Reclaiming tax sovereignty to transform global climate finance

Methodology note

June 2025

TAX JUSTICE NETWORK

Data sources

The data used for the slider comes from four different primary sources. All primary sources are open and accessible to the public.

We use the Tax Justice Network's estimates on potential revenues from implementing national wealth tax globally (available at Taxing extreme wealth: what countries around the world could gain from progressive wealth taxes) and revenues that could be obtained by curbing cross-border tax abuse (available at The State of Tax Justice 2024).

We also use historical emissions data from the Global Carbon Budget 2024 (Friedlingstein et al., 2024b, ESSD). We use their "Territorial emissions" data which is available since 1850 for many developed economies. Available at the Global Carbon Budget.

We use the *Vulnerability* indicator from the Notre Dame Global Adaptation Index (NDGAI), available at the Notre Dame Global Adaptation Initiative.

Fourthly, we use population data from the World Bank (available at World Bank Group Data).

Variables

Potential Additional Tax Revenue Available (Ending Cross-Border Tax Abuse and Implementing a Wealth Tax)

The *Potential Additional Tax Revenue Available* corresponds to the annual amount each country could generate annually from introducing wealth taxes and from eliminating profit shifting by multinational corporations. It is obtained by summing up the estimates from the wealth tax and the estimates that can be obtained by curbing cross border tax abuse to give us *Potential Additional Tax Revenue Available* for each country. While the amount is fixed in the slider, it is important to remember that this is a *yearly* amount that can be obtained each year.

Historical Share of Emissions of the Country (%)

the share of total historic global emissions attributable to each country. The *Historical Share of Emissions* is used to estimate each country's responsibilities towards contributing towards global climate finance. The *Historical Share of Emissions* is calculated by summing for each country and the world the historical emissions since a given year, and then dividing the country sum by the world's sum to obtain the *Historical Share of Emissions*.

Vulnerability Measure

Each country's share of vulnerability or climate-related needs (e.g., vulnerability to climate impacts) is calculated as a percentage of the total global funding to be distributed. Specifically, we multiply each country's NDGAI Vulnerability Indicator by its population to obtain a weighted vulnerability measure. We then sum these values across all countries to derive the global total vulnerability measure. Finally, we divide each country's weighted vulnerability by the global total to determine that country's share of the global vulnerability, which we term the Vulnerability Measure.

Gross Responsibility Contribution to the Global Climate Fund

This variable estimates how much each country should contribute to the Global Climate Fund. It is estimated by multiplying the *Historical Share of Emissions of the Country (%)* by the *Size of the Global Climate Fund.*

Gross Receipt to receive from the Global Climate Fund

This variable estimates how much each country should receive from the Global Climate Fund. It is obtained by multiplying the *Vulnerability Measure* by the *Size of the Global Climate Fund*.

Net Receipt from the Global Climate Fund

Net Receipts are estimated for each country by estimating *Gross Receipts* minus *Gross Responsibility Contribution*; in other words, it estimates how much each country receives from the Global Climate Fund minus how much they contribute to the Global Climate Fund. If *Net Receipt* is positive, you receive more from the Global Climate Fund that you contribute. If *Net Receipt* is negative, you contribute more to the fund than you receive.

Contribution to the Global Climate Fund and Amount to Spend Domestically

The slider allows you to decide how much you want to assign each country to contribute to the Global Climate Fund. This is a function of how much Total Potential Revenue Available there is. Each country can choose to give between 0 and 100% of those revenues to the Global Climate Fund. Consequently, what is not contributed to the Global Climate Fund is left to spend domestically.

Percentage of the Contribution Covered

Depending on your choice, these three variables will change.

