36 (-2.54
7 <sup>China</sup>	to 27.15)	to 54.99)	3.19)	1.16)	0.35)	to -3.71)	to 30.19)	to 16.31)	to -2.18)
8 9 Colombia	29.55 (24.81	29.36 (24.89	-0.04 (-0.07	0.28 (0.25 to	0.29 (0.22 to	0.75 (0.38 to	12.89 (10.91	12.53 (9.75	0.36 (0.12 to
9 Colombia 10	to 34.95)	to 34.88)	to -0.01)	0.31)	0.38)	1.12)	to 15.21)	to 15.57)	0.60)
11	7.33 (6.01 to	7.78 (6.38 to	0.36 (0.24 to	0.83 (0.43 to	0.75 (0.48 to	-0.51 (-0.67	23.44 (10.67	20.58 (13.10	-0.63 (-0.84
12 Comoros 13	9.00)	9.69)	0.48)	1.44)	1.19)	to -0.36)	to 39.49)	to 30.54)	to -0.41)
14	9.67 (7.93 to	10.38 (8.57	0.30 (0.16 to	0.79 (0.56 to	0.66 (0.47 to	-0.58 (-0.75	23.58 (16.35	18.36 (13.15	-0.82 (-0.99
15 Congo	11.87)	to 12.74)	0.45)	1.16)	0.93)	to -0.41)	to 34.61)	to 25.90)	to -0.66)
16 170 July J	6.37 (5.18 to	6.17 (5.09 to	-0.21 (-0.35	1.64 (1.17 to	0.81 (0.53 to	-2.70 (-2.90	50.74 (35.37	24.94 (15.58	-2.70 (-2.88
17Cook Islands 18	7.65)	7.51)	to -0.06)	2.20)	1.11)	to -2.50)	to 72.08)	to 36.18)	to -2.51)
19	30.77 (25.88	31.40 (26.47	0.04 (0.03 to	0.14 (0.12 to	0.20 (0.14 to	1.04 (0.82 to	8.60 (6.81 to	10.14 (7.74	0.58 (0.47 to
20 <sup>Costa Rica</sup>	to 36.60)	to 37.15)	0.05)	0.16)	0.26)	1.26)	10.81)	to 12.91)	0.69)
21	8.08 (6.58 to	8.70 (7.15 to	0.43 (0.34 to	0.46 (0.23 to	0.40 (0.26 to	-0.71 (-0.97	15.45 (7.59	13.59 (8.56	-0.63 (-0.86
22 <sub>C ôte</sub> d'Ivoire 23	9.97)	10.96)	0.52)	0.80)	0.58)	to -0.45)	to 24.88)	to 19.48)	to -0.40)
24	166.42	203.79							
25 Croatia	(155.48 to	(188.71 to	0.64 (0.57 to	0.28 (0.24 to	0.41 (0.30 to	1.79 (1.42 to	33.08 (24.90	41.30 (30.43	0.79 (0.65 to
26 27	178.41)	220.14)	0.70)	0.42)	0.52)	2.17)	to 42.82)	to 53.17)	0.93)
28	30.31 (25.30	29.25 (23.94	-0.01 (-0.07	0.35 (0.23 to	0.23 (0.18 to	-2.04 (-2.48	14.22 (10.70	10.45 (8.37	-1.38 (-1.64
29 <sup>Cuba</sup>	to 36.52)	to 35.26)	to 0.06)	0.42)	0.29)	to -1.60)	to 16.97)	to 12.94)	to -1.12)
30 31 <sub>Cyprus</sub>	42.09 (35.82	58.44 (53.02	0.98 (0.85 to	2.09 (1.24 to	1.00 (0.76 to	-3.13 (-3.45	36.43 (25.10	22.06 (17.95	-2.26 (-2.48
31 Cyprus 32	to 49.01)	to 63.85)	1.11)	3.02)	1.32)	to -2.81)	to 47.83)	to 26.41)	to -2.03)
33		152.02				0.00.40			
34 35 <sup>Czechia</sup>	85.23 (71.89	(139.69 to	1.52 (1.33 to	0.54 (0.49 to	0.56 (0.42 to	0.80 (0.45 to	26.65 (21.98	35.40 (27.15	0.98 (0.90 to
36	to 102.44)	164.49)	1.71)	0.63)	0.69)	1.15)	to 32.43)	to 44.74)	1.06)
37 <sub>Democratic</sub>									
38 People's	15.93 (13.23	15.61 (12.96	-0.13 (-0.21	0.57 (0.33 to	0.41 (0.28 to	-1.10 (-1.20	17.24 (9.70	11.10 (8.17	-1.31 (-1.41
39 40 Republic of	to 19.03)	to 18.71)	to -0.06)	0.82)	0.59)	to -1.00)	to 27.63)	to 14.58)	to -1.21)
41 Korea									
42 Democratic	0.00				o <b></b> (o (o				
43 44 <sup>Republic</sup> of the	8.50 (6.93 to	7.80 (6.41 to	-0.45 (-0.71	0.71 (0.50 to	0.57 (0.40 to	-0.78 (-0.91	21.69 (14.31	17.22 (12.20	-0.82 (-0.97
45 Congo	10.44)	9.73)	to -0.20)	1.02)	0.82)	to -0.64)	to 32.28)	to 24.09)	to -0.66)
46	232.13	227.82							
47 48 Denmark	(210.74 to	(208.42 to	0.47 (0.29 to	0.53 (0.48 to	0.59 (0.50 to	0.01 (-0.61	46.68 (35.05	45.17 (34.12	0.13 (-0.02
48	255.89)	250.75)	0.65)	0.62)	0.68)	to 0.63)	to 59.60)	to 58.06)	to 0.29)
50	7.12 (5.93 to	9.07 (7.45 to	1.24 (1.04 to	0.60 (0.37 to	0.54 (0.36 to	-0.56 (-0.67	18.05 (10.87	15.83 (10.31	-0.67 (-0.82
51 Djibouti	8.73)	11.07)	1.45)	1.07)	0.89)	to -0.45)	to 32.37)	to 24.84)	to -0.53)
52 53 <sub>Dominica</sub>	29.23 (24.60	27.29 (22.61	-0.12 (-0.18	1.01 (0.79 to	0.76 (0.57 to	-1.20 (-1.28	34.22 (27.47	26 (20.19 to	-1.17 (-1.27
55 Dominica 54	to 35.45)	to 33.47)	to -0.07)	1.23)	1.02)	to -1.12)	to 41.24)	34.33)	to -1.07)
55 Dominican	25.16 (20.80	24.19 (19.90	0.16 (0.01 to	0.24 (0.19 to	0.24 (0.17 to	0.09 (-0.13	12.08 (9.46	10.73 (7.96	-0.27 (-0.50
56 57 <sup>Republic</sup>	to 30.54)	to 29.50)	0.32)	0.31)	0.32)	to 0.32)	to 15.94)	to 13.99)	to -0.04)
58	17.02 (15.04	19.97 (17.98	0.49 (0.39 to	0.23 (0.18 to	0.23 (0.17 to	0.55 (-0.03	10.90 (8.22	9.02 (6.84 to	-0.33 (-0.74
59 Ecuador	to 19.21)	to 22.11)	0.59)	0.31)	0.30)	to 1.13)	to 13.94)	11.09)	to 0.08)
60			/			,	· · · · /	/	

