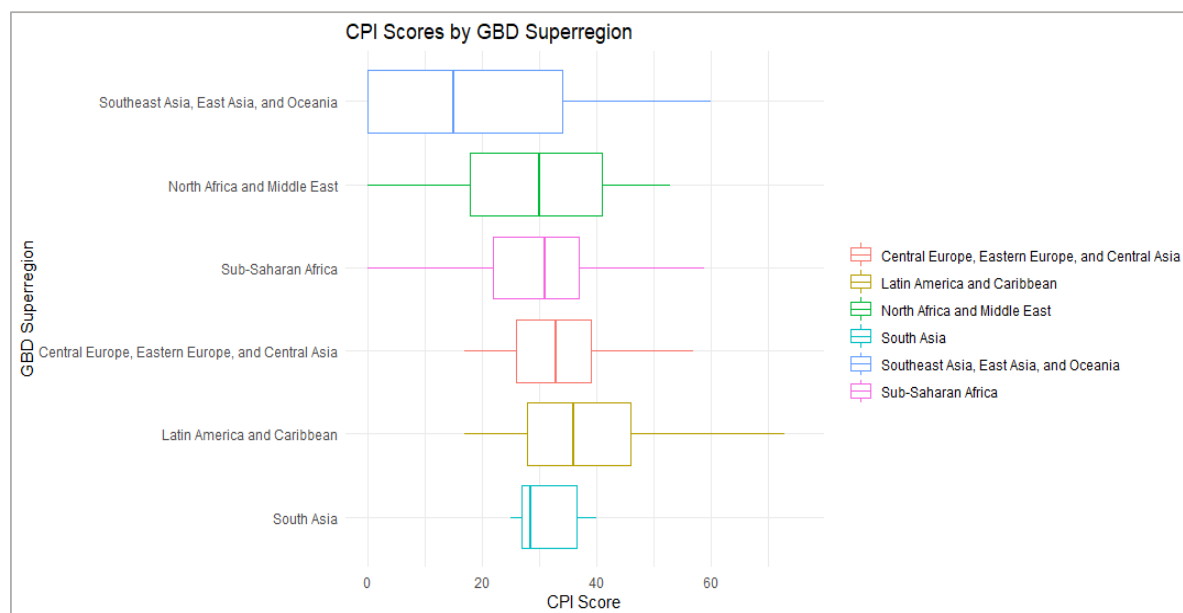


## Appendix

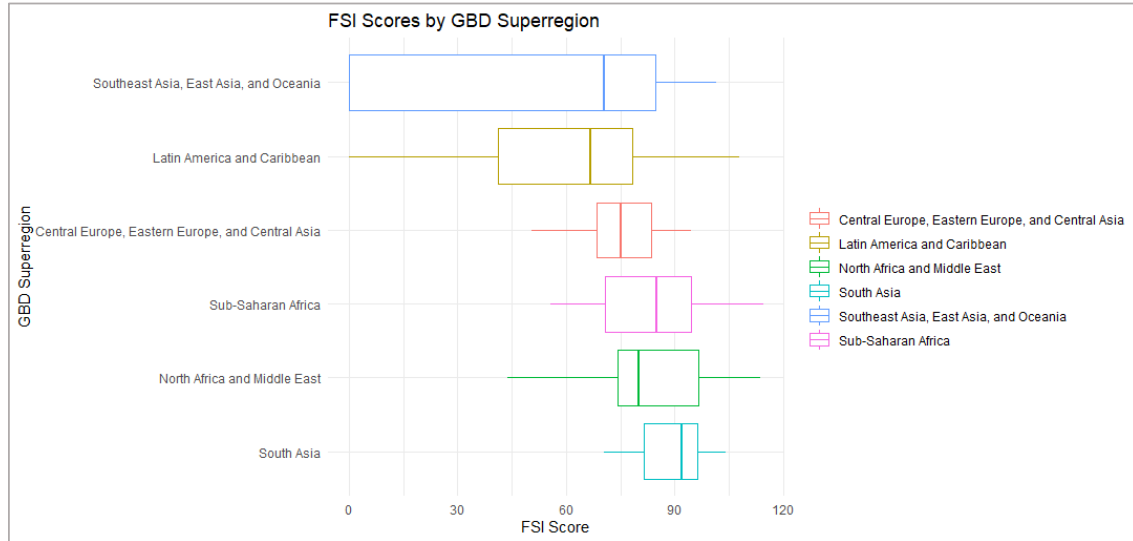
### Factors associated with development assistance for health disbursements in low- and middle-income countries, 2002-2017

