

TIME TO CARE

Unpaid and underpaid care work and the global inequality crisis

Methodology note

1 INTRODUCTION

This methodology note accompanies the 2020 Oxfam report *Time to Care: Unpaid and underpaid care work and the global inequality crisis*. It documents and describes the in-house estimations carried out for the report in the following three areas:

- wealth and inequality trends
- unpaid care work
- taxes and paying for the care deficit.

For each of these areas, we document sources and methods of estimation.

Icons used



Most of the information that Oxfam uses in the calculations is derived from open data. We point to the sources where data can be accessed and downloaded.



Important reminders and caveats.

2 WEALTH AND INEQUALITY TRENDS

2.1 BILLIONAIRES AND EXTREME WEALTH

Data source

Forbes publishes a ranked list of billionaires' net worth both annually and daily on its Real Time Ranking of billionaires. For the present analysis, Oxfam used the annual list published in March 2019. At this time, there were 2,153 billionaires on the list, of whom 195 were newcomers. The total wealth held by all billionaires in March 2019 was \$8.7 trillion.

Billionaires' wealth data are presented in billions of dollars as of the day/month the information is captured.



Forbes, 2019 billionaires' list

<https://www.forbes.com/>

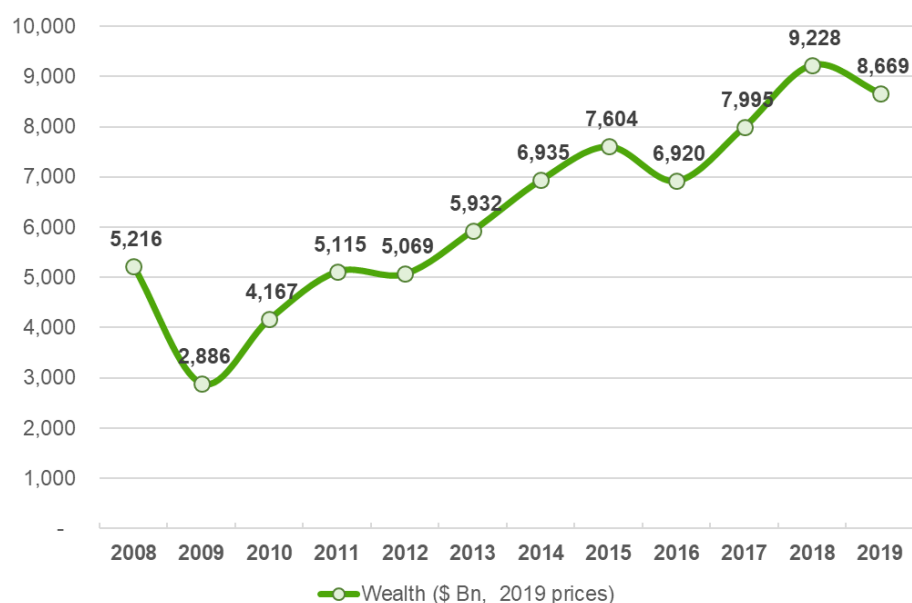
Oxfam's calculations

Changes in billionaires' wealth since 2008

- Reference period: March 2008 to March 2019
- Adjustment: Value of wealth adjusted to be expressed in March 2019 prices
- Deflator: US Consumer Price Index (CPI) from the US Labour Bureau of Statistics (data in **Annex 1**)

Billionaires wealth has increased from \$5.2 to 8.7 trillion from 2008 to 2019 (in 2019 prices) at different rates. The average growth rate for this period has been 7.4%.

Figure 1: Value of billionaires' wealth since 2008



The magnitude of the wealth held by the wealthiest billionaires in 2019

1. The average wealth of the richest five billionaires listed by *Forbes* in March 2019 was \$90bn. If a person could have saved \$10,000 a day since the building of the pyramids in Egypt – circa 2,500 BC¹ – she would still have only one-fifth of the average wealth of the five richest billionaires.²
2. If everyone were to sit on a pile of \$100 bills corresponding to their own net wealth, most of us would be sitting on the floor. Middle-class people in rich countries (with home equity and a pension fund) would be sitting chair-high, and the two richest men in the world would be sitting in outer space.³

2.2 GLOBAL WEALTH DISTRIBUTION

Data sources

Every year, Credit Suisse publishes its *Global Wealth Report* and an accompanying *Global Wealth Databook*. These contain estimates of the wealth holdings of households around the world since 2000. Estimates are provided for more than 200 countries; however, as no country has a single comprehensive source of information on personal wealth, and others have few records of any kind, different methods are employed to estimate wealth figures when they are missing. As a result, wealth estimates show different quality levels ('good'/'fair'/'poor'). Despite this shortcoming, Credit Suisse's *Global Wealth Data* is the most comprehensive reference allowing for an in-depth, long-term overview of how household wealth is distributed within and across nations.