Page 57 of 70	

2									
3	39.84 (33.94	44.48 (36.34	0.26 (0.20 to	0.22 (0.13 to	0.21 (0.12 to	0.32 (0.07 to	11.25 (7.91	11.49 (8.21	0.19 (0.10 to
4 Egypt 5	to 46.00)	to 55.00)	0.32)	0.47)	0.35)	0.56)	to 16.51)	to 15.51)	0.27)
6	23.89 (19.87	24.71 (20.64	0.12 (0.05 to	0.36 (0.23 to	0.14 (0.11 to	-3.87 (-4.22	15.07 (11.16	7.25 (5.45 to	-2.87 (-3.18
7 El Salvador	to 28.45)	to 29.14)	0.19)	0.45)	0.20)	to -3.52)	to 18.78)	9.54)	to -2.56)
8 9 Equatorial	7.11 (5.84 to	10.89 (9.04	1.66 (1.48 to	0.76 (0.44 to	0.54 (0.33 to	-1.45 (-1.60	23.13 (13.07	14.77 (9.26	-1.89 (-2.04
9 10 Guinea	8.80)	to 13.36)	1.85)	1.28)	0.86)	to -1.30)	to 37.98)	to 22.66)	to -1.73)
11	6.35 (5.28 to	6.98 (5.79 to	0.26 (0.21 to	0.61 (0.39 to	0.77 (0.52 to	0.71 (0.52 to	20.05 (11.19	22.27 (15.26	0.34 (0.20 to
12 Eritrea 13	7.85)	8.43)	0.32)	0.96)	1.12)	0.89)	to 34.57)	to 32.30)	0.49)
13		103.71	1 12 (0 01 )	0.55 (0.46)	0.24 (0.26)	0.05 ( 0.60	20.55 (22.60	24.50 (10.40	1.07 ( 1.00
15 Estonia	71.59 (62.77	(90.72 to	1.12 (0.91 to	0.55 (0.46 to	0.34 (0.26 to	-2.35 (-2.68	28.55 (23.60	24.50 (18.49	-1.07 (-1.32
16 17	to 81.41)	118.15)	1.32)	0.61)	0.47)	to -2.02)	to 33.59)	to 31.62)	to -0.81)
10	8.30 (6.84 to	9.49 (7.76 to	0.49 (0.39 to	0.55 (0.33 to	0.60 (0.42 to	0.53 (0.14 to	17.33 (9.97	17.93 (12.43	0.38 (0.14 to
19	10.21)	11.68)	0.58)	0.83)	0.83)	0.91)	to 26.06)	to 25.37)	0.63)
20 21 Ethionic	5.88 (4.90 to	6.78 (5.64 to	0.53 (0.48 to	0.84 (0.59 to	0.72 (0.42 to	-0.67 (-0.82	26.74 (17.05	19.04 (11.93	-1.33 (-1.48
21 Ethiopia 22	7.15)	8.29)	0.59)	1.34)	1.07)	to -0.52)	to 45.16)	to 28.10)	to -1.18)
23	4.78 (3.90 to	4.70 (3.85 to	-0.12 (-0.34	0.35 (0.26 to	0.26 (0.19 to	-1.16 (-1.28	10.67 (8.31	8.17 (5.94 to	-1.08 (-1.21
24	5.75)	5.71)	to 0.09)	0.45)	0.34)	to -1.03)	to 13.70)	10.77)	to -0.95)
25 26	162.00	286.76	1.86 (1.78 to	0.47 (0.35 to	0.29 (0.25 to	-2.22 (-2.47	33.34 (25.19	47.57 (33.68	1.06 (0.98 to
27 <sup>Finland</sup>	(150.44 to	(256.44 to	1.80 (1.78 to	0.55)	0.29 (0.25 to	-2.22 (-2.47 to -1.96)	to 43.04)	to 63.99)	1.14)
28	173.8)	318.38)	1.74)	0.55)	0.54)	10 -1.90)	10 43.04)	10 03.77)	1.14)
29		136.71							
.30	96.03 (87.62		1.43 (1.34 to	1.08 (0.93 to	1.21 (0.73 to	0.74 (0.46 to	31.92 (26.78	39.44 (31.13	1.07 (0.94 to
30 31 <sup>France</sup>	96.03 (87.62 to 104.59)	(123.31 to	1.43 (1.34 to	1.08 (0.93 to	1.21 (0.73 to	0.74 (0.46 to	31.92 (26.78 to 37.48)	39.44 (31.13 to 48.47)	1.07 (0.94 to
31 <sup>France</sup> 32	96.03 (87.62 to 104.59)	(123.31 to 151.14)	1.43 (1.34 to 1.53)	1.08 (0.93 to 1.20)	1.21 (0.73 to 1.42)	0.74 (0.46 to 1.02)	31.92 (26.78 to 37.48)	39.44 (31.13 to 48.47)	1.07 (0.94 to 1.20)
31 <sup>France</sup> 32 33				1.20) 0.61 (0.41 to					
31 <sup>France</sup> 32	to 104.59)	151.14)	1.53)	1.20)	1.42)	1.02)	to 37.48)	to 48.47)	1.20)
31 France 32 33 34 Gabon 35 36 Cambia	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85
<ul> <li>31 France</li> <li>32</li> <li>33</li> <li>34 Gabon</li> <li>35</li> <li>36</li> <li>37 Gambia</li> </ul>	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28)
31       France         32       -         33       -         34       Gabon         35       -         36       -         37       Gambia         38       -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38
31         France           32         -           33         Gabon           35         -           36         -           37         Gambia           38         -           39         Georgia           40         -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       41	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38
31         France           32         -           33         Gabon           35         -           36         -           37         Gambia           38         -           39         Georgia           40         -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41)
31       France         32       -         33       Gabon         35       -         36       Gambia         37       Georgia         40       -         41       -         42       Germany         43       -	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       45	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27
<ul> <li>31 France</li> <li>32</li> <li>33</li> <li>34 Gabon</li> <li>35</li> <li>36</li> <li>37 Gambia</li> <li>38</li> <li>39 Georgia</li> <li>40</li> <li>41</li> <li>42 Germany</li> <li>43</li> <li>44</li> <li>45</li> </ul>	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77)
31France323334Gabon353637Gambia3839Georgia404142434445464748Greece	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82) 0.23 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85
31       France         32       Gabon         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       Germany         45       Ghana         47       Greece         49       Greece	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Georgia         42       Germany         43       Germany         44       Ghana         45       Ghana         47       Greece         49       50         50       51	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82) 0.23 (0.19 to	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85
31France323334Gabon353637Gambia3839Georgia4041424344454647484950515152	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75)	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to 0.30)	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82) 0.23 (0.19 to 0.27)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92 to 0.20)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85 to -0.71)
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Georgia         42       Germany         43       Germany         44       Greece         45       Ghana         47       Greece         49       Greenland         50       Greenland         51       Greenland         53       Greenland	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49)	$\begin{array}{c} 1.53)\\ 0.53\ (0.51\ to\\ 0.56)\\ -0.10\ (-0.21\\ to\ 0.01)\\ 0.15\ (0.08\ to\\ 0.22)\\ 1.09\ (0.54\ to\\ 1.64)\\ 0.73\ (0.63\ to\\ 0.83)\\ -0.98\ (-1.20\\ to\ -0.75)\\ 0.34\ (0.27\ to\\ 0.40)\\ \end{array}$	$\begin{array}{c} 1.20 \\ \hline 0.61 & (0.41 \ to \\ 0.96 ) \\ \hline 0.58 & (0.34 \ to \\ 0.92 ) \\ \hline 0.29 & (0.18 \ to \\ 0.39 ) \\ \hline 0.96 & (0.79 \ to \\ 1.60 ) \\ \hline 0.70 & (0.35 \ to \\ 1.24 ) \\ \hline 0.26 & (0.22 \ to \\ 0.30 ) \\ \hline 0.57 & (0.45 \ to \\ 0.71 ) \end{array}$	1.42) 0.53 (0.38 to 0.76) 0.44 (0.29 to 0.60) 0.29 (0.19 to 0.37) 1.94 (1.46 to 2.20) 0.55 (0.31 to 0.82) 0.23 (0.19 to 0.27) 0.74 (0.38 to 0.96)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92 to 0.20) 1.07 (0.80 to 1.34)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15)	1.20) -0.71 (-0.88 to -0.54) -1.56 (-1.85 to -1.28) 0.02 (-0.38 to 0.41) 1.80 (1.57 to 2.02) -1.02 (-1.27 to -0.77) -0.78 (-0.85 to -0.71) 0.36 (0.24 to 0.47)
31France323334Gabon353637Gambia3839Georgia4041424344454647484950515152	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to $0.01$ ) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to $-0.75$ ) 0.34 (0.27 to 0.40) 0.03 (-0.05	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to 0.30) 0.57 (0.45 to 0.71) 1.34 (1.06 to	1.42) 0.53 (0.38 to) 0.76) 0.44 (0.29 to) 0.60) 0.29 (0.19 to) 0.37) 1.94 (1.46 to) 2.20) 0.55 (0.31 to) 0.82) 0.23 (0.19 to) 0.27) 0.74 (0.38 to) 0.96) 1.24 (1.03 to)	1.02) -0.49 (-0.70 to -0.28) -1.52 (-1.81 to -1.24) 0.18 (-1.12 to 1.50) 3.73 (3.26 to 4.20) -0.97 (-1.23 to -0.70) -0.36 (-0.92 to 0.20) 1.07 (0.80 to 1.34) -0.55 (-0.68	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       Gerece         45       Ghana         47       Greece         50       Greenland         51       Greenland         52       Grenada         53       Grenada         54       Grenada	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74 to 29.02)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03 to 30.13)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75) 0.34 (0.27 to 0.40) 0.03 (-0.05 to 0.12)	$\begin{array}{c} 1.20 \\ 0.61 & (0.41 \text{ to} \\ 0.96 ) \\ 0.58 & (0.34 \text{ to} \\ 0.92 ) \\ 0.29 & (0.18 \text{ to} \\ 0.39 ) \\ 0.96 & (0.79 \text{ to} \\ 1.60 ) \\ 0.70 & (0.35 \text{ to} \\ 1.24 ) \\ 0.26 & (0.22 \text{ to} \\ 0.30 ) \\ 0.57 & (0.45 \text{ to} \\ 0.71 ) \\ 1.34 & (1.06 \text{ to} \\ 1.62 ) \end{array}$	$\begin{array}{c} 1.42)\\ 0.53\ (0.38\ to\\ 0.76)\\ 0.44\ (0.29\ to\\ 0.60)\\ 0.29\ (0.19\ to\\ 0.37)\\ 1.94\ (1.46\ to\\ 2.20)\\ 0.55\ (0.31\ to\\ 0.82)\\ 0.23\ (0.19\ to\\ 0.27)\\ 0.74\ (0.38\ to\\ 0.96)\\ 1.24\ (1.03\ to\\ 1.52)\\ \end{array}$	1.02) -0.49 (-0.70) to $-0.28$ ) -1.52 (-1.81) to $-1.24$ ) 0.18 (-1.12) to $1.50$ ) 3.73 (3.26 to) 4.20) -0.97 (-1.23) to $-0.70$ ) -0.36 (-0.92) to $0.20$ ) 1.07 (0.80 to) 1.34) -0.55 (-0.68) to $-0.41$ )	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58 to 52.74)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58 to 46.61)	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73 to $-0.56$ )
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       Greece         45       Ghana         47       Greece         49       Greece         50       Greenland         51       Greenada         52       Greenada         53       Greenada         54       Greenada         55       Greenada         56       Greenada	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74 to 29.02) 6.83 (5.65 to	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03 to 30.13) 6.54 (5.35 to	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75) 0.34 (0.27 to 0.40) 0.03 (-0.05 to 0.12) -0.18 (-0.35	1.20) 0.61 (0.41 to 0.96) 0.58 (0.34 to 0.92) 0.29 (0.18 to 0.39) 0.96 (0.79 to 1.60) 0.70 (0.35 to 1.24) 0.26 (0.22 to 0.30) 0.57 (0.45 to 0.71) 1.34 (1.06 to 1.62) 0.33 (0.26 to	1.42) 0.53 (0.38 to) 0.76) 0.44 (0.29 to) 0.29 (0.19 to) 0.29 (0.19 to) 0.37) 1.94 (1.46 to) 2.20) 0.55 (0.31 to) 0.23 (0.19 to) 0.23 (0.19 to) 0.27) 0.74 (0.38 to) 0.96) 1.24 (1.03 to) 1.52) 0.16 (0.12 to)	1.02) -0.49 (-0.70) to $-0.28$ ) -1.52 (-1.81) to $-1.24$ ) 0.18 (-1.12) to $1.50$ ) 3.73 (3.26 to 4.20) -0.97 (-1.23) to $-0.70$ ) -0.36 (-0.92) to $0.20$ ) 1.07 (0.80 to 1.34) -0.55 (-0.68) to $-0.41$ ) -3.00 (-3.55)	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58 to 52.74) 9.01 (7.19 to	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58 to 46.61) 5.39 (4.11 to	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73 to $-0.56$ ) -2.12 (-2.65
31       France         32       33         34       Gabon         35       Gambia         36       Gambia         37       Georgia         40       Georgia         41       Germany         43       Germany         44       Greece         45       Ghana         47       Greece         49       Greenland         50       Greenland         51       Greenada         52       Greenada         53       Greenada         54       Greenada	to 104.59) 9.49 (7.90 to 11.62) 8.70 (7.11 to 10.56) 84.45 (71.53 to 99.72) 104.26 (89.74 to 121.91) 10.54 (8.69 to 12.71) 97.92 (82.43 to 113.83) 144.67 (122.01 to 170.01) 24.13 (19.74 to 29.02)	151.14) 11.27 (9.27 to 13.92) 8.81 (7.23 to 10.96) 87.97 (73.75 to 104.83) 214.93 (188.62 to 243.64) 12.26 (10.11 to 14.88) 78.66 (70.88 to 87.04) 163.39 (138.74 to 188.49) 24.31 (20.03 to 30.13)	1.53) 0.53 (0.51 to 0.56) -0.10 (-0.21 to 0.01) 0.15 (0.08 to 0.22) 1.09 (0.54 to 1.64) 0.73 (0.63 to 0.83) -0.98 (-1.20 to -0.75) 0.34 (0.27 to 0.40) 0.03 (-0.05 to 0.12)	$\begin{array}{c} 1.20 \\ 0.61 & (0.41 \text{ to} \\ 0.96 ) \\ 0.58 & (0.34 \text{ to} \\ 0.92 ) \\ 0.29 & (0.18 \text{ to} \\ 0.39 ) \\ 0.96 & (0.79 \text{ to} \\ 1.60 ) \\ 0.70 & (0.35 \text{ to} \\ 1.24 ) \\ 0.26 & (0.22 \text{ to} \\ 0.30 ) \\ 0.57 & (0.45 \text{ to} \\ 0.71 ) \\ 1.34 & (1.06 \text{ to} \\ 1.62 ) \end{array}$	$\begin{array}{c} 1.42)\\ 0.53\ (0.38\ to\\ 0.76)\\ 0.44\ (0.29\ to\\ 0.60)\\ 0.29\ (0.19\ to\\ 0.37)\\ 1.94\ (1.46\ to\\ 2.20)\\ 0.55\ (0.31\ to\\ 0.82)\\ 0.23\ (0.19\ to\\ 0.27)\\ 0.74\ (0.38\ to\\ 0.96)\\ 1.24\ (1.03\ to\\ 1.52)\\ \end{array}$	1.02) -0.49 (-0.70) to $-0.28$ ) -1.52 (-1.81) to $-1.24$ ) 0.18 (-1.12) to $1.50$ ) 3.73 (3.26 to) 4.20) -0.97 (-1.23) to $-0.70$ ) -0.36 (-0.92) to $0.20$ ) 1.07 (0.80 to) 1.34) -0.55 (-0.68) to $-0.41$ )	to 37.48) 18.69 (12.11 to 28.60) 19.12 (10.73 to 31.19) 20.37 (15.24 to 26.41) 35.51 (28.44 to 47.28) 24.11 (11.81 to 39.44) 19.2 (14.17 to 25.49) 34.12 (26.01 to 44.17) 44.27 (36.58 to 52.74)	to 48.47) 15.27 (10.62 to 21.51) 14.25 (9.59 to 19.10) 20.25 (15.35 to 26.28) 64.06 (51.49 to 77.71) 18.5 (10.85 to 26.95) 15.88 (11.92 to 20.55) 38.3 (28.36 to 50.15) 38.43 (32.58 to 46.61)	1.20) -0.71 (-0.88 to $-0.54$ ) -1.56 (-1.85 to $-1.28$ ) 0.02 (-0.38 to $0.41$ ) 1.80 (1.57 to 2.02) -1.02 (-1.27 to $-0.77$ ) -0.78 (-0.85 to $-0.71$ ) 0.36 (0.24 to 0.47) -0.64 (-0.73 to $-0.56$ )

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0.32)	0.38)	0.37)	1.92

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Guinea

8 Guinea-Bissau

to 26.13)	to 28.11)	0.32)	0.38)	0.37)	1.92)	to 18.2)	to 14.91)	1.24)
7.53 (6.18 to	8.61 (7.06 to	0.61 (0.49 to	0.43 (0.18 to	0.40 (0.21 to	-0.36 (-0.50	16.9 (6.31 to	14.41 (7.36	-0.58 (-0.70
9.35)	10.53)	0.74)	0.86)	0.60)	to -0.22)	29.14)	to 21.95)	to -0.47)
7.32 (5.99 to	8.43 (6.92 to	0.63 (0.50 to	0.75 (0.36 to	0.61 (0.4 to	-0.81 (-0.93	26.39 (11.34	20.54 (12.76	-0.94 (-1.07
9.06)	10.32)	0.76)	1.18)	0.85)	to -0.68)	to 44.49)	to 28.9)	to -0.80)
23.56 (19.43	22.95 (18.93	0.06 (-0.03	1.19 (0.97 to	1.02 (0.76 to	-0.53 (-0.70	40.69 (32.87	35.43 (26.51	-0.46 (-0.59
to 28.53)	to 28.26)	to 0.15)	1.41)	1.33)	to -0.35)	to 48.37)	to 46.07)	to -0.32)
20.11 (16.54	19.43 (16.14	0.07 (-0.03	1.41 (0.74 to	1.08 (0.61 to	-0.77 (-0.89	52.02 (22.41	36.86 (19.94	-0.94 (-1.12
to 24.88)	to 24.31)	to 0.17)	2.12)	1.59)	to -0.65)	to 92.43)	to 54.22)	to -0.77)
22.83 (18.97	23.93 (19.84	0.18 (0.14 to	0.72 (0.46 to	0.83 (0.51 to	0.87 (0.73 to	28.54 (19.06	24.37 (15.88	-0.38 (-0.43
to 27.11)	to 28.49)	0.23)	0.99)	1.15)	1.02)	to 38.67)	to 32.67)	to -0.32)
199.20	332.82	2.13 (1.78 to	0 61 (0 59 to	0 56 (0 15 to	0.62 ( 1.04	10 22 (20 21	64 24 (47 60	1 15 (0 95 to
(181.71 to	(309.79 to		0.64 (0.58 to	0.56 (0.45 to	-0.62 (-1.04	48.33 (38.31	64.34 (47.69	1.15 (0.85 to
219.68)	356.72)	2.48)	0.82)	0.71)	to -0.20)	to 59.55)	to 82.55)	1.46)
136.42	210.18	0.84 (0.50 to	0.67 (0.57 to	0.65 (0.51 to	0.14 (-0.01	33.49 (26.34	42.38 (31.83	0 47 (0 22 4-
(115.41 to	(180.43 to	0.84 (0.59 to	0.78)		to 0.29)			0.47 (0.33 to 0.62)
161.21)	243.51)	1.09)	0.78)	0.75)	10 0.29)	to 42.36)	to 54.83)	0.02)
20.68 (16.76	20.34 (16.57	0.18 (-0.03	0.63 (0.43 to	0.40 (0.29 to	-1.93 (-2.11	20.11 (13.58	13.04 (9.44	-1.73 (-1.86
to 25.67)	to 24.97)	to 0.38)	0.91)	0.53)	to -1.74)	to 26.72)	to 16.5)	to -1.61)
3.37 (2.70 to	4.16 (3.37 to	0.74 (0.60 to	0.77 (0.37 to	0.55 (0.33 to	-1.42 (-1.56	19.48 (11.70	11.66 (8.16	-2.04 (-2.17
4.07)	5.00)	0.88)	1.04)	0.70)	to -1.29)	to 24.6)	to 14.98)	to -1.91)
41.07 (33.51	44.80 (36.70	0.29 (0.02 to	0.22 (0.12 to	0.19 (0.08 to	-0.11 (-0.64	11.09 (8.34	11.03 (7.60	0.12 (-0.02
to 50.84)	to 55.07)	0.57)	0.34)	0.24)	to 0.42)	to 14.22)	to 14.22)	to 0.25)
19.71 (16.52	28.11 (23.22	1.43 (1.27 to	0.29 (0.20 to	0.19 (0.15 to	-1.58 (-1.76	13.75 (9.61	10.42 (8.08	-0.96 (-1.14
to 23.39)	to 34.20)	1.59)	0.42)	0.27)	to -1.39)	to 19.18)	to 13.32)	to -0.78)
90.59 (75.89	97.87 (84.83	0.42 (0.35 to	0.87 (0.76 to	0.66 (0.53 to	-1.61 (-2.56	29.44 (24.40	25.50 (20.1	-0.80 (-1.30
to 107.72)	to 112.53)	0.49)	0.96)	0.84)	to -0.66)	to 35.63)	to 32.09)	to -0.30)
70.49 (59.79	70.21 (62.42	-0.08 (-0.20	0.47 (0.41 to	0.38 (0.32 to	-1.01 (-1.36	21.15 (17.17	18.50 (14.69	-0.65 (-0.76
to 83.85)	to 78.72)	to 0.05)	0.53)	0.51)	to -0.66)	to 26.12)	to 23.20)	to -0.54)