Countries with missing data

Our aim is to make the slider global and to encompass all countries and jurisdictions. Unfortunately, missing data difficults that objective. Countries which do not have data in either Historical Emissions or Vulnerability from the primary sources have to be dropped and are not present in the slider because we cannot calculate their *Gross Responsibility Contribution and/or their Gross Receipt***.** If one of the two variables is missing and we include that country in the slider, some jurisdictions would look like jurisdictions that have a responsibility to contribute but should receive nothing, and others would look like recipients without any contributions, muddying the overall picture. Furthermore, we decided against using proxies for missing data. The two primary sources on emissions and vulnerability were constructed to show the differences across countries. Using baseless proxies (e.g. imputations, averages…) would be a malpractice in this case. **Table A1** lists the countries not included in the slider due to missing data. Should Historical Emissions or Vulnerability data be made available for these jurisdictions by the two original sources, the slider could be updated to include them.

It is nonetheless important to discuss the implications of dropping these jurisdictions. Firstly, the implications are relatively minor for the size of the fund. Assume a baseline Fund of $1 trillion and historical emissions since 1850; dropped countries with available historical emissions data on which we can calculate the *Gross Responsibility Contribution*, would contribute $1.2 billion to the Fund, which is equal to 0.12%. Thus, their omission is negligeable and would not affect the size of the fund. Moreover, this is mostly driven by the *Gross Responsibility Contribution* of Hong Kong ($978 million) and Curaçao ($301 million), two jurisdictions with slightly higher historical emissions than the rest of dropped jurisdictions. We will come back to these two jurisdictions below.

Secondly the majority of missing jurisdictions are small jurisdictions, both territorially and in terms of population, except Hong Kong and Palestine. Even if we assume a higher than average vulnerability to climate change, which is likely, and would likely make them net recipients, the values of their absolute receipts from the fund will be comparatively small with respect to the total. This is easily shown by comparing countries with similar characteristics (such as neighbours for which data is available).

Thirdly, given the given the small size of the *Gross Responsibility Contribution***s** of the jurisdictions we drop, and the relatively small size of the absolute receipts they would receive, we are confident that dropping them does not distort extensively the values for the rest of countries. The main consequences of including them in the future would be twofold: since more countries would be contributing to the fund, there would be more global funds; since those funds would have to be

distributed with more jurisdictions, there might be a marginal decrease in the funds received by everyone else. In any case, the magnitude of those changes is likely to be very small.

Fourthly, the majority of dropped countries are either overseas territories, colonies, or occupied territories. Hence, they often depend on a metropolis and are not fully independent to set their own legislative choices or cannot be present in international negotiations as the sovereignty on foreign affairs might be in the hands of the metropolis. The details of their inclusion in a future fund remains a matter of further discussion. Moreover, these territories represent a further paradox: they are often highly vulnerable to climate change, have a historically low contribution of emissions… but they are also tax havens, with vast amounts of foreign funds hidden in their territories, funds that are global and could be used in climate finance.

The British Virgin Islands, Curaçao, Puerto Rico, Jersey, Guernsey, Hong Kong, Macao, and the Northern Mariana Islands could collect an extra $5.1 billion in tax revenues if cross-border tax abuse was reduced. A wealth tax in Hong Kong and Macao would bring an extra $7.3 billion in tax revenues. Hence, while their responsibility towards contributing to a fund might be low given historical emissions (and while they are all dependent of their metropoli), these dropped jurisdictions could contribute importantly to climate finance given their *Potential Additional Tax Revenue.* If anything, their exclusion just means that the Global *Potential Additional Tax Revenue* that we use is a lower bound. Should all countries be included, up to $13.1 billion in *Potential Additional Tax Revenue* could be used either towards a Climate Fund or domestic objectives.

To sum up, dropping the jurisdictions have relatively minor implications for the size of the fund. Given their relatively low size and their relatively small contribution to historical emissions, both their contributions and their receipts would be relatively very small with respect to the size of the fund. While proxying for the missing data would be a malpractice, one can nonetheless safely speculate that the majority of dropped countries vulnerability to climate change is probably above average, and given their low historical contributions, they should be net recipients. Hence, they stand to gain from being included in any future negotiation. Their inclusion would bring more funds, while only very marginally decrease the receipts from the rest. Lastly, it is worth noting that the majority of dropped jurisdictions have some sort of subordinated status, but that they are also a major source of funds, because many of them work as secrecy jurisdictions and/or tax havens.