In the latest edition, data are available from 2000 to 2019. As new data on wealth are made available each year, wealth estimates from previous years have been revised. This means that figures used and reported in the new Oxfam report may not match those published in previous years.



Credit Suisse, *Global Wealth Report* and *Global Wealth Databook*. Available at:

<https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html>

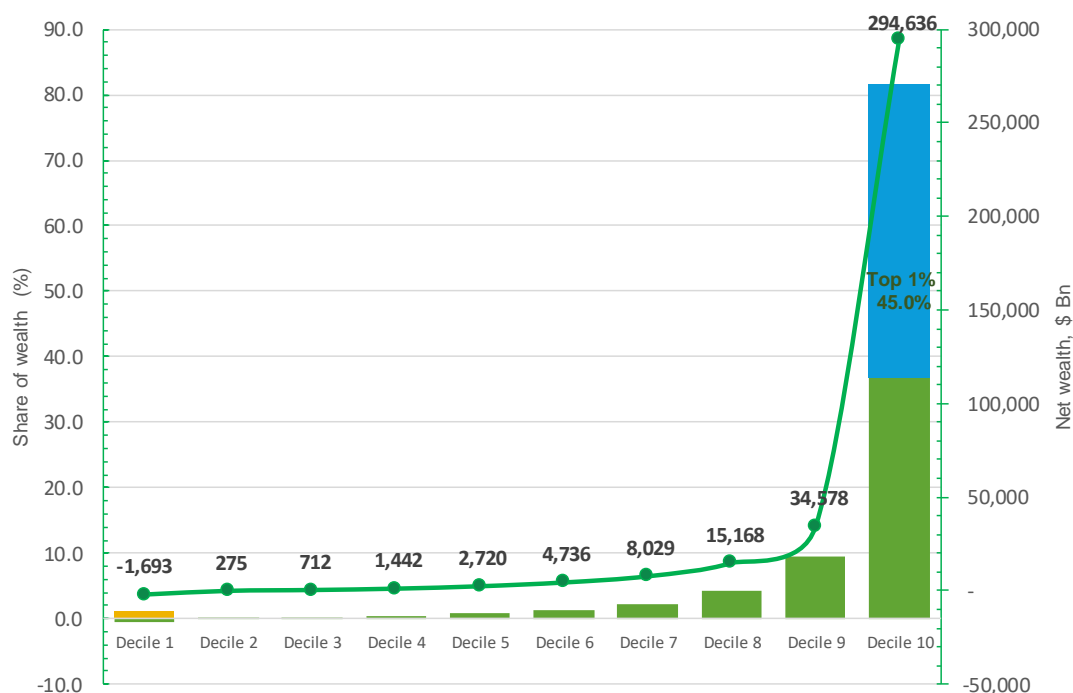
Wealth data are presented in nominal terms. For the period 2000–18, the data refer to the value of wealth accumulated up to the fourth quarter (Q4) of each year. For 2019, data refer to the second quarter (Q2). This information is also available for the year 2018. Oxfam has adjusted the figures on the basis of these different reference periods to convert the value of wealth from nominal to real terms.

Oxfam's calculations

Distribution of the world's wealth in 2019

By June 2019, the world's wealth was largely concentrated in the hands of the top 10%, who held 81.7% of the wealth – with the top 1% alone holding 45% of the world's wealth. This means that this group held more than twice the wealth of 90% of the world's population, or 6.9 billion people.⁴

Figure 2: Distribution of global wealth in % (left axis) and in \$ billions in Q2 2019 (right axis)



Highlight: The world's richest 1% have more than twice as much wealth as 6.9 billion people.