8 Guin 9	lea-Dissau	9.06)	10.32)	0.76)	1.18)	0.85)	to -0.68)	to 44.49)	to 28.9)	to -0.80)
10		23.56 (19.43	22.95 (18.93	0.06 (-0.03	1.19 (0.97 to	1.02 (0.76 to	-0.53 (-0.70	40.69 (32.87	35.43 (26.51	-0.46 (-0.59
11	Buyana	to 28.53)	to 28.26)	to 0.15)	1.41)	1.33)	to -0.35)	to 48.37)	to 46.07)	to -0.32)
12 13	TT '.'	20.11 (16.54	19.43 (16.14	0.07 (-0.03	1.41 (0.74 to	1.08 (0.61 to	-0.77 (-0.89	52.02 (22.41	36.86 (19.94	-0.94 (-1.12
14	Haiti	to 24.88)	to 24.31)	to 0.17)	2.12)	1.59)	to -0.65)	to 92.43)	to 54.22)	to -0.77)
15	,	22.83 (18.97	23.93 (19.84	0.18 (0.14 to	0.72 (0.46 to	0.83 (0.51 to	0.87 (0.73 to	28.54 (19.06	24.37 (15.88	-0.38 (-0.43
10	onduras	to 27.11)	to 28.49)	0.23)	0.99)	1.15)	1.02)	to 38.67)	to 32.67)	to -0.32)
17 18		199.20	332.82	0.10 (1.70 )	0 (1 (0 50 )	0.56 (0.45)	0.60 ( 1.04	40.00 (20.01	(1 24 (17 (0	1 15 (0 05 (
	ungary	(181.71 to	(309.79 to	2.13 (1.78 to	0.64 (0.58 to	0.56 (0.45 to	-0.62 (-1.04	48.33 (38.31	64.34 (47.69	1.15 (0.85 to
20		219.68)	356.72)	2.48)	0.82)	0.71)	to -0.20)	to 59.55)	to 82.55)	1.46)
21 22		136.42	210.18	0.84 (0.50 to	0 (7 (0 57 +-	0 (5 (0 51 4-	0.14 ( 0.01	22 40 (26 24	40.00 (21.02	0 47 (0 22 4-
	celand	(115.41 to	(180.43 to	0.84 (0.59 to	0.67 (0.57 to	0.65 (0.51 to	0.14 (-0.01	33.49 (26.34 to 42.26)	42.38 (31.83	0.47 (0.33  to
24		161.21)	243.51)	1.09)	0.78)	0.75)	to 0.29)	to 42.36)	to 54.83)	0.62)
25 26	T., J'.,	20.68 (16.76	20.34 (16.57	0.18 (-0.03	0.63 (0.43 to	0.40 (0.29 to	-1.93 (-2.11	20.11 (13.58	13.04 (9.44	-1.73 (-1.86
20	India	to 25.67)	to 24.97)	to 0.38)	0.91)	0.53)	to -1.74)	to 26.72)	to 16.5)	to -1.61)
28 In	donasia	3.37 (2.70 to	4.16 (3.37 to	0.74 (0.60 to	0.77 (0.37 to	0.55 (0.33 to	-1.42 (-1.56	19.48 (11.70	11.66 (8.16	-2.04 (-2.17
29 <sup>Inc</sup> 30	donesia	4.07)	5.00)	0.88)	1.04)	0.70)	to -1.29)	to 24.6)	to 14.98)	to -1.91)
31 <sup>Iran</sup>	(Islamic	41.07 (33.51	44.80 (36.70	0.29 (0.02 to	0.22 (0.12 to	0.19 (0.08 to	-0.11 (-0.64	11.09 (8.34	11.03 (7.60	0.12 (-0.02
-	oublic of)	to 50.84)	to 55.07)	0.57)	0.34)	0.24)	to 0.42)	to 14.22)	to 14.22)	to 0.25)
33 34	Iraq	19.71 (16.52	28.11 (23.22	1.43 (1.27 to	0.29 (0.20 to	0.19 (0.15 to	-1.58 (-1.76	13.75 (9.61	10.42 (8.08	-0.96 (-1.14
34 35	naq	to 23.39)	to 34.20)	1.59)	0.42)	0.27)	to -1.39)	to 19.18)	to 13.32)	to -0.78)
36	reland	90.59 (75.89	97.87 (84.83	0.42 (0.35 to	0.87 (0.76 to	0.66 (0.53 to	-1.61 (-2.56	29.44 (24.40	25.50 (20.1	-0.80 (-1.30
37	Icialiu	to 107.72)	to 112.53)	0.49)	0.96)	0.84)	to -0.66)	to 35.63)	to 32.09)	to -0.30)
38 39 j	Israel	70.49 (59.79	70.21 (62.42	-0.08 (-0.20	0.47 (0.41 to	0.38 (0.32 to	-1.01 (-1.36	21.15 (17.17	18.50 (14.69	-0.65 (-0.76
40	Israel	to 83.85)	to 78.72)	to 0.05)	0.53)	0.51)	to -0.66)	to 26.12)	to 23.20)	to -0.54)
41		261.58	227.51	-0.24 (-0.43	0.44 (0.39 to	0.76 (0.55 to	2.55 (2.03 to	49.44 (36.73	46.95 (35.41	0.17 (0.00 to
42 43	Italy	(226.94 to	(200.83 to	to -0.05)	0.70)	0.85)	3.06)	to 63.71)	to 59.78)	0.34)
44		297.14)	254.27)	10 0.057	0.70)	0.057	5.00)	10 05.71)	10 59.10)	0.54)
45 	amaica	29.63 (24.88	29.42 (24.46	0.15 (0.05 to	0.30 (0.23 to	0.24 (0.17 to	-1.45 (-1.78	14.86 (11.53	11.50 (8.84	-1.28 (-1.50
46 <sup>Ja</sup> 47		to 35.60)	to 35.27)	0.25)	0.35)	0.33)	to -1.12)	to 17.70)	to 14.50)	to -1.06)
48		151.17	291.90	1.48 (1.08 to	0.25 (0.18 to	0.11 (0.09 to	-2.39 (-2.83	27.14 (19.46	46.58 (31.41	1.21 (0.88 to
	Japan	(125.74 to	(251.75 to	1.88)	0.27)	0.16)	to -1.95)	to 36.26)	to 63.54)	1.54)
50 51		179.69)	336.57)		•					
52		69.20 (60.07	113.51	2.51 (2.23 to	0.43 (0.30 to	0.23 (0.18 to	-2.62 (-2.98	20.68 (15.47	22.01 (16.06	0.46 (0.34 to
55	ordan	to 79.85)	(95.78 to	2.79)	0.59)	0.30)	to -2.26)	to 26.15)	to 29.65)	0.58)
54 55		,	133.87)	,	,					
	zakhstan	80.02 (67.16	81.77 (68.13	0.12 (0.06 to	0.57 (0.41 to	0.46 (0.37 to	-1.26 (-1.68	30.23 (24.06	26.97 (21.78	-0.74 (-1.02
57		to 96.26)	to 97.46)	0.18)	0.72)	0.56)	to -0.85)	to 37.42)	to 33.61)	to -0.45)
58 50 k	Kenya	6.80 (5.68 to	8.33 (6.99 to	0.31 (0.19 to	0.81 (0.43 to	0.84 (0.50 to	0.31 (0.22 to	21.25 (13.20	21.31 (13.76	0.26 (0.16 to
59 <sup>r</sup> 60		8.23)	10.12)	0.42)	1.44)	1.26)	0.40)	to 36.93)	to 30.78)	0.36)
-										

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1 2									
3	4.05 (3.25 to	3.55 (2.90 to	-0.69 (-0.88	1.81 (0.99 to	1.08 (0.68 to	-2.13 (-2.29	53.42 (24.47	31.83 (17.58	-2.07 (-2.20
4 Kiribati 5	4.96)	4.32)	to -0.51)	2.71)	1.67)	to -1.98)	to 92.59)	to 55.40)	to -1.93)
6	55.67 (51.70	54.34 (45.07	0.09 (-0.06	0.19 (0.14 to	0.15 (0.12 to	-0.66 (-1.06	13.39 (10.47	11.73 (8.74	-0.33 (-0.50
7 <sup>Kuwait</sup>	to 60.02)	to 65.64)	to 0.25)	0.22)	0.20)	to -0.25)	to 16.77)	to 15.53)	to -0.15)
8 9 <sub>Kyrgyzstan</sub>	73.48 (61.75	73.31 (61.61	-0.03 (-0.10	0.42 (0.29 to	0.19 (0.16 to	-3.52 (-3.86	28 (21.04 to	17.37 (13.34	-2.11 (-2.28
10	to 87.12)	to 87.09)	to 0.04)	0.50)	0.25)	to -3.19)	34.06)	to 22.37)	to -1.94)
11 <sub>Lao</sub> People's	2.98 (2.32 to	3.67 (2.95 to	0.79 (0.74 to	0.45 (0.22 to	0.26 (0.14 to	-2.40 (-2.60	13.04 (6.62	6.97 (4.13 to	-2.47 (-2.65
12 13 Democratic	3.69)	4.55)	0.83)	0.43 (0.22 to	0.41)	to -2.19)	to 19.19)	11.24)	to -2.30)
14 Republic	0.07)		0.00)	0.12)	0)				(0 2.00)
15 16 <sub>Latvia</sub>	103.47	123.78	0.42 (0.33 to	0.34 (0.29 to	0.37 (0.30 to	0.22 (-0.08	25.74 (20.10	28.66 (21.84	0.14 (-0.02
10 Latvia 17	(89.32 to	(108.48 to	0.50)	0.42)	0.48)	to 0.51)	to 32.35)	to 36.61)	to 0.29)
18	119.13)	139.23)						,	
19 20 <sup>Lebanon</sup>	33.16 (27.13	46.20 (37.84	1.23 (1.00 to	0.14 (0.10 to	0.15 (0.08 to	0.32 (0.10 to	8.48 (6.32 to	10.18 (7.34	0.79 (0.65 to
20	to 41.07)	to 56.68)	1.47)	0.21)	0.23)	0.55)	11.24)	to 13.75)	0.93)
22 Lesotho	7.67 (6.36 to	8.77 (7.23 to	0.48 (0.40 to	0.55 (0.36 to	0.69 (0.48 to	1.08 (0.85 to	16.56 (10.77	20.29 (13.61	1.06 (0.87 to
23 24	9.34)	10.83)	0.57)	0.8)	0.98)	1.31)	to 23.28)	to 29.06)	1.26)
25 Liberia	7.84 (6.42 to	8.46 (6.99 to	0.57 (0.33 to	0.52 (0.23 to	0.42 (0.26 to	-0.84 (-1.09	19.69 (7.54	13.96 (8.48	-1.16 (-1.44
26	9.75) 23.56 (19.39	10.34) 25.77 (21.21	0.80) 0.56 (0.29 to	0.92) 0.21 (0.13 to	0.62) 0.22 (0.15 to	to -0.60) 0.11 (-0.02	to 32.92) 8.88 (6.41 to	to 21.59) 9.05 (6.69 to	to -0.88) 0.21 (0.11 to
27 <sub>Libya</sub> 28	to 28.73)	to 31.41)	0.30 (0.29 to	0.21 (0.13 to	0.22 (0.15 to	to 0.24)	12.85)	11.82)	0.21 (0.11 to
29	10 20.75)	133.41	0.04)	0.57)	0.31)	10 0.24)	12.03)	11.02)	0.51)
30 21 Lithuania	109.21 (95.7	(123.84 to	0.84 (0.76 to	0.32 (0.24 to	0.33 (0.26 to	0.13 (-0.20	25.36 (19.61	28.75 (21.98	0.49 (0.33 to
31 <sup>Lithuania</sup> 32	to 123.65)	142.65)	0.92)	0.37)	0.42)	to 0.47)	to 31.92)	to 36.27)	0.65)
33	166.34	187.63							
34 35 <sup>Luxembourg</sup>	(145.24 to	(163.86 to	0.37 (0.22 to	0.96 (0.84 to	0.97 (0.72 to	0.55 (0.30 to	42.53 (33.57	43.90 (33.95	0.27 (0.15 to
36	189.85)	213.76)	0.53)	1.10)	1.16)	0.80)	to 52.29)	to 55.68)	0.38)
37	6.62 (5.44 to	7.25 (5.99 to	0.38 (0.29 to	0.53 (0.32 to	0.59 (0.40 to	0.45 (0.34 to	17.91 (8.95	16.98 (11.97	-0.03 (-0.18
38 Madagascar 39	8.22)	9.04)	0.48)	0.88)	0.88)	0.56)	to 28.15)	to 24.64)	to 0.13)
40	5.73 (4.70 to	6.33 (5.28 to	0.44 (0.40 to	0.71 (0.49 to	0.67 (0.46 to	-0.26 (-0.39	24.10 (13.49	19.08 (13.47	-0.85 (-1.02
40 Malawi 41	7.05)	7.8)	0.48)	1.02)	0.97)	to -0.12)	to 42.83)	to 26.73)	to -0.69)
42 43 Malaysia	4.33 (3.64 to	6.56 (5.71 to	1.38 (1.19 to	0.18 (0.14 to	0.17 (0.12 to	-0.75 (-1.06	5.01 (4.15 to	4.92 (3.71 to	-0.54 (-0.73
44	5.05)	7.56)	1.57)	0.22)	0.23)	to -0.43)	6.10)	6.26)	to -0.35)
45 A6 Maldives	4.10 (3.25 to	4.94 (3.96 to	0.74 (0.68 to	0.53 (0.32 to	0.30 (0.23 to	-2.37 (-2.52	13.21 (8.16	7.20 (5.69 to	-2.50 (-2.68
46 <sup>Waldives</sup> 47	4.98)	5.96)	0.80)	0.81)	0.40)	to -2.22)	to 20.38)	9.23)	to -2.32)
48 <sub>Mali</sub>	7.19 (5.85 to	8.08 (6.68 to	0.63 (0.48 to	0.49 (0.20 to	0.47 (0.26 to	-0.28 (-0.46	19.25 (6.81	16.53 (8.45	-0.64 (-0.80
49	8.93)	9.79)	0.79)	0.89)	0.71)	to -0.10)	to 33.36)	to 26.83)	to -0.48)
50 51 Malta	66.69 (57.4	72.00 (63.55	0.11 (0.05 to	0.54 (0.48 to	0.62 (0.48 to	0.78 (0.57 to	20.61 (16.77	22.28 (18.12	0.40 (0.30 to
52	to 76.82)	to 81.87)	0.17)	0.62)	0.74)	0.99)	to 24.94)	to 27.35)	0.50)
53 Marshall	4.22 (3.40 to	4.10 (3.35 to	-0.25 (-0.43	1.32 (0.84 to	0.83 (0.50 to	-1.90 (-2.04	38.63 (23.47	24.94 (14.63	-1.80 (-1.93
54 Islands 55	5.11)	4.93)	to -0.08)	1.88)	1.31)	to -1.76)	to 58.16)	to 40.72)	to -1.68)
56 Mauritania	8.95 (7.32 to	11.87 (9.73	0.85 (0.70 to	0.68 (0.41 to	0.41 (0.28 to	-2.01 (-2.18	22.06 (12.99	13.42 (9.08	-1.97 (-2.14
57	10.94)	to 14.62)	0.99)	0.99)	0.57)	to -1.84)	to 31.74)	to 18.70)	to -1.80)
58 59 <sup>Mauritius</sup>	4.55 (3.68 to 5.63)	5.50 (4.43 to 6.63)	0.68 (0.63 to 0.73)	0.17 (0.14 to 0.19)	0.22 (0.17 to 0.28)	1.44 (1.10 to	5.3 (4.63 to	7.7 (5.86 to 9.69)	1.88 (1.53 to
60	5.05)	0.03)	0.75)	0.17)	0.20)	1.78)	6.29)	9.07)	2.23)