Table A1. Jurisdictions with missing data	
Americas	Europe
Aruba	Andorra
Anguilla	Faroe Islands
Bonaire, Sint Eustatius and Saba	Guernsey
Bermuda	Gibraltar
Curaçao	Isle of Man
Cayman Islands	Jersey
Greenland	Liechtenstein
St. Kitts and Nevis	Monaco
St. Martin	San Marino
Montserrat	Vatican
Puerto Rico	Kosovo
Sint Maarten	
Turks and Caicos Islands	Oceania
British Virgin Islands	
US Virgin Islands	American Samoa
	Cook Islands
Asia	Guam
	Northern Mariana Islands
Hong Kong	New Caledonia
Macao	Niue
Palestine	French Polynesia
Taiwan	Tokelau
	Wallis and Futuna Islands

The Tax Sovereignty Scale

The Tax Sovereignty Scale is calculated by dividing a country's *Potential Additional Tax Revenue Available* by its *Total Collected Tax Revenue*. The latter is sourced from the UNU-Wider GRD Government Revenue Dataset, using the most recent year of data available for each country.[1]

Countries are then classified into three categories based on the resulting ratio:

Challenged: 0–5%

Endangered: 5–15%

Negated: +15%

It is important to note that for some countries, data on potential revenue from a wealth tax is not available. This limits the estimated additional revenue and may place these countries in a lower category (often "Challenged") than they might otherwise fall into. As such, these figures should be interpreted as **lower-bound estimates**; with complete data, many countries would likely shift upward in the classification.

[1] The most recent data is from 2022, but there is more variation as to what the most available data is for each country. Here is the detailed information on the data

a) **2022:** Angola, Aruba, Bangladesh, Barbados, Belize, Brunei, Burundi, Central African Republic, Colombia, Comoros, Congo, Cote d'Ivoire, Democratic Republic of Congo, Dominica, Dominican Republic, Equatorial Guinea, Eswatini, Fiji, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Haiti, India, Indonesia, Jamaica, Jordan, Kazakhstan, Kenya, Kosovo, Kyrgyzstan, Laos, Lesotho, Liberia, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Moldova, Morocco, Mozambique, Namibia, Nepal, Niger, Oman, Panama, Papua New Guinea, Rwanda, Saint Lucia, Samoa, San Marino, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Singapore, Solomon Islands, Somalia, Sri Lanka, Suriname, Tajikistan, Tanzania, Tonga, Trinidad and Tobago, Tuvalu, United Arab Emirates, Zambia.

b) **2021:** Albania, Antigua and Barbuda, Argentina, Armenia, Austria, Azerbaijan, Bahamas, Belgium, Bhutan, Bolivia, Bosnia and Herzegovina, Brazil, Burkina Faso, Cambodia, Canada, Chile, China, Costa Rica, Croatia, Cuba, Czechia, Denmark, Ecuador, El Salvador, Estonia, Finland, France, Georgia, Germany, Greece, Honduras, Hungary, Iceland, Ireland, Israel, Italy, Kiribati, Latvia, Lebanon, Lithuania, Luxembourg, Macao, Maldives, Malta, Mexico, Micronesia, Mongolia, Montenegro, Nauru, Netherlands, Nicaragua, North Macedonia, Norway, Pakistan, Palestine, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Saint Vincent and the Grenadines, Serbia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Kingdom, United States, Uruguay, Uzbekistan, Vanuatu, Vietnam, Zimbabwe.

c) **2020:** Afghanistan, Australia, Bahrain, Belarus, Bulgaria, Cape Verde, Djibouti, Hong Kong, Japan, Kuwait, Liechtenstein, New Zealand, Palau, Saint Kitts and Nevis, Sudan, Tunisia, Uganda.

d) **Rest of the years:** Cameroon, Guyana, Myanmar, and Togo (2019); Chad and Saudi Arabia (2018); Botswana (2017); Anguilla, East Timor, and Iran (2016); Venezuela (2015); Benin and Russia (2013); Libya and Yemen (2012); Marshall Islands, Qatar, Syria, and Turkmenistan (2008); Nigeria (2007); Cyprus (2004); Eritrea (2002); Gabon (1996).

