Analysis - Descriptive Analysis

3/8/23

### Purpose

Calculate descriptive statistics for general and military health in both tabular and graphical formats.

### Setup

### Top-10 military health recipients

Calculate top recipients based on three metrics:

1. Total number of projects
2. Total amount spent
3. Total amount spent per project (average)

Data coverage includes all projects between 2005 and 2017.

Note - all summary calculations include top-11 for US and top-10 for China to facilitate comparison with US including or excluding Iraq.

#### Top military - total projects

Top military health recipients: total projects

| United States | China |
| --- | --- |
| Iraq - 796 | Pakistan - 10 |
| Honduras - 63 | Zambia - 9 |
| Dominican Republic - 37 | Sierra Leone - 8 |
| Senegal - 28 | Liberia - 6 |
| Uganda - 28 | Laos - 5 |
| Ghana - 27 | Peru - 5 |
| Kenya - 26 | Ecuador - 4 |
| Zambia - 26 | Ethiopia - 4 |
| Nigeria - 25 | Benin - 3 |
| Peru - 25 | Gabon - 3 |
| South Africa - 25 | NA |
| Note: |  |
| Data sources: US - USAID, CN - AidData. |  |

#### Top military - total spending

Top military health recipients: total spending

| United States | China |
| --- | --- |
| Iraq - 998.98 | Sierra Leone - 46.28 |
| Tanzania (Tanganyika) - 316.9 | Liberia - 39.55 |
| Kenya - 220.04 | Laos - 30.59 |
| Nigeria - 123.19 | Peru - 23.78 |
| Afghanistan - 105.11 | Pakistan - 21.61 |
| Zambia - 99.96 | Benin - 19.95 |
| Uganda - 68.58 | Guinea-Bissau - 19.19 |
| Rwanda - 30.93 | Zambia - 15.92 |
| Mozambique - 25.87 | Ecuador - 4.63 |
| Namibia - 22.43 | Mozambique - 3.23 |
| Vietnam, Democratic Republic of - 21.42 | NA |
| Note: |  |
| Amounts reported in 2017 constant USD, millions. Data sources: US - USAID, CN - AidData. |  |

#### Top military - average spending per project

Top military health recipients: average spending per project

| United States | China |
| --- | --- |
| Tanzania (Tanganyika) - 17.61 | Guinea-Bissau - 9.6 |
| Kenya - 8.46 | Benin - 6.65 |
| Afghanistan - 7.01 | Liberia - 6.59 |
| Nigeria - 4.93 | Laos - 6.12 |
| Zambia - 3.84 | Sierra Leone - 5.78 |
| Uganda - 2.45 | Peru - 4.76 |
| Rwanda - 1.63 | Ukraine - 3.16 |
| Iraq - 1.26 | Pakistan - 2.16 |
| Panama - 1.09 | Zambia - 1.77 |
| Mozambique - 1.08 | Myanmar (Burma) - 1.56 |
| Vietnam, Democratic Republic of - 1.02 | NA |
| Note: |  |
| Amounts reported in 2017 constant USD, millions per project. Data sources: US - USAID, CN - AidData. |  |

### Summary statistics

#### Health outcomes

##### Health - General

Health - General: Summary statistics

| Source | Measure | Mean | Median | SD | Min | Max | N |
| --- | --- | --- | --- | --- | --- | --- | --- |
| United States | Health spending (USD) | 40.540 | 2.897 | 107.387 | 0 | 881.515 | 2201 |
| United States | Health allocation (% budget) | 0.583 | 0.044 | 1.478 | 0 | 17.741 | 2201 |
| China | Health spending (USD) | 0.097 | 0.005 | 0.378 | 0 | 8.525 | 2201 |
| China | Health allocation (% budget) | 0.584 | 0.045 | 1.571 | 0 | 21.366 | 2201 |
| Note: |  |  |  |  |  |  |  |
| USD measures reflect 2017 constant millions USD. Data source: IHME DAH project. |  |  |  |  |  |  |  |

##### Health - Military

Health - Military: Summary statistics

| Source | Measure | Mean | Median | SD | Min | Max | N |
| --- | --- | --- | --- | --- | --- | --- | --- |
| United States | Military health (projects) | 0.908 | 0 | 8.420 | 0 | 298 | 2201 |
| United States | Military health (binary) | 0.358 | 0 | 0.479 | 0 | 1 | 2201 |
| China | Military health (projects) | 0.042 | 0 | 0.261 | 0 | 6 | 2201 |
| China | Military health (binary) | 0.033 | 0 | 0.179 | 0 | 1 | 2201 |
| Note: |  |  |  |  |  |  |  |
| Data sources: US - USAID, CN - AidData. |  |  |  |  |  |  |  |

### Health outcomes (no Iraq)

Note - main model results are robust to data including or excluding Iraq. Many of the 298 Iraq projects in top-reported year (XXXX) are Commander’s Emergency Response Program allocations.