1									
2 3 4 Mexico	47.30 (40.55	36.92 (31.76	-0.82 (-0.97	0.34 (0.31 to	0.45 (0.36 to	1.68 (1.33 to	16.08 (13.61	17.13 (14.12	0.68 (0.41 to
5 6 Micronesia	to 55.27)	to 42.73)	to -0.67)	0.39)	0.54)	2.02)	to 19.12)	to 20.45)	0.96)
<ul><li>6 Micronesia</li><li>7 (Federated</li></ul>	4.44 (3.61 to	4.11 (3.40 to	-0.45 (-0.62	1.36 (0.88 to	0.80 (0.48 to	-2.09 (-2.29	40.59 (25.23	23.88 (12.56	-2.07 (-2.24
8 States of	5.35)	4.96)	to -0.27)	1.97)	1.32)	to -1.88)	to 65.57)	to 43.11)	to -1.89)
9	102.48	110.59							
10 11 <sub>Monaco</sub>	(86.41 to	(93.15 to	0.31 (0.29 to	0.38 (0.27 to	0.36 (0.27 to	-0.07 (-0.15	22.98 (17.18	23.10 (17.08	0.08 (0.06 to
12	120.82)	130.73)	0.33)	0.50)	0.47)	to 0.01)	to 30.02)	to 29.93)	0.10)
13	68.37 (56.95	69.72 (57.44	0.02 (0.01 to	0.73 (0.47 to	0.45 (0.33 to	-2.10 (-2.26	38.19 (25.22	24.75 (19.13	-1.88 (-2.00
14 15 Mongolia	to 82.11)	to 83.84)	0.04)	1.01)	0.61)	to -1.94)	to 51.55)	to 31.11)	to -1.75)
16	135.02	133.80						,	
17 18 <sup>Montenegro</sup>	(114.64 to	(112.95 to	0.02 (0.00 to	0.29 (0.23 to	0.30 (0.23 to	0.27 (0.08 to	29.84 (22.66	28.38 (20.94	-0.08 (-0.14
19	158.46)	156.37)	0.05)	0.37)	0.37)	0.46)	to 38.5)	to 37.02)	to -0.02)
20	15.56 (13.00	17.60 (14.69	0.60 (0.47 to	0.23 (0.14 to	0.21 (0.15 to	-0.17 (-0.38	8.23 (5.69 to	7.60 (5.86 to	-0.09 (-0.21
21 Morocco 22	to 18.49)	to 21.00)	0.72)	0.38)	0.28)	to 0.04)	11.59)	9.68)	to 0.02)
	5.71 (4.71 to	6.30 (5.22 to	0.38 (0.33 to	0.69 (0.45 to	0.84 (0.58 to	0.94 (0.77 to	22.30 (13.46	24.35 (16.57	0.62 (0.41 to
23 24 <sup>Mozambique</sup>	7.03)	7.69)	0.43)	1.04)	1.20)	1.12)	to 36.57)	to 34.27)	0.84)
25 26 <sub>Myanmar</sub>	3.09 (2.42 to	3.71 (3.00 to	0.72 (0.63 to	0.22 (0.13 to	0.13 (0.1 to	-1.95 (-2.07	7.97 (4.53 to	4.34 (3.28 to	-2.29 (-2.41
26 <sub>Myanmar</sub> 27	3.79)	4.59)	0.81)	0.31)	0.17)	to -1.83)	12.88)	6.04)	to -2.17)
28 29 Namibia	9.39 (7.72 to	11.47 (9.48	0.66 (0.54 to	0.72 (0.50 to	0.63 (0.45 to	-0.61 (-0.80	21.26 (13.8	18.09 (12.71	-0.52 (-0.63
29 <sup>Namibia</sup> 30	11.59)	to 14.12)	0.77)	1.00)	0.87)	to -0.41)	to 28.84)	to 26.34)	to -0.41)
31 <sub>Nauru</sub>	5.33 (4.35 to	5.02 (4.11 to	-0.61 (-0.94	1.37 (0.82 to	0.92 (0.54 to	-1.85 (-2.09	42.03 (22.9	27.18 (13.97	-1.87 (-2.08
32	6.41)	6.11)	to -0.28)	2.13)	1.45)	to -1.61)	to 73.19)	to 47.82)	to -1.65)
33 34 Nepal	16.18 (12.92	18.72 (15.04	0.55 (0.50 to	0.98 (0.57 to	0.59 (0.36 to	-1.88 (-2.06	28.52 (18.28	15.65 (10.93	-2.15 (-2.36
35	to 20.54)	to 23.18)	0.59)	1.86)	0.98)	to -1.69)	to 47.84)	to 23.88)	to -1.94)
36	142.28	73.64 (63.08	-2.19 (-2.78	1.43 (1.24 to	2.08 (1.58 to	1.35 (0.87 to	47.17 (39.07	41.11 (35.20	-0.50 (-0.93
37 <sub>Netherlands</sub> 38	(129.20 to	to 85.72)	to -1.60)	1.75)	2.40)	1.84)	to 56.59)	to 47.09)	to -0.06)
39	155.78)								
40	160.29	168.32	0.20 (0.15 to	0.53 (0.45 to	0.38 (0.32 to	-1.70 (-2.05	34.31 (26.39	31.98 (23.24	-0.32 (-0.42
41New Zealand 42	(139.19 to	(152.62 to	0.26)	0.59)	0.46)	to -1.34)	to 43.21)	to 41.73)	to -0.22)
43	182.59)	186.95)	0.00 (0.10 (	0.15 (0.12 )	0.17 (0.12 (	0.49 (0.20.)	7.00 (6.05 )	0.06 (6.41.)	0.12 ( 0.02
44 Nicaragua	23.25 (19.28	26.41 (22.30	0.20 (0.10 to	0.15 (0.12 to	0.17 (0.13 to	0.48 (0.30 to	7.80 (6.25 to	8.26 (6.41 to	0.12 (-0.02
45 46	to 27.88)	to 31.28)	0.31) 0.37 (0.26 to	0.18)	0.21)	0.67) -0.71 (-0.92	9.75)	10.34)	to 0.25)
47 Niger	7.12 (5.75 to 8.74)	7.75 (6.26 to 9.48)	0.37 (0.26 to 0.48)	0.58 (0.28 to 0.99)	0.5 (0.29 to 0.79)	-0.71 (-0.92 to -0.51)	21.59 (8.82 to 38.22)	17.16 (9.15 to 26.85)	-1.08 (-1.30 to -0.86)
48	8.88 (7.36 to	11.03 (9.13	0.48) 0.98 (0.83 to	0.57 (0.28 to	0.73) 0.52 (0.28 to	-0.11 (-0.21	19.98 (11.19	17.08 (10.24	-0.43 (-0.51
49 50 <sup>Nigeria</sup>	10.86)	to 13.41)	1.14)	0.97 (0.28 to	0.83)	to -0.02)	to 32.55)	to 26.72)	to -0.35)
51	5.82 (4.77 to	5.53 (4.56 to	-0.24 (-0.39	0.96 (0.67 to	0.63 (0.38 to	-1.75 (-1.86	29.80 (19.61	19.00 (10.29	-1.92 (-2.07
52 Niue	7.03)	6.74)	to -0.08)	1.38)	0.03 (0.30 to	to -1.63)	to 46.61)	to 29.66)	to -1.78)
53 54	119.00	122.13		1.00)	5.71)				
55 <sup>North</sup>	(100.79 to	(103.27 to	0.14 (0.12 to	0.20 (0.15 to	0.18 (0.13 to	-0.21 (-0.36	23.91 (17.63	23.32 (16.99	0.00 (-0.04
56 Macedonia 57	140.81)	143.78)	0.17)	0.25)	0.23)	to -0.07)	to 31.43)	to 31.08)	to 0.05)
57 58 Northern	6.60 (5.47 to	5.79 (4.80 to	-0.61 (-0.80	1.28 (0.85 to	0.38 (0.26 to	-4.76 (-5.32	34.73 (23.54	11.56 (7.82	-4.28 (-4.78
59 <sub>Mariana</sub>	7.98)	6.96)	to -0.42)	1.82)	0.73)	to -4.19)	to 50.03)	to 20.63)	to -3.78)
60	,	,	,	,	,	,	,	,	,