#### Summary Distribution of Variables:

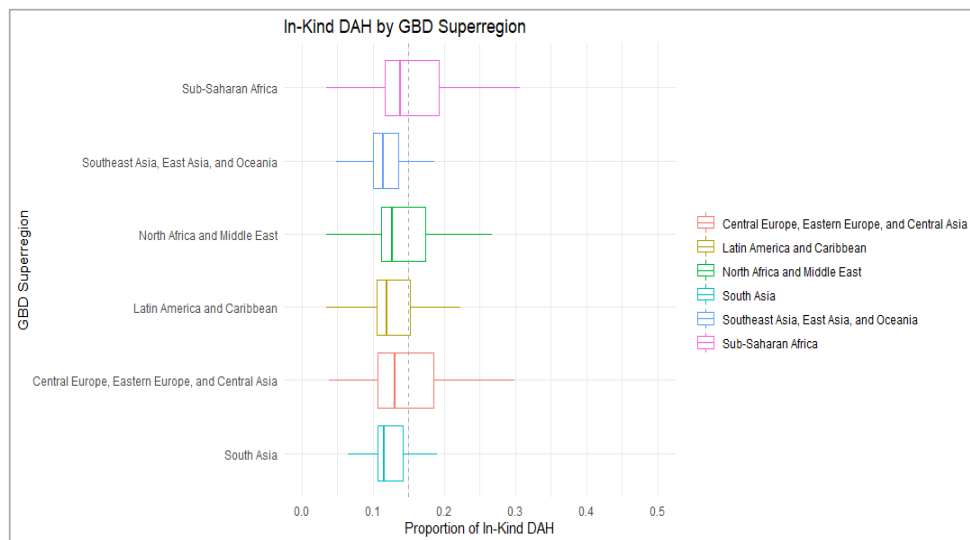
**CPI:** Corruption Perception Index (CPI) scores ranged from 0 through 100 with lower scores reflecting greater corruption higher scores reflecting lower corruption. CPI scores are summarized here by GBD super-region with lower median CPI scores for Southeast Asia and followed by North Africa compared to other super-regions.



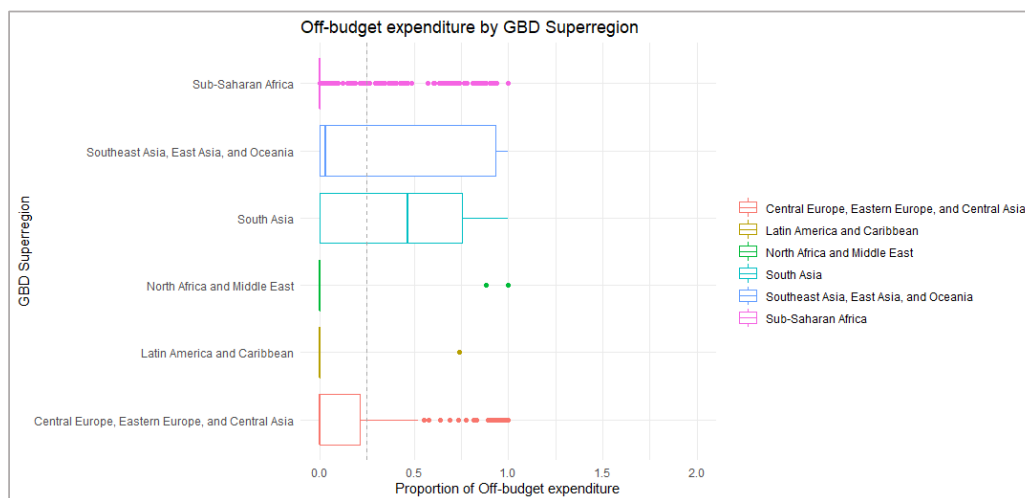
**FSI:** Fragile States Index scores ranged from 0 through 120 with higher scores reflecting higher fragility. FSI scores summarized here show higher relative median FSI scores for South Asia, North Africa, Sub-Saharan Africa, followed by the remaining super-regions.