##### Health - General (no Iraq)

Health - General: Summary statistics

| Source | Measure | Mean | Median | SD | Min | Max | N |
| --- | --- | --- | --- | --- | --- | --- | --- |
| United States | Health spending (USD) | 40.069 | 2.851 | 106.664 | 0 | 881.515 | 2188 |
| United States | Health allocation (% budget) | 0.569 | 0.043 | 1.410 | 0 | 10.811 | 2188 |
| China | Health spending (USD) | 0.098 | 0.005 | 0.380 | 0 | 8.525 | 2188 |
| China | Health allocation (% budget) | 0.587 | 0.045 | 1.575 | 0 | 21.366 | 2188 |
| Note: |  |  |  |  |  |  |  |
| USD measures reflect 2017 constant millions USD. Data source: IHME DAH project. |  |  |  |  |  |  |  |

##### Health - Military (no Iraq)

Health - Military: Summary statistics

| Source | Measure | Mean | Median | SD | Min | Max | N |
| --- | --- | --- | --- | --- | --- | --- | --- |
| United States | Military health (projects) | 0.549 | 0 | 1.144 | 0 | 24 | 2188 |
| United States | Military health (binary) | 0.356 | 0 | 0.479 | 0 | 1 | 2188 |
| China | Military health (projects) | 0.042 | 0 | 0.262 | 0 | 6 | 2188 |
| China | Military health (binary) | 0.033 | 0 | 0.180 | 0 | 1 | 2188 |
| Note: |  |  |  |  |  |  |  |
| Data sources: US - USAID, CN - AidData. |  |  |  |  |  |  |  |

### Control variables

Control variables: Summary statistics

| Measure | Mean | Median | SD | Min | Max | N |
| --- | --- | --- | --- | --- | --- | --- |
| Distance from US (km, log) | 9.015 | 9.076 | 0.481 | 6.598 | 9.703 | 2201 |
| GDP per capita (log) | 8.399 | 8.349 | 1.478 | 4.645 | 11.577 | 2201 |
| Life expectancy (years) | 69.853 | 71.981 | 9.035 | 42.518 | 84.290 | 2201 |
| Infant death rate (per 1000 live births, log) | 2.846 | 2.958 | 1.102 | 0.246 | 4.888 | 2201 |
| Communicable disease per capita (log) | -0.582 | -0.514 | 0.369 | -1.430 | 0.307 | 2201 |
| Non-communicable disease per capita (log) | -0.088 | -0.086 | 0.064 | -0.382 | 0.506 | 2201 |
| Humanitarian crisis count | 2.575 | 1.000 | 4.277 | 0.000 | 63.000 | 2201 |
| Humanitarian crisis deaths (log) | 2.564 | 2.639 | 2.362 | 0.000 | 12.344 | 2201 |
| Civil war | 0.035 | 0.000 | 0.183 | 0.000 | 1.000 | 2201 |
| Non-agression pact: US | 0.537 | 1.000 | 0.499 | 0.000 | 1.000 | 2201 |
| Non-agression pact: CN | 0.254 | 0.000 | 0.435 | 0.000 | 1.000 | 2201 |
| Democracy | 0.422 | 0.394 | 0.242 | 0.046 | 0.863 | 2201 |
| Note: |  |  |  |  |  |  |
| Data sources: |  |  |  |  |  |  |
| 1 Distance - locally computed in GIS |  |  |  |  |  |  |
| 2 UN Stats: GDP, life expec., infant death |  |  |  |  |  |  |
| 3 GHDX: Communicable and non-communicable disease prevalence |  |  |  |  |  |  |
| 4 EM-Dat: Humanitarian crises and deaths |  |  |  |  |  |  |
| 5 UCDP GED: Civil war |  |  |  |  |  |  |
| 6 ATOP: non-aggression pacts |  |  |  |  |  |  |
| 7 VDEM: democracy |  |  |  |  |  |  |