1 2									
3 Islands									
4	406.73	498.95							
5 6 Norway	(342.53 to	(429.41 to	0.38 (0.24 to	0.43 (0.39 to	0.38 (0.32 to	-0.86 (-1.19	69.15 (49.57	80.37 (56.25	0.17 (0.01 to
7	478.15)	570.55)	0.52)	0.58)	0.52)	to -0.53)	to 92.09)	to 108.56)	0.33)
8	32.04 (26.30	33.81 (27.79	0.24 (0.08 to	0.23 (0.12 to	0.23 (0.15 to	0.58 (0.34 to	10.5 (7.14 to	9.96 (7.66 to	0.17 (0.00 to
9 Oman	to 38.55)	to 40.80)	0.24 (0.08 to	0.23 (0.12 to	0.23 (0.13 to	0.38 (0.34 to	10.3 (7.14 to	12.72)	0.17 (0.00 to
10 11						-0.87 (-0.93	· · · · · ·		
12 Pakistan	13.75 (11.11	16.77 (13.78	0.77 (0.72 to	0.78 (0.39 to	0.62 (0.41 to		21.52 (12.69	17.80 (12.91	-0.71 (-0.77
13	to 17.15)	to 21.25)	0.81)	1.57)	0.99)	to -0.80)	to 38.34)	to 25.37)	to -0.66)
14 15 Palau	5.62 (4.60 to	5.22 (4.30 to	-0.40 (-0.56	0.88 (0.53 to	0.62 (0.29 to	-1.36 (-1.47	26.21 (13.51	19.34 (8.32	-1.21 (-1.31
15 16	6.79)	6.32)	to -0.24)	1.46)	0.97)	to -1.24)	to 47.84)	to 32.27)	to -1.10)
17 Palestine	31.49 (25.86	35.42 (29.15	0.71 (0.52 to	0.33 (0.23 to	0.20 (0.15 to	-2.83 (-3.48	11.67 (8.60	9.47 (7.18 to	-1.16 (-1.42
18	to 38.19)	to 42.61)	0.90)	0.50)	0.29)	to -2.18)	to 16.06)	12.75)	to -0.90)
19 20 <sup>Panama</sup>	30.64 (26.19	31.9 (26.95	0.09 (0.04 to	0.40 (0.33 to	0.59 (0.45 to	2.20 (1.67 to	19.61 (16.04	24.28 (18.4	1.57 (1.10 to
20	to 35.44)	to 37.19)	0.14)	0.57)	0.76)	2.73)	to 24.02)	to 31.52)	2.05)
22 Papua New	4.05 (3.24 to	3.65 (2.96 to	-0.52 (-0.69	0.54 (0.31 to	0.42 (0.27 to	-1.02 (-1.10	19.34 (11.2	14.68 (9.5 to	-1.09 (-1.18
23 Guinea	4.88)	4.45)	to -0.35)	0.80)	0.63)	to -0.93)	to 29.45)	21.87)	to -1.00)
24 25 Paraguay	35.78 (30.69	30.96 (26.24	-0.62 (-0.73	0.16 (0.13 to	0.21 (0.15 to	1.35 (1.08 to	10.62 (8.39	10.30 (7.70	0.12 (-0.06
26	to 41.49)	to 36.59)	to -0.50)	0.21)	0.28)	1.63)	to 13.36)	to 13.16)	to 0.29)
27 <sub>Peru</sub>	17.18 (14.20	16.74 (13.74	-0.14 (-0.17	0.69 (0.47 to	0.23 (0.16 to	-4.20 (-4.68	34.79 (19.65	9.31 (6.89 to	-5.08 (-5.69
28	to 20.56)	to 20.14)	to -0.10)	0.93)	0.32)	to -3.72)	to 53.77)	12.58)	to -4.47)
29 30 Philippines	4.47 (3.59 to	4.96 (4.02 to	0.35 (0.25 to	0.35 (0.16 to	0.16 (0.13 to	-3.25 (-3.54	8.94 (5.36 to	4.87 (4.06 to	-2.61 (-2.86
31	5.38)	6.00)	0.46)	0.46)	0.20)	to -2.95)	11.07)	6.26)	to -2.35)
32	418.60	177.25	-3.73 (-4.52	0.44 (0.41 to	0.53 (0.42 to	0.82 (0.68 to	72.05 (51.85	38.44 (29.32	-2.70 (-3.28
33 Poland	(351.62 to	(157.39 to	-3.73 (-4.32 to -2.94)	0.44 (0.41 to	0.62)	0.82 (0.08 to	to 95.72)	to 49.04)	to -2.11)
34 35	498.71)	199.48)	10 -2.94)	0.51)	0.02)	0.90)	10 95.72)	10 49.04)	10 -2.11)
36	52.37 (46.30	74.24 (66.91	0.72 (0.46 to	0.69 (0.60 to	1.06 (0.57 to	2.38 (1.99 to	20.51 (17.46	27.82 (20.23	1.24 (1.07 to
3/	to 58.76)	to 82.44)	0.99)	0.76)	1.24)	2.77)	to 24.14)	to 33.05)	1.41)
38 39 December Disc	31.12 (29.32	30.88 (28.28	0.00 (-0.04	0.56 (0.43 to	0.27 (0.19 to	-3.70 (-4.28	21.05 (16.43	12.28 (9.43	-2.69 (-3.09
39 Puerto Rico 40	to 33.10)	to 33.59)	to 0.04)	0.64)	0.41)	to -3.10)	to 24.23)	to 16.08)	to -2.29)
41 Octor	38.47 (31.44	44.46 (36.75	0.53 (0.42 to	0.37 (0.24 to	0.34 (0.21 to	0.52 (0.07 to	14.06 (10.55	13.06 (9.28	0.13 (-0.12
42 <sup>Qatar</sup> 43	to 45.79)	to 53.66)	0.64)	0.59)	0.51)	0.98)	to 19.68)	to 17.59)	to 0.37)
43 44 Republic of	37.89 (33.49	70.21 (66.03	1.25 (0.89 to	1.76 (0.56 to	0.30 (0.23 to	-7.96 (-8.67	31.72 (18.30	15 (11.13 to	-3.63 (-4.02
45 Korea	to 42.88)	to 74.79)	1.61)	2.34)	0.39)	to -7.25)	to 38.85)	19.33)	to -3.23)
46 Republic of	67.21 (55.76	66.12 (59.51	0.47 (0.09 to	0.38 (0.32 to	0.33 (0.27 to	-0.60 (-0.96	22.87 (18.45	20.72 (16.98	-0.20 (-0.52
47 48 <sup>Moldova</sup>	to 80.49)	to 73.09)	0.85)	0.47)	0.39)	to -0.25)	to 27.69)	to 25.12)	to 0.13)
49	70.01 (58.65	70.93 (63.66	0.37 (0.16 to	0.27 (0.23 to	0.23 (0.18 to	-0.65 (-1.01	21.99 (17.23	17.97 (13.92	-0.63 (-0.89
50 Romania	to 82.51)	to 79.55)	0.59)	0.31)	0.28)	to -0.29)	to 27.18)	to 22.6)	to -0.37)
51 52 Russian	95.59 (81.25	85.89 (72.98	-0.12 (-0.25	0.57 (0.42 to	0.56 (0.46 to	-0.40 (-0.74	30.76 (24.06	28.04 (22.97	-0.52 (-0.70
52 53 Federation	to 111.84)	to 100.35)	to 0.00)	0.66)	0.66)	to -0.06)	to 37.42)	to 34.48)	to -0.35)
54	6.69 (5.55 to	7.89 (6.47 to	0.57 (0.40 to	0.92 (0.61 to	0.65 (0.42 to	-1.79 (-2.06	29.08 (17.93	19.33 (12.66	-1.92 (-2.15
55 <sup>Rwanda</sup>	8.31)	9.74)	0.74)	1.40)	0.92)	to -1.51)	to 46.16)	to 28.48)	to -1.69)
56 ₅∳aint Kitts and	29.59 (24.68	28.95 (23.75	0.06 (-0.02	2.25 (1.70 to	1.44 (1.06 to	-2.01 (-2.26	67.93 (52.91	42.16 (29.05	-2.07 (-2.32
57 58 Nevis	to 35.93)	to 35.61)	to 0.14)	2.63)	2.05)	to -1.76)	to 79.57)	to 61.00)	to -1.82)
59 Saint Lucia	25.70 (21.15	27.48 (22.74	0.32 (0.22 to	0.99 (0.78 to	0.65 (0.51 to	-2.24 (-2.69	32.61 (26.63	22.26 (17.86	-1.84 (-2.19
60							-		

2									
3 4	to 31.22)	to 33.54)	0.42)	1.15)	0.84)	to -1.78)	to 37.29)	to 28.14)	to -1.49)
5 Saint Vincent	24.91 (20.72	24.40 (20.24	0.24 (0.13 to	1.31 (1.08 to	1.22 (0.98 to	-0.56 (-0.70	44.25 (37.35	38.61 (31.46	-0.80 (-0.94
6 and the 7 Granadinas	to 30.36)	to 29.76)	0.34)	1.57)	1.53)	to -0.41)	to 51.61)	to 48.07)	to -0.67)
<ul><li>Grenadines</li></ul>									
9 <sub>Samoa</sub>	5.60 (4.60 to	4.77 (3.92 to	-0.77 (-1.05	0.98 (0.66 to	0.63 (0.45 to	-1.64 (-1.80	27.95 (18.61	17.97 (11.92	-1.62 (-1.75
10	6.71)	5.78)	to -0.49)	1.49)	0.85)	to -1.47)	to 40.58)	to 26.18)	to -1.49)
11 12	107.02	112.86	0.23 (0.21 to	0.37 (0.27 to	0.36 (0.22 to	0.22 (0.06 to	21.57 (15.79	21.79 (15.52	0.15 (0.11 to
12 San Marino 13	(89.88 to	(94.72 to	0.24)	0.48)	0.53)	0.38)	to 28.34)	to 28.71)	0.19)
14	126.67)	132.67)							
15Sao Tome and	10.50 (8.66	11.85 (9.61	0.59 (0.46 to	0.46 (0.26 to	0.31 (0.21 to	-1.58 (-1.93	15.7 (9.25 to	10.34 (7.41	-1.71 (-2.03
16 Principe 17	to 12.87)	to 14.64)	0.71)	0.73)	0.50)	to -1.24)	23.73)	to 15.57)	to -1.38)
18 <sub>Saudi</sub> Arabia	33.86 (28.47	34.43 (28.66	0.22 (0.09 to	0.19 (0.11 to	0.15 (0.11 to	-0.60 (-0.71	9.73 (6.96 to	8.9 (6.65 to	-0.18 (-0.25
19	to 40.38)	to 41.36)	0.35)	0.31)	0.21)	to -0.48)	13.65)	11.75)	to -0.10)
20 21 Senegal	8.06 (6.57 to	8.84 (7.25 to	0.39 (0.27 to	0.55 (0.29 to	0.43 (0.27 to	-1.00 (-1.21	18.61 (9.28	14.15 (8.71	-1.12 (-1.32
21 Senegui 22	9.88)	11.10)	0.51)	0.93)	0.65)	to -0.78)	to 29.66)	to 21.53)	to -0.91)
23	118.24	151.50	0.43 (0.26 to	0.49 (0.37 to	0.76 (0.50 to	2.49 (2.05 to	31.72 (24.28	39.47 (29.72	0.83 (0.67 to
24 Serbia 25	(99.70 to	(130.14 to	0.61)	0.78)	0.97)	2.94)	to 43.38)	to 49.82)	0.98)
26	138.39)	173.84)	0.01)	0.70)	0.77)	2.5 1)	10 10.00)	10 19:02)	0.90)
27 Savahallas	4.66 (3.75 to	5.45 (4.43 to	0.52 (0.44 to	0.30 (0.19 to	0.22 (0.16 to	-1.44 (-1.65	8.38 (5.69 to	6.28 (4.77 to	-1.35 (-1.51
28	5.71)	6.55)	0.60)	0.38)	0.30)	to -1.23)	10.68)	7.85)	to -1.19)
29 30Sierra Leone	7.33 (6.06 to	8.45 (6.95 to	0.64 (0.51 to	0.42 (0.19 to	0.43 (0.24 to	0.20 (-0.07	15.88 (6.30	15.30 (8.12	0.00 (-0.27
31	9.02)	10.53)	0.77)	0.72)	0.61)	to 0.48)	to 28.04)	to 23.35)	to 0.26)
32 33 Singapore	47.14 (38.3	41.88 (34.28	-0.58 (-0.74	0.18 (0.14 to	0.07 (0.06 to	-3.18 (-3.41	12.19 (9.33	8.16 (5.69 to	-1.52 (-1.73
33 <sup>Singapore</sup> 34	to 56.56)	to 51.91)	to -0.43)	0.20)	0.11)	to -2.95)	to 15.58)	11.25)	to -1.31)
35	165.72	154.57	-0.05 (-0.12	0.54 (0.45 to	0.68 (0.48 to	1.56 (1.21 to	40.62 (31.28	40.31 (30.39	0.34 (0.19 to
36 Slovakia	(148.05 to	(140.40 to	to 0.02)	0.84)	0.90)	1.91)	to 53.36)	to 50.67)	0.49)
37	183.09)	170.08)	10 0.02)	0.04)	0.50)	1.71)	10 55.50)	10 50.07)	0.4))
38 39	167.07	179.18	0.15 (0.08 to	0.44 (0.33 to	0.39 (0.28 to	-1.39 (-2.13	34.68 (25.60	34.27 (24.57	-0.42 (-0.67
40 Slovenia	(146.63 to	(160.70 to	0.13 (0.08 to	0.56)	0.52)	to -0.65)	to 44.77)	to 44.81)	to -0.17)
41	189.8)	199.69)	0.21)	0.50)	0.52)	10 -0.03)	10 44.77)	10 44.01)	10 -0.17)
42 Solomon 43	3.49 (2.80 to	3.35 (2.73 to	-0.31 (-0.46	0.75 (0.42 to	0.53 (0.33 to	-1.42 (-1.56	24.39 (12.55	17.28 (10.22	-1.38 (-1.51
44 Islands	4.25)	4.12)	to -0.15)	1.16)	0.79)	to -1.29)	to 43.26)	to 29.48)	to -1.25)
45 46 Somalia	5.39 (4.41 to	5.28 (4.33 to	-0.09 (-0.12	0.55 (0.29 to	0.48 (0.30 to	-0.45 (-0.53	17.8 (7.75 to	14.47 (8.44	-0.63 (-0.69
40	6.68)	6.56)	to -0.06)	0.91)	0.79)	to -0.37)	34.12)	to 24.4)	to -0.56)
47 48 <sub>South</sub> Africa	11.04 (9.21	12.40 (10.36	0.52 (0.44 to	0.39 (0.30 to	0.39 (0.30 to	0.13 (-0.38	15.07 (10.33	12.17 (9.76	-0.56 (-0.99
49	to 13.55)	to 15.05)	0.60)	0.50)	0.47)	to 0.64)	to 20.06)	to 14.04)	to -0.14)
50 51 South Sudan	6.93 (5.69 to	7.78 (6.41 to	0.35 (0.31 to	0.68 (0.39 to	0.65 (0.36 to	-0.05 (-0.09	22.59 (10.42	19.12 (11.06	-0.45 (-0.58
51 South Sudan 52	8.55)	9.49)	0.40)	1.43)	1.40)	to 0.00)	to 43.44)	to 39.88)	to -0.32)
53	00 11 (96 16	134.10	0.77 (0.60 to	051 (0 16 to	0.25 (0.20 to	216(254	24.01 (20.22	27 21 (20 61	0.26 ( 0.47
54 Spain	90.41 (86.16 to 94.9)	(127.51 to	0.77 (0.60 to 0.95)	0.54 (0.46 to 0.60)	0.35 (0.29 to 0.50)	-2.16 (-2.54 to -1.78)	24.91 (20.33 to 30.25)	27.31 (20.61 to 34.99)	-0.26 (-0.47 to -0.05)
55 56	10 94.9)	141.19)	0.93)	0.00)	0.30)	10-1./8)	10 30.23)	10 34.99)	10 -0.03)
50 57 Sri Lanka	5.98 (4.90 to	9.51 (8.29 to	1.67 (1.38 to	0.18 (0.14 to	0.10 (0.07 to	-2.15 (-2.31	5.73 (4.38 to	3.77 (2.86 to	-1.45 (-1.57
58	7.28)	10.90)	1.96)	0.23)	0.13)	to -1.99)	7.09)	4.79)	to -1.33)
59 <sub>Sudan</sub> 60	25.18 (20.47	30.96 (25.17	0.90 (0.76 to	0.21 (0.10 to	0.25 (0.14 to	0.95 (0.78 to	9.58 (5.87 to	10.84 (7.56	0.71 (0.58 to

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59

60

United

Kingdom

223.81

(197.49 to

240.37

(214.96 to

0.17 (0.12 to

0.21)