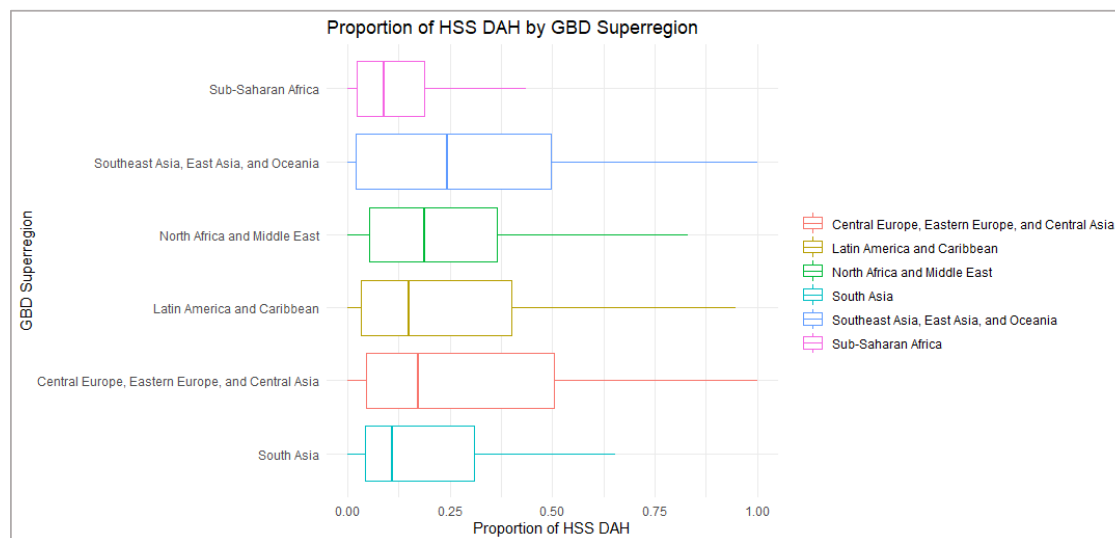
**In-Kind > 15%:** In-Kind or administrative expenses were calculated as a proportion of total DAH. Median proportions of In-Kind DAH were similar for most GBD super-regions – between 10 to 15 percent.



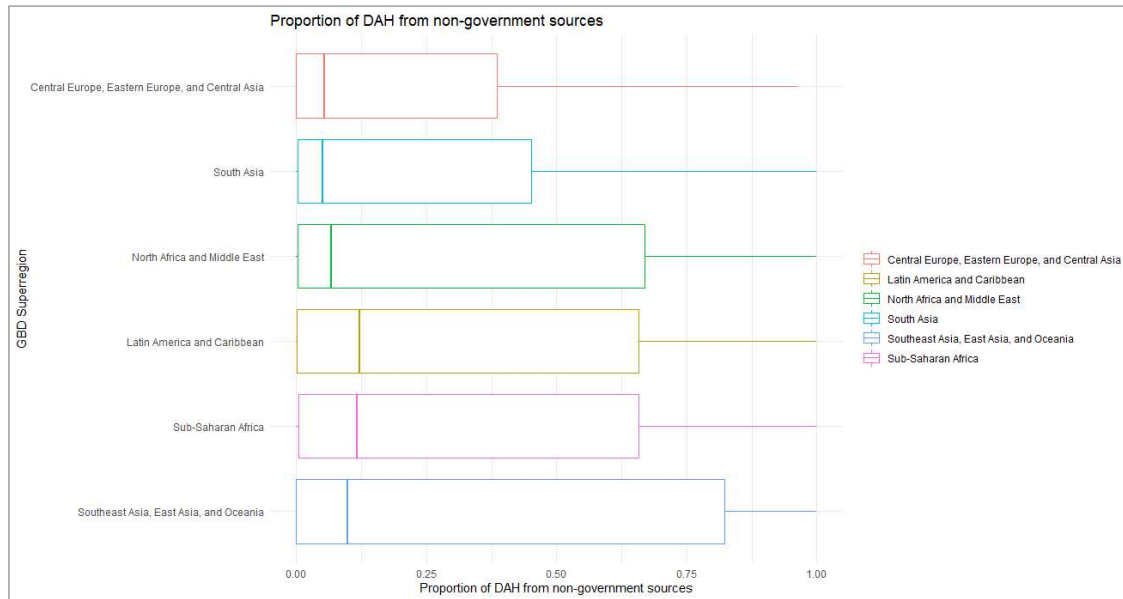
**Off-budget > 25%:** Off-budget delivery as a proportion of total expenditure is summarized here by GBD super-region. Off-budget delivery was characteristic of NHA expenditure predominantly for Southeast Asia, South Asia, and Central Europe.