Billionaires' wealth vs the rest of the world

- Adjustment: value of wealth adjusted to be expressed in June 2019 prices.
- Deflator: US Consumer Price Index (CPI) from the US Labour Bureau of Statistics (data in **Annex 1**).

Oxfam has compared the wealth of the billionaires on the *Forbes* list with the combined wealth of the bottom deciles. The combined wealth of deciles shows that 60% of the world's population hold \$8.2 trillion, less than the total wealth of the 2,153 billionaires listed by *Forbes* in March 2019 (\$8.8 trillion in June 2019 prices).

Highlight: Wealth is highly concentrated: in 2019, the world's billionaires – only 2,153 people – had more wealth than 4.6 billion people.

Billionaires' wealth vs women's wealth

The 2018 Credit Suisse report showed that women hold 40% of the world's wealth. This figure, however, shows important regional variations. African women, for instance, hold between 20% and 30% of that region's wealth. Considering that the region's total wealth in 2019 was \$4,119bn and considering the highest possible share held by women (30%), this would mean that African women hold \$1,235.7bn.

Focusing on the wealth of the richest men (male billionaires in the *Forbes* list), we see that 22 of them hold a combined wealth of \$1,268bn.

Highlight: The 22 richest men in the world hold more wealth than all the women in Africa.

3 ESTIMATING THE (MINIMUM) VALUE OF UNPAID CARE

Data sources

Data for this exercise come from different sources.

Data on *time spent on unpaid care work*, including all the different activities that make up unpaid care work (i.e. domestic services for own final use within the household, unpaid caring activities for family members, and community services and help to other households) were provided for 76 countries by Jacques Charmes, author of *Dimensions of Resilience in Developing Countries: Informality, Solidarities and Care Work* (Springer, 2019), where he covers the topic of unpaid care work as measured by time use surveys, and evaluates the care economy in terms of gross domestic product (GDP) for different geographic regions. Results from this analysis are also presented in the International Labour Organization (ILO) report *Care Work and Care Jobs for the Future of Decent Work*.⁵

Data on *minimum wages* were taken mainly from the ILO and complemented with data from <https://www.minimum-wage.org/international>. For countries that do not have a legal minimum wage (i.e. Italy and Sweden in our dataset), the average individual living wage was used.



ILO – Minimum wages:
<https://bit.ly/2qe6KkT>



Alternative source for minimum wages:
<https://www.minimum-wage.org/international>



Living wages:
<https://wageindicator.org/salary/living-wage>

Purchasing power parity (PPP) conversion rates were taken from the World Development Indicators database of the World Bank.



PPP conversion factor, private consumption (LCU per international \$):
<https://databank.worldbank.org/reports.aspx?source=world-development-indicators>

Population estimates for different age groups were taken from United Nations Population Division data.



World Population Prospects 2019:
<https://population.un.org/wpp/Download/Standard/Population/>

Oxfam's calculations

Oxfam used an input-based method using the legal minimum wage as replacement cost. The method for valuing unpaid care work consists of a calculation of the number of hours each year spent in unpaid care work valued with the legal minimum wage converted in 2018 PPP and multiplied by the number of women in a specific age group. Time use surveys collect information for different age groups – Tanzania, for instance, collects information for a population aged 5 and over and France for a population aged 15 and over. For this exercise, we included all women aged 15 and over. The valuing of unpaid care work also assumes that a full working week is 40 hours per week or 173 hours per month.

The formula consists of estimating the total number of hours per month spent on unpaid care activities, valuing this in terms of a full-time monthly minimum wage, multiplying by the number of women aged 15 and over and, finally, multiplying it by 12 to get to an annual figure.

$$Value\ Unpaid\ Care = (UC_{min/day} * \frac{(365)}{12}) * \frac{MMW}{173} * \# Women_{Age \geq 15} * 12$$

Where:

$UC_{min/day}$ = Unpaid care work in minutes per day

MMW = Monthly minimum wage

Women_{age>=15} = Number of women aged 15 and over

We finally aggregate the results for 72 countries with complete data to get to a global figure. The list of countries and final estimations are presented in **Annex 2**.

Accordingly, we estimate that if we were to value unpaid care at a minimum wage, it would have a monetary value of \$10.8 trillion per year, with 78% of such work consisting of domestic chores/services, 17% caregiving services and 4% community services.