1 2									
3	to 31.02)	to 37.98)	1.05)	0.39)	0.43)	1.11)	15.53)	to 15.32)	0.84)
4	25.78 (21.39	25.28 (20.76	0.11 (0.01 to	1.00 (0.77 to	0.66 (0.50 to	-1.99 (-2.24	35.66 (26.78	23.00 (18.20	-1.99 (-2.24
5 Suriname 6	to 31.18)	to 30.88)	0.22)	1.18)	0.86)	to -1.73)	to 43.03)	to 29.10)	to -1.75)
7	294.18	315.22		,			,	,	
8 9 <sup>Sweden</sup>	(253.51 to	(271.18 to	0.31 (0.28 to	0.68 (0.56 to	0.38 (0.31 to	-3.16 (-4.26	56.12 (41.20	53.00 (37.35	-0.35 (-0.54
9 10	336.93)	360.86)	0.34)	0.75)	0.56)	to -2.06)	to 73.41)	to 71.73)	to -0.16)
11	129.02	134.73							
12 Switzerland	(116.30 to	(121.98 to	0.09 (0.06 to	0.68 (0.54 to	0.58 (0.47 to	-1.03 (-1.80	32.21 (25.49	29.51 (22.30	-0.56 (-0.82
13 Switzerland	142.70)	148.05)	0.12)	0.77)	0.75)	to -0.26)	to 39.69)	to 37.67)	to -0.31)
15 Syrian Arab	28.71 (23.39	33.67 (27.34	0.96 (0.65 to	0.46 (0.23 to	0.36 (0.19 to	-1.00 (-1.20	14.71 (9.86	12.75 (9.00	-0.46 (-0.53
16 Republic	to 35.03)	to 40.47)	1.26)	0.76)	0.52)	to -0.80)	to 20.18)	to 16.93)	to -0.39)
17 18 <sup>Taiwan</sup>									
19 (Province of	11.23 (9.74	,	4.29 (3.71 to	0.91 (0.57 to	0.50 (0.38 to	-2.08 (-3.37	17.35 (12.32	12.40 (10.06	-0.85 (-1.78
20 China)	to 12.86)	to 31.28)	4.86)	1.04)	0.65)	to -0.78)	to 19.43)	to 15.44)	to 0.10)
21 22 <sub>Tajikistan</sub>	68.84 (56.59	71.19 (59.54	0.12 (0.07 to	0.41 (0.28 to	0.3 (0.22 to	-0.79 (-0.88	30.29 (19.52	20.60 (15.55	-0.89 (-1.10
22 Tajikistan 23	to 83.10)	to 85.49)	0.18)	0.58)	0.41)	to -0.70)	to 43.28)	to 26.90)	to -0.69)
24 Theilend	3.31 (2.57 to	4.28 (3.44 to	0.96 (0.83 to	0.2 (0.14 to	0.12 (0.08 to	-2.46 (-2.78	6.06 (4.39 to	3.64 (2.76 to	-2.40 (-2.71
25 Thailand 26	4.15)	5.22)	1.08)	0.26)	0.15)	to -2.14)	7.89)	4.68)	to -2.09)
27	3.20 (2.51 to	3.90 (3.14 to	0.84 (0.75 to	0.42 (0.17 to	0.36 (0.20 to	-0.57 (-0.70	11.64 (5.58	9.14 (5.17 to	-0.95 (-1.13
27 Timor-Leste 28	3.91)	4.72)	0.94)	0.83)	0.61)	to -0.44)	to 22.42)	14.89)	to -0.77)
29 30 Togo	9.42 (7.74 to	9.00 (7.38 to	0.03 (-0.09	0.49 (0.28 to	0.48 (0.32 to	-0.05 (-0.31	17.29 (9.05	16.30 (10.74	-0.23 (-0.48
30 Togo 31	11.41)	11.07)	to 0.15)	0.76)	0.68)	to 0.21)	to 26.59)	to 22.75)	to 0.01)
32	4.65 (3.78 to	5.36 (4.37 to	0.72 (0.46 to	0.89 (0.57 to	0.58 (0.42 to	-1.72 (-1.88	25.84 (15.77	16.11 (11.19	-1.68 (-1.80
33 <sup>Tokelau</sup>	5.66)	6.54)	0.97)	1.34)	0.78)	to -1.57)	to 38.77)	to 22.98)	to -1.56)
34 35 <sub>Tonga</sub>	5.55 (4.56 to	4.96 (4.08 to	-0.51 (-0.69	1.14 (0.67 to	0.76 (0.56 to	-1.73 (-1.92	31.30 (19.82	21.58 (15.55	-1.63 (-1.83
36	6.66)	5.98)	to -0.32)	1.64)	1.02)	to -1.54)	to 44.12)	to 30.10)	to -1.44)
37 <sub>Trinidad</sub> and	27.68 (22.88	27.49 (22.91	0.31 (0.17 to	0.34 (0.24 to	0.29 (0.21 to	-0.98 (-1.25	14.27 (10.86	12.54 (9.51	-0.66 (-0.84
38 39 <sup>Tobago</sup>	to 33.63)	to 33.71)	0.45)	0.39)	0.39)	to -0.72)	to 16.75)	to 16.14)	to -0.48)
40 Tunisia	35.29 (29.00	40.47 (33.21	0.59 (0.45 to	0.15 (0.1 to	0.14 (0.09 to	-0.05 (-0.15	9.05 (6.50 to	9.36 (6.89 to	0.27 (0.17 to
41	to 42.68)	to 49.35)	0.73)	0.22)	0.20)	to 0.06)	12.22)	12.40)	0.37)
42 43 Turkey	50.66 (44.42	98.87 (84.96	2.04 (1.87 to	0.67 (0.43 to	0.40 (0.30 to	-1.87 (-2.02	27.88 (19.30	25.05 (19.42	-0.61 (-0.70
44	to 56.99)	to 113.45)	2.20)	1.06)	0.56)	to -1.72)	to 38.53)	to 32.24)	to -0.51)
45 Turkmenistan	69.03 (57.31	77.89 (64.42	0.43 (0.32 to	0.37 (0.28 to	0.33 (0.22 to	-0.50 (-0.78	24.59 (17.78	22.90 (16.63	-0.20 (-0.38
46 <sup>Turkmenistan</sup> 47	to 82.24)	to 92.76)	0.54)	0.49)	0.46)	to -0.21)	to 31.67)	to 29.27)	to -0.02)
47 48 <sub>Tuvalu</sub>	4.48 (3.63 to	4.08 (3.38 to	-0.47 (-0.63	1.08 (0.65 to	0.71 (0.47 to	-1.60 (-1.73	33.30 (17.86	21.17 (13.37	-1.65 (-1.76
49	5.44)	4.88)	to -0.30)	1.59)	1.05)	to -1.47)	to 54.06)	to 33.22)	to -1.55)
50 51 Uganda	5.79 (4.75 to	7.14 (5.88 to	1.01 (0.88 to	0.59 (0.37 to	0.61 (0.40 to	-0.03 (-0.17	17.22 (11.39	17.40 (12.18	-0.02 (-0.16
51 Uganda 52	7.14)	8.92)	1.15)	0.91)	0.92)	to 0.10)	to 25.60)	to 25.46)	to 0.13)
53 Ukraine	68.71 (57.64	68 (57.27 to	0.19 (0.03 to	0.34 (0.26 to	0.39 (0.31 to	0.17 (-0.10	21.06 (16.76	23.62 (18.99	0.34 (0.12 to
54	to 82.57)	80.79)	0.35)	0.45)	0.48)	to 0.44)	to 26.65)	to 28.82)	0.56)
55 <sub>United</sub> Arab 56	36.50 (30.28	42.72 (35.58	0.73 (0.60 to	0.21 (0.09 to	0.24 (0.15 to	0.72 (0.25 to	10.79 (6.88	12.40 (8.88	0.73 (0.52 to
57 Emirates	to 44.12)	to 51.97)	0.87)	0.43)	0.43)	1.20)	to 16.90)	to 17.45)	0.94)
59 United	222.81	240.37	0.17(0.12 to	0 97 (0 85 to	1.30(1.12 to	1 22 (0.84 to	52 80 (11 67	50 34 (47 21	0.41 (0.25 to

BMJ Open

1.30 (1.12 to

1.44)

1.22 (0.84 to

1.59)

52.80 (41.67

to 65.37)

59.34 (47.21

to 72.73)

0.41 (0.25 to

0.57)

0.97 (0.85 to

1.18)

BMJ Op
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1 2									
2 3									
4	251.35)	267.14)							
5 <sup>United</sup>	7.20 (5.89 to	7.76 (6.36 to	0.22 (0.10 to	0.58 (0.40 to	0.60 (0.41 to	0.38 (0.19 to	19.56 (13.24	18.91 (12.48	0.25 (0.07 to
6 Republic of	8.90)	9.50)	0.35)	0.81)	0.89)	0.57)	to 32.21)	to 26.55)	0.43)
7 <sub>Tanzania</sub> 8	,	,	,	,	,	,	,	·····,	,
9 United States	343.12	193.07	-1.59 (-2.08	0.67 (0.60 to	1.02 (0.80 to	1.80 (1.52 to	64.72 (47.50	49.82 (40.25	-0.48 (-0.78
10 11 of America	(295.81 to	(179.65 to	to -1.09)	0.82)	1.11)	2.07)	to 84.88)	to 60.19)	to -0.18)
11	394.51)	206.87)	10 -1.07)	0.82)	1.11)	2.07)	10 04.00)	10 00.17)	10 -0.18)
12 United States	31.96 (26.73	33.22 (27.69	0.23 (0.16 to	0.81 (0.56 to	0.45 (0.34 to	-2.32 (-2.66	26.35 (19.55	15.91 (12.54	-2.03 (-2.27
14 <sup>Virgin Islands</sup>	to 38.19)	to 39.97)	0.31)	1.02)	0.59)	to -1.99)	to 32.66)	to 20.17)	to -1.78)
15 16 Uruguay	17.66 (14.59	17.41 (14.35	-0.17 (-0.21	0.27 (0.23 to	0.41 (0.35 to	1.10 (0.62 to	9.71 (8.22 to	12.78 (11.11	0.63 (0.27 to
16 <sup>Uruguay</sup> 17	to 21.30)	to 21.13)	to -0.13)	0.37)	0.47)	1.58)	12.16)	to 14.58)	0.98)
18 Uzbekistan	74.25 (62.30	75.79 (63.42	-0.02 (-0.05	0.28 (0.20 to	0.29 (0.23 to	-0.33 (-0.58	23.48 (17.64	21.90 (17.37	-0.47 (-0.58
19	to 88.98)	to 90.50)	to 0.01)	0.39)	0.39)	to -0.09)	to 29.48)	to 27.16)	to -0.36)
20 21 Vanuatu	4.27 (3.44 to	3.94 (3.23 to	-0.42 (-0.59	1.22 (0.69 to	0.84 (0.52 to	-1.74 (-1.94	34.45 (18.68	25.36 (15.29	-1.58 (-1.80
21 Vanuatu 22	5.21)	4.77)	to -0.24)	2.03)	1.24)	to -1.54)	to 54.26)	to 38.79)	to -1.36)
23 Venezuela	29.50 (25.29	29.03 (24.54	-0.01 (-0.05	0.25 (0.17 to	0.15 (0.11 to	-2.32 (-2.82	12.00 (9.33	8.87 (6.84 to	-1.36 (-1.66
24 (Bolivarian 25 <sub>Berublia of</sub> )	to 33.94)	to 34.19)	to 0.03)	0.29)	0.21)	to -1.82)	to 14.20)	11.26)	to -1.05)
25 26 <sup>Republic</sup> of)		,		,		,			
27 <sub>Viet Nam</sub>	9.12 (7.04 to	18.35 (14.68	2.72 (2.05 to	0.58 (0.30 to	0.22 (0.15 to	-3.98 (-4.35	13.87 (8.53	7.60 (5.65 to	-2.48 (-2.72
28	11.43)	to 22.55)	3.39)	0.88)	0.32)	to -3.61)	to 18.99)	9.80)	to -2.23)
29 30 Yemen	23.40 (18.89	28.03 (22.65	0.95 (0.76 to	0.28 (0.15 to	0.33 (0.22 to	0.85 (0.73 to	10.64 (7.11	12.40 (9.18	0.79 (0.66 to
31	to 29.12)	to 34.94)	1.14)	0.52)	0.52)	0.97)	to 15.89)	to 16.77)	0.93)
32 23 Zambia	6.36 (5.26 to	8.42 (6.92 to	0.86 (0.63 to	0.86 (0.60 to	0.70 (0.51 to	-0.86 (-1.04	27.59 (16.02	20.49 (14.47	-1.05 (-1.14
33 <sup>Zambia</sup> 34	7.78)	10.46)	1.10)	1.32)	0.94)	to -0.69)	to 45.42)	to 27.66)	to -0.96)
35 <sub>Zimbabwe</sub>	8.69 (7.15 to	8.91 (7.29 to	0.21 (0.11 to	0.47 (0.36 to	0.58 (0.35 to	0.96 (0.85 to	14.20 (10.79	17.38 (10.28	1.22 (0.99 to
36	10.74)	11.06)	0.30)	0.64)	0.86)	1.06)	to 19.20)	to 25.35)	1.44)
37 38						ability adj		year.	
39	EAPC=e	stimated and	nual percent	age change.	UI=uncerta	inty interva	l.		
40									
41 42									
42 43									
44									
45									
46 47									
48									
49									
50									
51 52									
53									
54									
55 56									
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- 3 4 5		v				YLDs of inf ange from 1	•		
<u>5</u> 6		Incident cases		r r	YLLs			YLDs	
7 8 Characteristics 9 10	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95% UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)	1990 No. (95%UI)	2019 No. (95%UI)	Percentage change (%) (95%UI)
11 12 13 13 14 15sex	293572 (257425 to 336651)	404552 (360521 to 456478)	37.80 (33.91 to 41.98)	757137 (557008 to 914270)	895798 (779706 to 999120)	18.31 (-1.81 to 52.08)	491137 (326283 to 678806)	726701 (487015 to 993466)	47.96 (43.96 to 52.28)
16 17 18 <sup>Male</sup> 19 20 21 2 <sup>f</sup> emale	153074 (133344 to 174640) 140498 (123361 to	213814 (189759 to 241304) 190738 (171154 to	39.68 (36.00 to 43.73) 35.76 (31.29	370299 (264345 to 462642) 386839 (242819 to	450214 (368766 to 507382) 445584 (372799 to	21.58 (-1.85 to 53.89) 15.19 (-5.95	230665 (152583 to 318772) 260473 (173833 to	352534 (235403 to 486701) 374167 (251188 to	52.83 (48.57 to 57.83) 43.65 (39.16
22 23 24 <sub>5DI</sub> quintile 25	161173)	213778)	to 39.92)	477114)	510194)	to 67.02)	359493)	513406)	to 48.19)
26 2≯ligh 28 29	171841 (151878 to 195746)	196451 (179556 to 217510)	14.32 (9.64 to 19.56)	139690 (129255 to 171300)	268406 (221318 to 288862)	92.14 (36.87 to 107.98)	275795 (183466 to 378544)	334924 (229615 to 452309)	21.44 (15.85 to 27.66)
30 3 Ħigh-middle 32	71474 (62545 to 81510)	94553 (84101 to 107156)	32.29 (29.05 to 36.06)	149876 (130428 to 171308)	151980 (137423 to 168345)	1.40 (-11.32 to 17.80)	138460 (92476 to 192296)	200814 (133980 to 276597)	45.03 (40.58 to 50.41)
33 34	27459	59817	117.84	201655	167470	-16.95	46484	123619	165.94
35 <sup>Middle</sup>	(23259 to	(50973 to	(108.98 to	(144191 to	(141946 to	(-32.64 to	(30292 to	(80636 to	(155.28 to
36	32310)	70648)	127.40)	243718)	187219)	19.35)	65651)	174495)	177.70)
37 38	17434	36681	110.40	179309	184730	3.02 (-21.85	23711	51855	118.69
39 Low-middle	(14532 to	(30862 to	(104.05 to	(103608 to	(144128 to	to 54.27)	(15318 to	(33811 to	(110.14 to
40	20935)	44031)	116.72)	244139)	223656)	$\mathbf{O}_{\mathbf{A}}$	33814)	73563)	127.95)
41 42 <sub>Low</sub> 43 44	5279 (4395 to 6379)	12215 (10164 to 14793)	131.41 (126.67 to 136.00)	86179 (39359 to 140538)	122638 (86434 to 167342)	42.31 (-5.62 to 150.88)	6540 (4199 to 9362)	15228 (9694 to 22000)	132.87 (123.17 to 142.33)
45GBD region 46 47Andean Latin 48 <sub>America</sub> 49	472 (402 to 550)	1128 (975 to 1314)	138.95 (128.76 to 150.71)	10085 (4860 to 16590)	4311 (3237 to 5564)	-57.25 (-76.23 to -4.50)	682 (439 to 990)	1631 (1060 to 2311)	139.04 (119.92 to 161.86)
50 51 52 53 53	2979 (2556 to 3481)	6446 (5755 to 7212)	116.39 (101.08 to 132.24)	2212 (1997 to 2709)	5448 (4212 to 6156)	146.25 (61.5 to 182.75)	3590 (2340 to 5079)	7879 (5232 to 10860)	119.48 (94.61 to 145.44)
54 55. 56 57	677 (580 to 796)	1312 (1121 to 1571)	93.82 (84.67 to 103.42)	6186 (3853 to 10389)	6861 (4657 to 9603)	10.92 (-26.38 to 51.60)	1266 (836 to 1782)	2038 (1332 to 2893)	61.05 (49.16 to 73.60)
58 59 Central Asia	3514 (2995	6461 (5487	83.87 (77.84	9604 (7718	9458 (8184	-1.52	6348 (4181	10778 (7154	69.79 (58.22
60	to 4146)	to 7637)	to 90.36)	to 11578)	to 10959)	(-20.39 to	to 9075)	to 15134)	to 81.49)