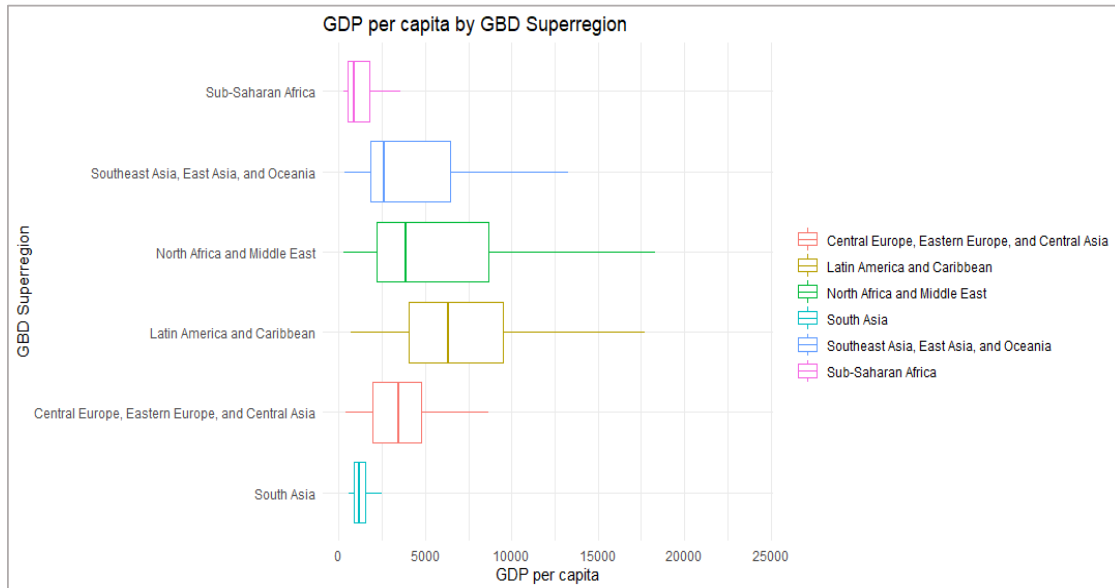
**DAH\_HSS:** The proportion of DAH allocated to health systems strengthening (HSS) is summarized here by GBD super-region. Southeast Asia followed by North Africa accounted for the highest median proportion of HSS DAH.



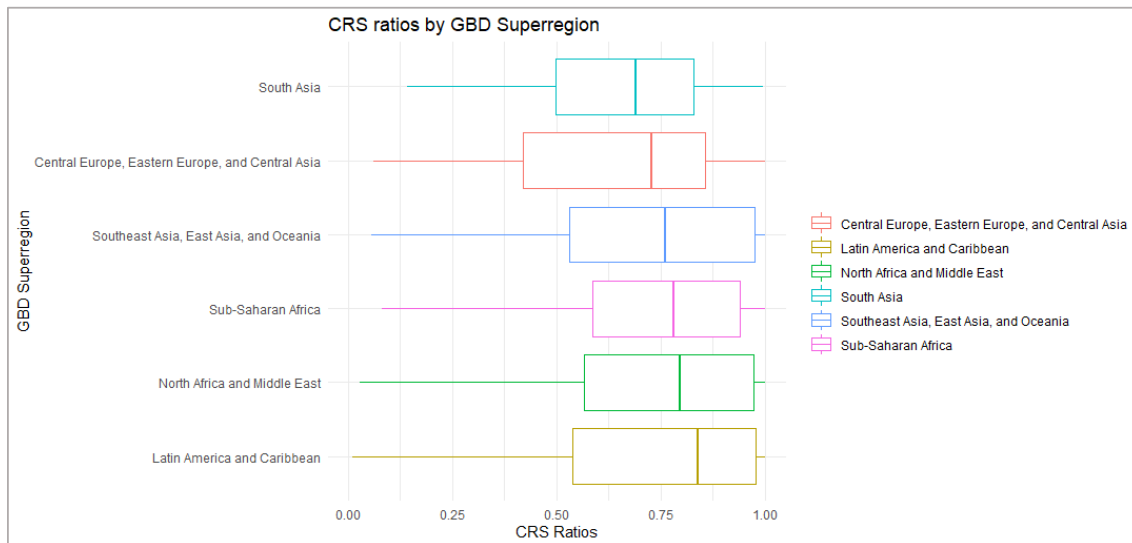
**DAH from non-governmental sources:** The proportion of DAH from non-governmental sources is summarized here by GBD super-region. Latin America and Sub-Saharan Africa accounted for the highest median proportion of DAH from non-governmental sources followed by the remaining GBD super-regions.