These estimates assume that time spent on unpaid care activities has not changed since the time of the surveys carried out at different times in different countries. Admittedly, this includes some measurement bias, but it is very limited considering that between 1997 and 2012 women's time spent on unpaid care work decreased, on average, by one minute per year (from 264 to 249 minutes).⁶



This amount should not be considered the true value of unpaid care work as (1) it is valued at a minimum wage and (2) it considers only countries where time use information exists. This means that the real value of unpaid care is being greatly underestimated in this exercise.

What does \$10.8 trillion mean?

Forrester, a research and advisory firm, has estimated that the total global technology market in 2018 was worth \$3.2 trillion.⁷



<https://go.forrester.com/blogs/forrester-forecasts-5-1-growth-in-global-tech-market-in-2018-and-4-7-in-2019/>

Highlight: The monetary value of women's unpaid care work globally is at least \$10.8 trillion annually – three times the size of the world's tech industry.

4 TAXES AND PAYING FOR CARE SERVICES

RAISING A 0.5% WEALTH TAX FOR THE TOP 1%

Data sources

Data for wealth tax revenues come from two main sources: the OECD's Global Revenue Statistics Database and the IMF's macroeconomic and financial data. The total number of countries covered by these two sources is 111: 78 by the OECD and 33 by the IMF (list of countries and sources in **Annex 3**). For countries with data in both datasets, the OECD data were chosen. For countries with neither OECD nor IMF data, Oxfam estimated wealth tax revenues by multiplying the effective wealth tax rate of that country's income groups by total wealth.



OECD.Stat – Global Revenue Statistics Database:
https://stats.oecd.org/Index.aspx?DataSetCode=RS_GBL



IMF– Government Finance Statistics: Revenue:
<http://data.imf.org/?sk=388DFA60-1D26-4ADE-B505-A05A558D9A42&slid=1479329334655>

In addition, data for household wealth (net of debt) and wealth distribution were taken from Credit Suisse's *Global Wealth Report* and *Global Wealth Databook*.

Oxfam's calculations

In order to estimate what an additional 0.5% tax on the wealthiest 1% of individuals in each country would amount to, Oxfam has estimated the following:

Total wealth: Estimate of wealth (net of debt) for all individual residents in a country, gathered from Credit Suisse data for the year 2015. While more recent data are available, 2015 was chosen to match the most recent data for wealth tax revenues and social spending.

Wealth tax revenues: Government revenues at all levels (i.e. central, regional and local governments) from all taxes on wealth, including property taxes, inheritance and gift taxes, net wealth taxes, and property and financial transaction taxes (but excluding capital gains taxes that are accounted as income taxes) were gathered from the OECD and IMF sources. Data for 2015 are used, as this is the latest year with data for most countries (111 countries).

Effective wealth tax rate: Estimated by dividing wealth tax revenues by total wealth.

Wealth of richest 1%: Net wealth of individual residents in a country belonging to the top 1% in the wealth distribution of that country. It is important to note that this is not the top 1% in the world, but the richest 1% in each country. This information was gathered from Credit Suisse.

Spending required to create care jobs and to close care deficits: The ILO has estimated that the additional spending required to close care deficits by 2030 – which covers two critical objectives of Sustainable Development Goals 3 and 4 in education (achieving enrolment rates) and healthcare (meeting coverage rates of the overall population and older persons in long-term care) – is \$3.5 trillion (in 2015 prices).⁸

A 0.5% additional wealth tax on the richest 1%: Oxfam estimates that taxing the richest 1% by an additional 0.5% would raise \$418bn per year, or \$4.18 trillion in the next 10 years (~year 2030).

The estimations are presented for all countries grouped by income in Table 1.