Tax sovereignty scale	Countries
Negated (+15%)	Sierra Leone, Marshall Islands*, Samoa*, Liberia, Seychelles, Kuwait, Luxembourg, Lebanon, Somalia, Libya, Myanmar, Sao Tome and Principe, Laos, Central African Republic, Syria, Timor-Leste, Singapore, Saudi Arabia, Bahrain, Oman, Nigeria, Honduras, Cambodia, Philippines, India, Costa Rica, Chad, Haiti, China, Chile, Vietnam, St. Lucia*, Solomon Islands*, Mexico, Guinea-Bissau
Endangered (5-15%)	Congo, United Arab Emirates, Equatorial Guinea, Madagascar, Tanzania, Peru, Guyana, Ireland, Benin, Cyprus, Comoros, Namibia, Sri Lanka, Malawi, Afghanistan, Uganda, Malaysia, Mongolia, Mauritius, United States, South Africa, Nicaragua, Burundi, Papua New Guinea, Belize, Guatemala, Australia, Paraguay, Zambia, Pakistan, Russia, Morocco, Gambia, Jamaica, Thailand, Kenya, Rwanda, Brazil, Panama, Indonesia, Mauritania, El Salvador, Bolivia, Mozambique, Cameroon, Sweden, Kazakhstan, Canada, Sudan, Eswatini, Malta, United Kingdom, Turkmenistan, Croatia, St. Vincent & Grenadines*, Switzerland, Djibouti, Israel, Germany, Yemen, Colombia, Portugal, Angola, Mali, Niger, Japan, Barbados*, Iran, Burkina Faso, Brunei, Ghana, Nepal, Dominican Republic, Suriname, New Zealand, Lesotho, Czechia, Latvia, South Korea
Challenged (0-5%)	Netherlands, Bahamas, Jordan, Hungary, Azerbaijan, France, Austria, Democratic Republic of the Congo, Eritrea, Gabon, Guinea, Romania, Bhutan, Uruguay, Iceland, Botswana, Estonia, Denmark, Senegal, Togo, Italy, Trinidad and Tobago, Uzbekistan, Georgia, Bulgaria, Cote d'Ivoire, Cuba, Slovenia, Spain, Poland, Ecuador, Bosnia and Herzegovina, Turkey, Lithuania, Cape Verde, North Macedonia, Ukraine, Tunisia, Belgium, Nauru*, Zimbabwe, Armenia, Maldives, Tajikistan, Albania, Montenegro, Slovakia, Vanuatu*, Finland, Dominica*, Serbia, Norway, Argentina, Greece, Kyrgyz Republic, Bangladesh, Moldova, Fiji*, Grenada*, Venezuela*, Micronesia*, Qatar*, Belarus*, Kiribati*, Tonga*, Tuvalu*, Palau*, Antigua and Barbuda*.

Countries unable to meet their contribution under the most modest climate fund scenario

According to our estimates, even under the most modest climate fund scenario, which is the $300 billion COP29 proposal, 11% of countries would be unable to meet their gross responsibility contribution using their potential additional tax revenues. While we do not undertake a detailed country-by-country analysis, this section offers a brief overview of the general dynamics behind this outcome. Two broad groups of countries tend to emerge: Firstly, countries lacking wealth tax data; for several countries, data on potential revenue from a net wealth tax is unavailable. As a result, their estimated additional revenues only reflect gains from curbing multinational tax abuse. It is likely that, if a wealth tax were implemented and included in the estimates, these countries would be able to meet their contribution. Therefore, their current shortfall should be seen as a reflection of data limitations. Secondly, former Soviet republics: Many ex-USSR countries exhibit relatively high historical emissions, largely due to heavy industrial activity during the Soviet era. This increases their responsibility-based contribution. At the same time, their potential additional tax revenues tend to fall short of the amount required. Future negotiations may need to take into account historical context and the legacy of broader dynamics related to colonialism.