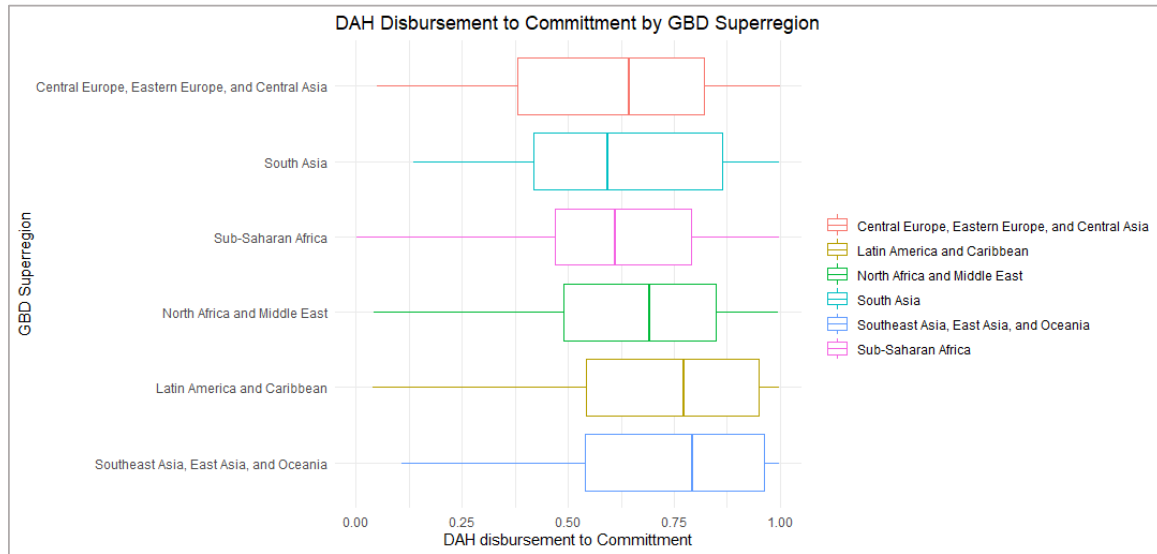
**GDP:** Gross domestic product per capita in US Dollars was estimated by IHME and summarized here by GBD super-region.



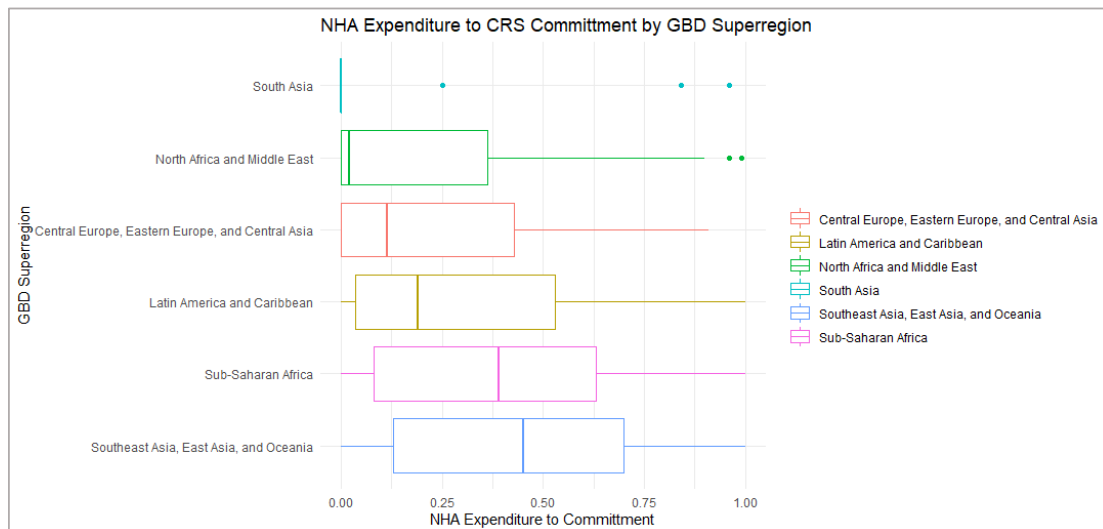
**CRS Disbursement to Commitment:** CRS ratios were calculated as CRS disbursement divided by CRS commitment for each country-year and summarized here by GDB super-region.