Table 1: Summary of estimations for an additional 0.5% tax on the wealth of the world's richest 1%

Income group	Total wealth (\$bn, 2015)	Wealth tax revenues (\$bn, 2015)	Wealth tax rate	Wealth of 1% richest (\$bn, 2015)	Potential revenue of 0.5% additional tax on wealth of richest 1% (\$bn, 2015)
<i>Low-income countries</i>	341	0.6	0.18%	86	0.4
<i>Lower-middle-income countries</i>	9,923	25	0.25%	4,450	22
<i>Upper-middle-income countries</i>	58,952	265	0.45%	19,687	97
<i>High-income countries</i>	206,291	1,228	0.60%	60,378	298
<i>World</i>	275,507	1,519	0.55%	84,601	418

Highlight: Taxing the wealth of the richest 1% by an additional 0.5% over the next 10 years would be equivalent to the investment needed to create 117 million jobs in education, health, and elderly care and other sectors and to close care deficits.

Like existing wealth tax revenues, the additional potential revenue could be raised through a variety of wealth taxes, including property, inheritance, net wealth and transaction taxes.

Assuming that the richest 1% face the same effective wealth tax rate as the overall population (0.55% is the world average), an additional burden of 0.5% means almost doubling existing wealth tax collection on the richest 1%. Some countries already achieve effective wealth tax rates of that magnitude or even higher for their whole population.

Table 2: Top three countries by effective wealth tax rate by income group

	Effective wealth tax rate
<i>Top three high-income countries¹</i>	
Luxembourg	1.29%
Uruguay	1.27%
Israel	1.21%
<i>Top three upper-middle-income countries²</i>	
Kazakhstan	1.83%
Colombia	1.42%
Russia	1.05%
<i>Top three lower-middle-income countries³</i>	
Morocco	1.09%
Uzbekistan	0.83%
Swaziland	0.79%
<i>Top three low-income countries⁴</i>	
Senegal	0.48%
Afghanistan	0.24%
Democratic Republic of Congo	0.10%

Notes:

¹ Out of 38 countries with available wealth tax revenue data and satisfactory wealth data.

² Out of 11 countries with available wealth tax revenue data and satisfactory wealth data.

³ Out of 25 countries with available wealth tax revenue data and wealth data of any quality. These numbers should be used with caution.

⁴ Out of seven countries with available wealth tax revenue data and wealth data of any quality. These numbers should be used with caution.

However, the richest 1% may not face the same effective wealth tax rate as the whole population. We cannot estimate the effective wealth tax rate borne by the richest 1%, because there are no data about the distribution of wealth tax revenues. While there are reasons to believe that the richest 1% face an effective wealth tax rate higher than the average of 0.55% (as there could be some wealth taxes that apply above a certain threshold of wealth),⁹ other factors point in the opposite direction: the richest 1% have more opportunities to avoid taxes, and they hold more of their wealth as financial wealth relative to real estate wealth, the latter usually being taxed more.¹⁰

Low- and lower-middle-income countries would raise only 5% of the total needed, such that aid would need to increase to transfer the additional revenue from high- to low-income countries.

ANNEXES

ANNEX 1: US CONSUMER PRICE INDEX (CPI)

- Source: US Bureau of Labor Statistics
- Series title: All items in US city average, all urban consumers, not seasonally adjusted
- Seasonality: Not seasonally adjusted
- Survey name: CPI-All Urban Consumers (Current Series)
- Measure data type: US city average
- 1982–84=100
- All items, by month

Table 3: US CPI, January 2008 – September 2019

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	211.1	211.7	213.5	214.8	216.6	218.8	220.0	219.1	218.8	216.6	212.4	210.2
2009	211.1	212.2	212.7	213.2	213.9	215.7	215.4	215.8	216.0	216.2	216.3	215.9
2010	216.7	216.7	217.6	218.0	218.2	218.0	218.0	218.3	218.4	218.7	218.8	219.2
2011	220.2	221.3	223.5	224.9	226.0	225.7	225.9	226.5	226.9	226.4	226.2	225.7
2012	226.7	227.7	229.4	230.1	229.8	229.5	229.1	230.4	231.4	231.3	230.2	229.6
2013	230.3	232.2	232.8	232.5	232.9	233.5	233.6	233.9	234.1	233.5	233.1	233.0
2014	233.9	234.8	236.3	237.1	237.9	238.3	238.3	237.9	238.0	237.4	236.2	234.8
2015	233.7	234.7	236.1	236.6	237.8	238.6	238.7	238.3	237.9	237.8	237.3	236.5
2016	236.9	237.1	238.1	239.3	240.2	241.0	240.6	240.8	241.4	241.7	241.4	241.4
2017	242.8	243.6	243.8	244.5	244.7	245.0	244.8	245.5	246.8	246.7	246.7	246.5
2018	247.9	249.0	249.6	250.5	251.6	252.0	252.0	252.1	252.4	252.9	252.0	251.2
2019	251.7	252.8	254.2	255.5	256.1	256.1	256.6	256.6	256.8			