1									
2 3						25.90)			
4 5 6 Central Europe 7 8	20997 (18082 to 24170)	14809 (13443 to 16391)	-29.47 (-33.69 to -24.67)	19517 (17440 to 21350)	20261 (17005 to 23354)	3.81 (-12.56 to 21.14)	42029 (28219 to 58172)	34433 (23103 to 46581)	-18.07 (-23.95 to -11.37)
9 <sub>Central</sub> Latin 10 1 <sup>America</sup>	3968 (3402 to 4618)	6754 (5834 to 7826)	70.22 (64.07 to 77.19)	11909 (10476 to 13363)	23887 (19416 to 28208)	100.58 (62.63 to 141.31)	6187 (4023 to 8802)	12291 (8076 to 17492)	98.64 (90.00 to 107.98)
12 13 1∳ub-Saharan 1∱frica	381 (318 to 469)	1150 (955 to 1400)	201.42 (188.00 to 216.18)	9036 (4403 to 17181)	14431 (9735 to 21338)	59.71 (-15.47 to 217.75)	455 (291 to 663)	1142 (725 to 1644)	151.34 (136.85 to 168.27)
16 17	17567	52319	197.82	202402	101852	-49.68	37829	138111	265.09
18 East Asia	(14627 to	(44680 to	(178.88 to	(132058 to	(80904 to	(-63.19 to	(24646 to	(90529 to	(244.38 to
19	20802)	61455)	220.44)	259475)	117925)	-16.68)	53906)	194304)	290.80)
20 21 22 <sup>Eastern Europe</sup> 23	18150 (15600 to 21209)	19500 (16838 to 22671)	7.44 (5.08 to 9.90)	39012 (29086 to 45400)	42550 (36378 to 48906)	9.07 (-8.79 to 41.38)	33920 (22663 to 47811)	34573 (23253 to 48708)	1.92 (-2.34 to 6.15)
2 <del>£</del> astern 25 26 <sup>Sub-Saharan</sup> 26	1092 (908 to 1315)	2938 (2449 to 3538)	168.96 (163.69 to 175.74)	34323 (15796 to 66928)	49854 (36274 to 71146)	45.25 (-23.18 to 204.58)	1157 (736 to 1664)	3074 (1958 to 4469)	165.68 (159.54 to 172.36)
28 2∲Iigh-income 30Asia Pacific 31	18105 (15391 to 21422)	27084 (23870 to 30621)	49.59 (40.22 to 59.35)	14265 (11234 to 15903)	10285 (8672 to 13984)	-27.90 (-41.19 to 11.39)	37434 (24881 to 52603)	68316 (45509 to 94577)	82.50 (67.39 to 99.60)
32 33 <sup>High-income</sup>	107616	99611	-7.44	48899	111196	127.40	160173	134037	-16.32
	(94147 to	(91945 to	(-13.45 to	(45188 to	(90610 to	(58.53 to	(106818 to	(92136 to	(-22.94 to
34North America 35	123884)	109000)	-0.48)	60393)	118997)	147.53)	221989)	178957)	-9.00)
3 North Africa 3 North Middle 38 29 39	8107 (7040 to 9204)	22722 (19277 to 26952)	180.29 (162.24 to 198.18)	21634 (13448 to 31651)	30142 (25222 to 36090)	39.33 (-4.16 to 131.21)	13804 (8984 to 19350)	42612 (27805 to 59873)	208.69 (184.84 to 233.72)
40 4Dceania 42 43	22 (18 to 27)	63 (52 to 77)	181.23 (166.43 to 197.89)	1003 (571 to 1593)	1628 (1040 to 2510)	62.31 (1.40 to 173.45)	33 (20 to 48)	69 (43 to 102)	109.64 (96.04 to 124.81)
44	18439	39705	115.33	146986	170233	15.82	24461	51744	111.54
4 <b>5</b> outh Asia	(15169 to	(32943 to	(107.88 to	(82781 to	(122056 to	(-12.64 to	(15784 to	(33609 to	(102.18 to
46 47	22582)	48454)	123.07)	202629)	222489)	63.63)	35449)	74915)	121.79)
48	1882 (1527	4980 (4182	164.62	42561	38819	-8.79	2755 (1714	7867 (5022	185.53
4∳outheast Asia 50	to 2270)	to 5972)	(151.61 to	(28111 to	(32029 to	(-30.14 to	to 4108)	to 11568)	(161.80 to
	050 (510)	1000 (1155	181.06)	54072)	46584)	30.72)	1454 (044	0055 (1500	213.61)
51 52	879 (742 to	1382 (1177	57.15 (49.53	3794 (3293	5362 (4801	41.34 (23.31	1454 (944	2377 (1528	63.53 (47.49
53 <sup>America</sup> 5 <b>\$</b> outhern	1030)	to 1620)	to 64.67)	to 4092)	to 6325)	to 66.99)	to 2091)	to 3449)	to 82.12)
55 <sub>3ub</sub> -Saharan 56 5∱Africa	504 (423 to 608)	989 (837 to 1188)	96.29 (90.20 to 103.76)	6007 (3712 to 8927)	7933 (6389 to 9558)	32.06 (-8.55 to 122.99)	608 (390 to 884)	1298 (837 to 1875)	113.43 (105.15 to 123.26)
58 ropical Latin	7826 (6859	12928	65.19 (58.70	16336	29155	78.46 (62.35	11387 (7351	17842	56.68 (48.38
59 <sub>America</sub> 60	to 8976)	(11334 to	to 72.03)	(14276 to	(26876 to	to 103.68)	to 15958)	(11730 to	to 65.76)

1 2 3 4 5 6 Western Europe 7 8 9 Western 1 Sub-Saharan 1 Africa	59081 (53733 to 65529) 1314 (1102 to 1599)	14874) 78645 (71611 to 86709) 3628 (3028 to 4401)	33.11 (30.56 to 35.75) 176.18 (171.94 to 180.47)	18011) 81826 (75154 to 106409) 29540 (12580 to 46343)	33305) 160823 (127602 to 175684) 51309 (30850 to 73337)	96.54 (25.96 to 118.11) 73.69 (23.64 to 200.73)	103907 (69789 to 141113) 1657 (1057 to 2403)	25165) 149868 (101976 to 202986) 4717 (3002 to 6840)	44.23 (39.12 to 49.03) 184.63 (179.19 to 190.47)
12131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960		rtainty inter	D=Global B rval. YLDs= <u>Y</u>	years of life	e lived with	ı disability. Y	YLLs=years		

Supplementary Table 5 Age-standardised incidence,	, YLL and YLD rates for
inflammatory bower disease (IBD) in 1990 and 2019 an	d their temporal trends from
1990 to 2019	

7	1990 to Age	-standardised ind	cidence rate	Age-star	ndardized YLL	rate	Ag	e-standardized	YLD rate
8 9 Characteristics		per 100,000 pop	ulation	per 100	),000 population	1	1	per 100,000 pop	ulation
<sup>9</sup> Characteristics 10	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.	1990 No.	2019 No.	EAPC No.
11	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)	(95%UI)	(95%UI)	(95%CI)
<del>12</del> 13									
Global	6.10 (5.35	4.97 (4.43	-0.60 (-0.73	16.47 (12.78	11.35 (9.89	-1.33 (-1.37	10.73 (7.16	8.80 (5.90	-0.62 (-0.70
5	to 6.96)	to 5.59)	to -0.48)	to 19.33)	to 12.70)	to -1.30)	to 14.82)	to 12.05)	to -0.53)
6 Bex									
8	6.39 (5.60	5.30 (4.72	-0.55 (-0.68	17.08 (12.95	11.98 (9.82	-1.29 (-1.32	10.32 (6.91	8.66 (5.80	-0.53 (-0.60
9Male	to 7.29)	to 5.99)	to -0.43)	to 20.96)	to 13.45)	to -1.27)	to 14.27)	to 11.93)	to -0.47)
20 21	5.80 (5.12	4.64 (4.16	-0.65 (-0.78	15.95 (10.70	10.74 (8.88	-1.39 (-1.43	11.15 (7.43	8.96 (6.02	-0.69 (-0.79
1 Female 2	to 6.61)	to 5.20)	to -0.53)	to 19.09)	to 12.44)	to -1.35)	to 15.41)	to 12.30)	to -0.59)
SDI region	,	····,		,		,	,	····,	,
5	18.96	17 (1 (1 ( 02	0.16 ( 0.20		15 (4 (12.00	0.56 (0.41	20 54 (10 55	27.20 (19.55	0.00 ( 0.00
High	(16.73 to	17.61 (16.03	-0.16 (-0.30	14.41 (13.34	15.64 (13.09	0.56 (0.41	29.54 (19.66	27.29 (18.55	-0.30 (-0.39
27 28	21.58)	to 19.41)	to -0.01)	to 17.57)	to 16.73)	to 0.70)	to 40.6)	to 37.18)	to -0.21)
9 High-middle	6.12 (5.36	5.58 (4.97	-0.35 (-0.45	13.87 (12.06	8.37 (7.56	-1.99 (-2.11	12.05 (8.08	10.97 (7.26	-0.26 (-0.40
0	to 6.99)	to 6.28)	to -0.24)	to 15.79)	to 9.33)	to -1.88)	to 16.72)	to 15.12)	to -0.13)
1 2011	1.83 (1.58	2.27 (1.94	1.07 (0.95	14.68 (11.06	7 (5.95 to	-2.77 (-2.85	3.43 (2.26	4.61 (3.01	1.22 (1.01 to
32Middle 33	to 2.15)	to 2.68)	to 1.18)	to 17.93)	7.79)	to -2.69)	to 4.84)	to 6.52)	1.43)
4 Low-middle	2.00 (1.70	2.21 (1.88	0.46 (0.35	20.36 (13.37	12.15 (9.66	-1.99 (-2.09	2.93 (1.93	3.22 (2.12	0.50 (0.38 to
	to 2.40)	to 2.65)	to 0.57)	to 27.43)	to 14.61)	to -1.90)	to 4.16)	to 4.56)	0.62)
86 87 <sub>.ow</sub>	1.46 (1.23	1.52 (1.29	0.37 (0.31	20.24 (12.52	15.18 (11.82	-1.08 (-1.14	1.95 (1.26	2.02 (1.32	0.28 (0.19 to
2Low 88	to 1.77)	to 1.83)	to 0.44)	to 27.74)	to 19.54)	to -1.02)	to 2.82)	to 2.88)	0.37)
GBD region									
lo Andean Latin	1.63 (1.41	1.82 (1.57	-0.05 (-0.29	23.76 (13.24	7.15 (5.41	-4.50 (-5.07	2.6 (1.67 to	2.68 (1.74	0.05 (0.01 to
America	to 1.91)	to 2.12)	to 0.20)	to 36.33)	to 9.17)	to -3.92)	3.8)	to 3.79)	0.08)
13	13.56	20.03 (17.79	0.94 (0.72	9.98 (9.01	11.54 (8.93	1.11 (0.82 to	16.21 (10.57	23.45 (15.53	0.86 (0.63 to
14 Australasia 15	(11.64 to	to 22.57)	to 1.16)	to 12.07)	to 13.01)	1.41)	to 22.95)	to 32.51)	1.09)
l6	15.80)	10 22.57)	10 1.10)	(0 12:07)	10 15.01)	1.41)	(0 22.95)	(0.52.51)	1.09)
7 Caribbean	2.11 (1.83	2.63 (2.24	0.49 (0.34	19.10 (12.84	14.19 (9.36	-1.13 (-1.33	4.28 (2.83	4.02 (2.62	-0.06 (-0.14
18 19	to 2.49)	to 3.14)	to 0.64)	to 29.41)	to 20.49)	to -0.93)	to 6.06)	to 5.72)	to 0.01)
9 Central Asia	5.99 (5.13	6.9 (5.87 to	0.50 (0.46	14.63 (11.46	10.56 (9.16	-1.41 (-1.54	11.48 (7.62	11.7 (7.77 to	0.08 (0.04 to
51	to 7.07)	8.13)	to 0.53)	to 17.20)	to 12.18)	to -1.29)	to 16.46)	16.39)	0.11)
2	15.78	11.59 (10.51	-1.38 (-1.76	15.87 (13.6	11.95 (10.00	-0.91 (-1.11	30.41 (20.26	23.89 (15.95	-1.16 (-1.53
53 Central Europe 54	(13.61 to	to 12.81)	to -0.99)	to 17.59)	to 13.79)	to -0.72)	to 42.11)	to 32.56)	to -0.79)
55	18.19)								
Central Latin	3.16 (2.74	2.64 (2.29	-0.70 (-0.87	9.15 (8.21	9.79 (7.96	0.81 (0.47	5.69 (3.74	4.89 (3.22	-0.50 (-0.58
7 <sub>America</sub> 58	to 3.66)	to 3.06)	to -0.54)	to 10.10)	to 11.55)	to 1.16)	to 8.02)	to 6.96)	to -0.42)
Sentral	1.04 (0.88	1.26 (1.06	0.64 (0.59	20.92 (13.38	16.45 (11.73	-0.84 (-0.92	1.33 (0.87	1.32 (0.85	-0.16 (-0.35
5 <b>S</b> ub-Saharan	to 1.26)	to 1.52)	to 0.70)	to 31.16)	to 22.99)	to -0.75)	to 1.94)	to 1.91)	to 0.04)