**IHME DAH Disbursement to Commitment:** IHME DAH Disbursement to Commitment were calculated and summarized here by super-region.



**NHA Expenditure to CRS Commitment:** NHA expenditure to CRS Commitment was calculated to model NHA data and are summarized here by GBD super-region.



### Additional results using FSI as a covariate

| Parameter                              | CRS              |                 | IHME DAH          |                    | NHA              |                 |
|--|------------------|-----------------|-------------------|--------------------|------------------|-----------------|
|  | GBD super-region | Income-Level    | GBD super-region  | Income-Level       | GBD super-region | Income-Level    |
| Intercept                              | 0.66 (0.03) ***  | 0.71 (0.02) *** | 0.65 (0.05) ***   | 0.65 (0.05) ***    | 0.32 (0.04) ***  | 0.32 (0.02) *** |
| Off-budget > 25%                       | --               | --              | --                | --                 | 0.13 (0.05) *    | 0.21 (0.04) *** |
| In-kind > 15%                          | --               | --              | -0.072 (0.01) *** | -0.078 (0.014) *** | --               | --              |
| FSI                                    | 0.0004 (0.001)   | 0.0007 (0.0001) | -0.001 (0.0002) * | -0.001 (0.0002)    | -0.0005 (0.001)  | 0.001 (0.001)   |
| Proportion of HSS DAH                  | --               | --              | -0.03 (0.03)      | -0.031 (0.03)      | --               | --              |
| Proportion of NGO DAH                  | --               | --              | 0.03 (0.02)       | 0.04 (0.01)        | --               | --              |
| GDP                                    | 0.02 (0.01)      | 0.032 (0.02)    | 0.03 (0.008) ***  | 0.04 (0.01) **     | -0.032 (0.02) *  | -0.0003 (0.02)  |
| Percent DAH from public sources        | --               | --              | 0.02 (0.04)       | --                 | --               | --              |
| Latin America and the Caribbean        | 0.03 (0.03)      | --              | 0.08 (0.03) **    | --                 | 0.03 (0.04)      | --              |
| North Africa and the Middle East       | 0.073 (0.04)     | --              | 0.052 (0.03)      | --                 | 0.09 (0.05)      | --              |
| South Asia                             | 0.007 (0.05)     | --              | 0.04 (0.04)       | --                 | 0.25 (0.17)      | --              |
| Southeast Asia, East Asia, and Oceania | 0.056 (0.03)     | --              | 0.12 (0.03) ***   | --                 | 0.12 (0.05) *    | --              |
| Sub-Saharan Africa                     | 0.08 (0.03) **   | --              | 0.061 (0.02) *    | --                 | 0.12 (0.04) **   | --              |
| Low-Income                             | --               | 0.055 (0.04)    | --                | 0.025 (0.03)       | --               | -0.13 (0.06) *  |
| Low - Middle Income                    | --               | -0.032 (0.02)   | --                | -0.03 (0.02)       | --               | 0.14 (0.04) *** |

Significance codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05

CRS (n = 1034); IHME (n = 1119); NHA (n = 1089)

GBD super-region reference level: Central Asia, Central Europe, Eastern Europe.

Income Group reference level: Upper Middle Income

### Additional results using Income-level as a covariate

| Parameter                       | CRS             | IHME DAH          | NHA             |
|---------------------------------|-----------------|-------------------|-----------------|
| Intercept                       | 0.72 (0.01) *** | 0.64 (0.05) ***   | 0.32 (0.02) *** |
| Off-budget > 25%                | --              | --                | 0.18 (0.05) *** |
| In-kind > 15%                   | --              | -0.07 (0.02) ***  | --              |
| CPI                             | 0.002 (0.001) * | 0.002 (0.001) *** | 0.003 (0.001) * |
| Percent HSS DAH                 | --              | -0.03 (0.03)      | --              |
| Percent NGO DAH                 | --              | -0.03 (0.02)      | --              |
| GDP per capita                  | 0.03 (0.02)     | 0.03 (0.01) *     | -0.009 (0.02)   |
| Percent DAH from public sources | --              | 0.084 (0.05)      | --              |
| Low-Income                      | -0.0016 (0.03)  | 0.03 (0.03)       | 0.171 (0.06) ** |
| Low - Middle Income             | 0.03 (0.02)     | -0.026 (0.02)     | 0.14 (0.04) *** |