US Bureau of Labor Statistics, Consumer Price Index:
<https://www.bls.gov/cpi/tables/supplemental-files/historical-cpi-u-201909.pdf>

ANNEX 2: VALUING UNPAID CARE USING THE MINIMUM WAGE

Table 4: Minimum value of unpaid care and constituting activities

Country	Total unpaid (in 2018 PPP dollars)	Domestic services (in 2018 PPP dollars)	Care-giving services (in 2018 PPP dollars)	Community services (in 2018 PPP dollars)
Mauritius	663,000,000	548,000,000	105,000,000	9,575,660
Cape Verde	942,000,000	753,000,000	140,000,000	48,000,000
Kyrgyzstan	1,040,000,000	966,000,000	60,600,000	17,800,000
Mongolia	2,460,000,000	1,970,000,000	458,000,000	33,900,000
Macedonia	3,130,000,000	2,810,000,000	308,000,000	14,000,000
Japan	3,490,000,000	2,930,000,000	494,000,000	65,800,000
Armenia	3,970,000,000	3,390,000,000	586,000,000	
Estonia	4,380,000,000	3,640,000,000	520,000,000	218,000,000
Luxemburg	4,470,000,000	3,770,000,000	445,000,000	249,000,000
Benin	4,820,000,000	4,120,000,000	698,000,000	
Moldova	5,510,000,000	4,510,000,000	568,000,000	434,000,000
Albania	5,870,000,000	5,050,000,000	803,000,000	18,700,000
Latvia	5,950,000,000	5,270,000,000	398,000,000	281,000,000
Mali	6,080,000,000	6,080,000,000		
Uruguay	6,100,000,000	4,380,000,000	1,340,000,000	375,000,000
Dominican Republic*	6,660,000,000			
El Salvador	8,150,000,000	4,860,000,000	1,750,000,000	1,540,000,000
Cameroon	8,480,000,000	6,800,000,000	1,520,000,000	160,000,000
Madagascar	10,000,000,000	8,450,000,000	1,270,000,000	316,000,000
Tanzania	10,300,000,000	8,450,000,000	1,770,000,000	43,100,000
Lithuania	10,300,000,000	8,770,000,000	784,000,000	713,000,000
Ghana	11,200,000,000	7,900,000,000	2,700,000,000	612,000,000
Slovenia	11,500,000,000	10,100,000,000	1,200,000,000	201,000,000
Panama	11,600,000,000	7,740,000,000	3,270,000,000	578,000,000
Oman	12,400,000,000	12,400,000,000		
Kazakhstan	14,100,000,000	14,100,000,000		
Paraguay	14,300,000,000	9,600,000,000	4,200,000,000	467,000,000
Ethiopia	15,000,000,000	11,900,000,000	2,430,000,000	671,000,000
Azerbaijan	15,200,000,000	13,600,000,000	1,200,000,000	85,500,000
Cambodia	15,800,000,000	15,800,000,000		
Costa Rica	17,700,000,000	14,300,000,000	2,870,000,000	564,000,000
Iran	18,400,000,000	18,300,000,000		120,000,000
Tunisia	19,800,000,000	17,500,000,000	1,950,000,000	365,000,000
Bulgaria	21,600,000,000	19,400,000,000	1,160,000,000	1,090,000,000
Belarus	25,900,000,000	21,700,000,000	2,840,000,000	1,330,000,000