1 2 <sup>3</sup> Africa									
-1	1.45 (1.22	2.95 (2.55	2.54 (2.39	20.78 (14.55	6.12 (4.90	-4.52 (-4.79	3.45 (2.26	6.95 (4.57	2.74 (2.37 to
5 <sub>East Asia</sub> 6	to 1.71)	to 3.43)	to 2.69)	to 26.09)	to 7.03)	to -4.24)	to 4.87)	to 9.69)	3.12)
7	7.10 (6.12	7.34 (6.34	0.07 (-0.02	14.85 (11.23	14.46 (12.37	-0.56 (-0.82	12.83 (8.55	12.21 (8.15	0.05 (-0.07
8 Eastern Europe	to 8.29)	to 8.55)	to 0.17)	to 17.29)	to 16.65)	to -0.30)	to 18.05)	to 17.24)	to 0.17)
9 10Eastern	10 0.27)	(0 0.55)	10 0.17)	(0 17.29)	10 10.00)	10 0.50)	10 10.05)	(0 17.21)	(0 0.17)
1 Sub-Saharan	0.89 (0.76	1.04 (0.88	0.55 (0.48	21.56 (15.07	18.27 (13.48	-0.51 (-0.59	1.02 (0.66	1.17 (0.76	0.44 (0.40 to
12 Africa 13	to 1.07)	to 1.25)	to 0.61)	to 32.54)	to 24.41)	to -0.43)	to 1.46)	to 1.67)	0.48)
14High-income	9.25 (7.88	14.93 (13.14	1.10 (0.84	7.85 (6.04	2.74 (2.35	-4.07 (-4.38	18.58 (12.28	31.81 (21.06	1.11 (0.73 to
15Asia Pacific 16	to 10.91) 34.88	to 16.93)	to 1.37)	to 8.80)	to 3.86)	to -3.77)	to 26.01)	to 44.06)	1.49)
17High-income		24.51 (22.65	-0.82 (-1.20	14.94 (13.84	20.18 (16.54	1.26 (1.03	50.69 (33.71	31.1 (21.34	-1.28 (-1.69
18 <sub>North</sub> America 19	(30.59 to 40.02)	to 26.77)	to -0.45)	to 18.40)	to 21.51)	to 1.50)	to 70.19)	to 41.87)	to -0.86)
20 <sub>North</sub> Africa	2.05 (2.50	2.74 (2.10	0 (2 (0 52	0.00 (5.0)	6.06 (5.09	1 22 ( 1 26		7 01 (4 74	0.00 (0.76 (
21 22 <sup>and</sup> Middle	2.95 (2.59	3.74 (3.19	0.62 (0.53	8.82 (5.96	6.06 (5.08	-1.32 (-1.36	5.55 (3.65	7.21 (4.74	0.88 (0.76 to
2 <b>E</b> ast	to 3.38)	to 4.45)	to 0.72)	to 12.45)	to 7.15)	to -1.29)	to 7.72)	to 10.1)	1.00)
24	0.44 (0.36	0.56 (0.47	0.87 (0.76	19.89 (12.45	14.30 (9.82	-1.32 (-1.41	0.71 (0.45	0.63 (0.40	-0.53 (-0.72
250ceania 26	to 0.52)	to 0.67)	to 0.98)	to 28.10)	to 20.46)	to -1.23)	to 1.03)	to 0.93)	to -0.34)
	2.15 (1.79	2.32 (1.93	0.47 (0.31	18.45 (11.93	10.91 (7.96	-2.10 (-2.23	3.02 (1.97	3.08 (2.01	0.25 (0.09 to
27 South Asia 28	to 2.64)	to 2.84)	to 0.63)	to 26.19)	to 14.27)	to -1.97)	to 4.38)	to 4.49)	0.40)
29	0.46 (0.38	0.70 (0.59	1.45 (1.27	12.43 (7.76	6.35 (5.08	-2.69 (-2.85	0.73 (0.46	1.09 (0.7 to	1.52 (1.22 to
3 <b>®</b> outheast Asia 31	to 0.56)	to 0.84)	to 1.63)	to 15.13)	to 7.61)	to -2.53)	to 1.09)	1.60)	1.83)
32Southern Latin	1.82 (1.54	1.92 (1.63	0.24 (0.15	8.05 (7.00	6.85 (6.15	-0.71 (-0.86	3.05 (1.98	3.21 (2.06	0.23 (0.04 to
33 <sub>America</sub> 34 35 <sup>Southern</sup>	to 2.13)	to 2.26)	to 0.34)	to 8.69)	to 8.08)	to -0.56)	to 4.38)	to 4.68)	0.42)
	1.30 (1.10	1.37 (1.17	0.13 (0.06	13.43 (9.33	11.79 (9.6 to	-0.20 (-0.55	1.67 (1.08	1.87 (1.22	0.48 (0.41 to
3 <b>&amp;</b> ub-Saharan 3⊼ <sub>frica</sub>	to 1.56)	to 1.65)	to 0.20)	to 17.23)	13.95)	to 0.15)	to 2.41)	to 2.70)	0.55)
38 Tropical Latin 39	6.09 (5.40	5.25 (4.60	-0.55 (-0.59	13.65 (11.97	12.09 (11.13	-0.18 (-0.34	9.72 (6.37	7.17 (4.71	-0.83 (-1.04
46 <sup>America</sup>	to 6.93)	to 6.03)	to -0.51)	to 14.87)	to 13.83)	to -0.02)	to 13.54)	to 10.10)	to -0.63)
41	13.98	16.04 (15.00	0 (0 (0 55	16.07 (14.02	10.05 (15.10	0.02 (0.72	00.17 (15.50	07.02 (10.01	0.20 (0.25 )
42 Western Europe	(12.67 to	16.94 (15.33	0.60 (0.55	16.07 (14.83	18.85 (15.12	0.92 (0.72	23.17 (15.52	27.93 (19.01	0.38 (0.26 to
43 <sup>1</sup> 44	15.48)	to 18.73)	to 0.65)	to 20.58)	to 20.42)	to 1.11)	to 31.53)	to 38.12)	0.49)
45Western									
4 Sub-Saharan	1.01 (0.86	1.17 (1.00	0.36 (0.22	18.33 (10.38	15.14 (10.25	-0.69 (-0.80	1.37 (0.89	1.63 (1.06	0.78 (0.66 to
47 48 48	to 1.23)	to 1.41)	to 0.50)	to 29.12)	to 20.82)	to -0.58)	to 1.98)	to 2.34)	0.90)
40	Abbrevia	ations: CI=c	onfidence	interval. EA	PC=estimat	ed annual p	bercentage c	change.	

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GBD=Global Burden of Disease. SDI=Socio-demographic Index. UI=uncertainty

interval. YLD=years of life lived with disability. YLL=years of life lost.

STROBE Statement-checklist of items that should be included in reports of observational studies

	Item No	Recommendation	Pag No
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the	1
		abstract	
		(b) Provide in the abstract an informative and balanced summary of what	2
		was done and what was found	
Introduction			•
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods	-	The second s	
Study design	4	Present key elements of study design early in the paper	5
Setting	5	Describe the setting, locations, and relevant dates, including periods of	5
C		recruitment, exposure, follow-up, and data collection	
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods	5
1		of selection of participants. Describe methods of follow-up	
		<i>Case-control study</i> —Give the eligibility criteria, and the sources and	
		methods of case ascertainment and control selection. Give the rationale for	
		the choice of cases and controls	
		Cross-sectional study—Give the eligibility criteria, and the sources and	
		methods of selection of participants	
		(b) Cohort study—For matched studies, give matching criteria and number	
		of exposed and unexposed	
		Case-control study—For matched studies, give matching criteria and the	
		number of controls per case	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders,	5-6
		and effect modifiers. Give diagnostic criteria, if applicable	
Data sources/	8*	For each variable of interest, give sources of data and details of methods of	5-6
measurement		assessment (measurement). Describe comparability of assessment methods if	
		there is more than one group	
Bias	9	Describe any efforts to address potential sources of bias	6
			6
Study size	10	Explain how the study size was arrived at	6
Study size Quantitative variables		Explain how the study size was arrived at         Explain how quantitative variables were handled in the analyses. If	
Study size Quantitative variables	10	· ·	
	10	Explain how quantitative variables were handled in the analyses. If	
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5-6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why ( <i>a</i> ) Describe all statistical methods, including those used to control for	5-6
Quantitative variables	10 11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why ( <i>a</i> ) Describe all statistical methods, including those used to control for confounding	5-6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> </ul>	5-6 6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> <li>(c) Explain how missing data were addressed</li> </ul>	5-6 6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> <li>(c) Explain how missing data were addressed</li> <li>(d) Cohort study—If applicable, explain how loss to follow-up was</li> </ul>	5-6 6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> <li>(c) Explain how missing data were addressed</li> <li>(d) Cohort study—If applicable, explain how loss to follow-up was addressed</li> </ul>	5-6 6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> <li>(c) Explain how missing data were addressed</li> <li>(d) Cohort study—If applicable, explain how loss to follow-up was addressed</li> <li><i>Case-control study</i>—If applicable, explain how matching of cases and</li> </ul>	5-6 6 6
Quantitative variables	10 11	<ul> <li>Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why</li> <li>(a) Describe all statistical methods, including those used to control for confounding</li> <li>(b) Describe any methods used to examine subgroups and interactions</li> <li>(c) Explain how missing data were addressed</li> <li>(d) Cohort study—If applicable, explain how loss to follow-up was addressed</li> <li>Case-control study—If applicable, explain how matching of cases and controls was addressed</li> </ul>	5-6 6 6

Continued on next page

Participants	13*	(a) Report numbers of individuals at each stage of study-eg numbers potentially	6-
		eligible, examined for eligibility, confirmed eligible, included in the study, completing	
		follow-up, and analysed	
		(b) Give reasons for non-participation at each stage	6-
		(c) Consider use of a flow diagram	6-
Descriptive	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and	6-
data		information on exposures and potential confounders	
		(b) Indicate number of participants with missing data for each variable of interest	6-
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)	6-
Outcome data	15*	Cohort study-Report numbers of outcome events or summary measures over time	6-
		Case-control study—Report numbers in each exposure category, or summary	6-
		measures of exposure	
		Cross-sectional study—Report numbers of outcome events or summary measures	6-
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and	6-
		their precision (eg, 95% confidence interval). Make clear which confounders were	
		adjusted for and why they were included	
		(b) Report category boundaries when continuous variables were categorized	6-
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a	6-
		meaningful time period	
Other analyses	17	Report other analyses done-eg analyses of subgroups and interactions, and	6-
		sensitivity analyses	
Discussion			
Key results	18	Summarise key results with reference to study objectives	10
			11
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or	12
		imprecision. Discuss both direction and magnitude of any potential bias	
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations,	10
		multiplicity of analyses, results from similar studies, and other relevant evidence	13
Generalisability	21	Discuss the generalisability (external validity) of the study results	13
Other informati	on		
	22	Give the source of funding and the role of the funders for the present study and, if	14
Funding	22	Give the source of funding and the fole of the funders for the present study and, if	14

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.