Serbia	27,300,000,000	24,100,000,000	2,260,000,000	906,000,000
New Zealand	27,900,000,000	22,400,000,000	5,410,000,000	
Ireland	31,500,000,000	20,400,000,000	10,400,000,000	771,000,000
Hungary	32,500,000,000	27,500,000,000	4,960,000,000	
Finland	34,400,000,000	29,000,000,000	4,400,000,000	978,000,000
Sweden	37,700,000,000	31,900,000,000	5,820,000,000	
Ecuador	42,700,000,000	42,700,000,000		
Greece	47,000,000,000	38,900,000,000	4,750,000,000	3,400,000,000
Denmark	49,300,000,000	40,000,000,000	7,110,000,000	2,230,000,000
Portugal	50,300,000,000	43,000,000,000	3,830,000,000	3,500,000,000
Austria	51,800,000,000	42,800,000,000	7,520,000,000	1,540,000,000
Iraq	60,400,000,000	52,500,000,000	7,870,000,000	
Belgium	66,000,000,000	57,400,000,000	8,640,000,000	
South Africa	66,600,000,000	56,700,000,000	8,440,000,000	1,460,000,000
Peru	70,500,000,000	53,600,000,000	14,100,000,000	2,700,000,000
Algeria	71,600,000,000	64,700,000,000	6,890,000,000	
Romania	78,500,000,000	78,500,000,000		
Colombia*	92,700,000,000			
Thailand	102,000,000,000	82,300,000,000	18,400,000,000	1,780,000,000
Morocco	103,000,000,000	103,000,000,000		
Netherlands	117,000,000,000	87,700,000,000	19,300,000,000	9,640,000,000
Korea	174,000,000,000	138,000,000,000	33,300,000,000	2,770,000,000
Mexico	183,000,000,000	109,000,000,000	66,200,000,000	8,220,000,000
Poland	188,000,000,000	141,000,000,000	30,500,000,000	16,200,000,000
Canada	216,000,000,000	180,000,000,000	30,000,000,000	6,000,000,000
Spain	225,000,000,000	181,000,000,000	30,800,000,000	13,700,000,000
Australia	226,000,000,000	174,000,000,000	46,500,000,000	5,810,000,000
Italy	269,000,000,000	267,000,000,000		1,940,000,000
Pakistan	302,000,000,000	243,000,000,000	58,000,000,000	1,050,000,000
Turkey	362,000,000,000	258,000,000,000	44,700,000,000	60,000,000,000
United Kingdom	394,000,000,000	306,000,000,000	54,400,000,000	34,000,000,000
France	399,000,000,000	343,000,000,000	52,800,000,000	3,410,000,000
Argentina	606,000,000,000	431,000,000,000	137,000,000,000	37,700,000,000
Germany	638,000,000,000	539,000,000,000	64,100,000,000	35,600,000,000
India	1,000,000,000,000	1,000,000,000,000		
United States	1,480,000,000,000	1,080,000,000,000	245,000,000,000	150,000,000,000
China	2,600,000,000,000	1,710,000,000,000	845,000,000,000	33,800,000,000
Total	10,859,965,000,000	8,380,957,000,000	1,916,237,600,000	449,725,375,660

Notes: * Unpaid care work not disaggregated into different activities for Dominican Republic and Colombia - only total figure reported

ANNEX 3: SOURCES OF WEALTH TAX REVENUE BY COUNTRY

Table 5: List of countries and source of wealth tax revenue used in analysis

	Country	Source		Country	Source
1	Afghanistan	IMF	36	Finland	OECD
2	Albania	IMF	37	France	OECD
3	Argentina	OECD	38	Georgia	IMF
4	Armenia	IMF	39	Germany	OECD
5	Australia	OECD	40	Ghana	OECD
6	Austria	OECD	41	Greece	OECD
7	Azerbaijan	IMF	42	Guatemala	OECD
8	Bahamas	OECD	43	Honduras	OECD
9	Barbados	OECD	44	Hong Kong	IMF
10	Belarus	IMF	45	Hungary	OECD
11	Belgium	OECD	46	Iceland	OECD
12	Belize	OECD	47	India	IMF
13	Bhutan	IMF	48	Indonesia	OECD
14	Bolivia	OECD	49	Ireland	OECD
15	Bosnia and Herzegovina	IMF	50	Israel	OECD
16	Brazil	OECD	51	Italy	OECD
17	Bulgaria	IMF	52	Jamaica	OECD
18	Cameroon	OECD	53	Japan	OECD
19	Canada	OECD	54	Kazakhstan	OECD
20	Cape Verde	OECD	55	Kenya	OECD
21	Chile	OECD	56	Kiribati	IMF
22	China	IMF	57	Korea	OECD
23	Colombia	OECD	58	Kosovo	IMF
24	Costa Rica	OECD	59	Latvia	OECD
25	Côte d'Ivoire	OECD	60	Lithuania	IMF
26	Cuba	OECD	61	Luxembourg	OECD
27	Cyprus	IMF	62	Macao	IMF
28	Czech Republic	OECD	63	Macedonia	IMF
29	Democratic Republic of Congo	OECD	64	Malaysia	OECD
30	Denmark	OECD	65	Malta	IMF
31	Dominican Republic	OECD	66	Mauritius	OECD
32	Ecuador	OECD	67	Mexico	OECD
33	Egypt	IMF	68	Moldova	IMF
34	El Salvador	OECD	69	Mongolia	IMF
35	Estonia	OECD	70	Morocco	OECD
	Country	Source		Country	Source
71	Myanmar	IMF	101	Trinidad and Tobago	OECD
72	Netherlands	OECD	102	Tunisia	OECD
73	New Zealand	OECD	103	Turkey	OECD
74	Nicaragua	OECD	104	Uganda	OECD
75	Niger	OECD	105	Ukraine	IMF
76	Norway	OECD	106	United Arab Emirates	IMF
77	Panama	OECD	107	United Kingdom	OECD

	Country	Source		Country	Source
78	Paraguay	OECD	108	United States	OECD
79	Peru	OECD	109	Uruguay	OECD
80	Philippines	OECD	110	Uzbekistan	IMF
81	Poland	OECD	111	Venezuela	OECD
82	Portugal	OECD			
83	Romania	IMF			
	Russian	IMF			
84	Federation	IMF			
85	Rwanda	OECD			
86	San Marino	IMF			
87	Senegal	OECD			
88	Seychelles	IMF			
89	Singapore	OECD			
90	Slovak Republic	OECD			
91	Slovenia	OECD			
92	South Africa	OECD			
93	Spain	OECD			
	Swaziland	OECD			
94	(eSwatini)	OECD			
95	Sweden	OECD			
96	Switzerland	OECD			
97	Thailand	IMF			
98	Timor-Leste	IMF			
99	Togo	OECD			
100	Tonga	IMF			

NOTES

- 1 See National Geographic: <https://www.nationalgeographic.com/history/archaeology/giza-pyramids/>
- 2 This estimation does not consider interest or inflation rates. The figure is estimated by counting the number of days since the year 2500 BC until 2019, multiplying \$10,000 by the number of days and, finally, estimating the proportion of wealth accrued in relation to the average fortune of the five richest men according to the Forbes list of March 2019.
- 3 \$10,000 = 0.43" or 1.092cm (according to <https://www.pagetutor.com/trillion/index.html>; https://www.ehd.org/science_technology_largenumbers.php). Therefore: \$1bn (1,000,000,000) = 109,222cm = 1,092.2m = 1.0922km. The shortest distance between Earth and space is about 100km (see <https://www.livescience.com/32154-can-airplanes-fly-into-outer-space.html>) straight up – this is where the planet's boundary ends and suborbital space begins. The net wealth of Jeff Bezos in 2019 was \$131 billion and that of Bill Gates was \$96.5 billion. This means that they would be sitting on piles 143km and 105km high, respectively, in outer space.
- 4 Considering a total population in 2019 of 7.7 billion.
- 5 L. Addati, U. Cattaneo, V. Esquivel and I. Valarino (2018). Care Work and Care Jobs for the Future of Decent Work. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_633135.pdf
- 6 Ibid, p.69.
- 7 This figure is consistent with estimations by statista: <https://www.statista.com/statistics/886397/total-tech-spending-worldwide/>
- 8 See https://www.ilo.org/global/publications/books/WCMS_633135/lang--en/index.htm, p.275.
- 9 See Development Finance International. (2018). Wealth Taxes: A Huge Opportunity to Reduce Inequality (unpublished document).

10 See C. Balestra and R. Tonkin. (2018). Inequalities in household wealth across OECD countries: Evidence from the OECD Wealth Distribution Database. OECD: Working Paper 88. [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=SDD/DOC\(2018\)1&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=SDD/DOC(2018)1&docLanguage=En); and Development Finance International. (2018). Wealth Taxes: A Huge Opportunity to Reduce Inequality (unpublished document).

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