DOMESTIC GOVERNMENT SPENDING ON HIV: THREE SCENARIOS ASSESSING DECREASED DONOR SUPPORT
Background

• Recent reports of declining donor financing for HIV underscore the need to mobilize increased domestic government spending.
• At the same time, countries vary significantly in their ability to absorb such cuts, making it critical for donors to carefully assess the vulnerability of countries to declines and plan transitions accordingly.
• However, to date, data needed to make such assessments have been quite limited. This study uses a new dataset*, developed by the Institute for Health Metrics and Evaluation as part of the Global Burden of Disease Health Financing Collaborator Network, to begin to answer these questions.

Methods

• Using IHME's new global dataset on estimated 2015 HIV spending by country*, we identified spending by domestic governments, relative to development assistance for health (DAH) and other financing sources (pre-paid private health spending and out-of-pocket spending).
• We only included countries designated as low-, lower-middle, and upper-middle-income by the World Bank (N=135 in the dataset).
• We ran three scenarios of decreased DAH (2%, 5%, and 10%) to assess implications for domestic government spending.
• Finally, we developed two “country vulnerability” indices based on (1) DAH dependency and (2) increased domestic government spending needed to fill the DAH gap.

*All data are presented in US$ unless otherwise noted. 2015 data have been converted to 2017 purchasing power parity-adjusted dollars. For a full discussion of methods and limitations, see Dieleman, Joseph L et al, Lancet, 2018.
Results

• In 2015, of the estimated $32.6 billion spent on HIV in low- and middle-income countries, 48% ($15.7 billion) was from domestic governments, 45% ($14.5 billion) from DAH, 2% from pre-paid private health spending, and 5% from out-of-pocket spending (see Figure 1).
• The share provided by domestic governments varied significantly by country income group, ranging from 11% ($883 million) in low-income countries to 80% ($11.7 billion) in upper-middle-income countries.
• Conversely, DAH comprised 85% ($6.8 billion) of financing in low-income countries but only 12% ($1.8 billion) in upper-middle-income countries.
• Lower-middle-income countries fell between these extremes.
Figure 1: HIV Spending by Funding Source, by Country Income, 2015

- **All Low- and Middle-Income Countries**
  - Government: 44.6%
  - Pre-Paid: 4.7%
  - Out-of-Pocket: 2.4%
  - DAH: 48.3%

- **Upper-Middle-Income**
  - Government: 79.8%
  - Pre-Paid: 4.5%
  - Out-of-Pocket: 3.5%
  - DAH: 12.1%

- **Lower-Middle-Income**
  - Government: 60.1%
  - Pre-Paid: 6.6%
  - Out-of-Pocket: 1.7%
  - DAH: 31.6%

- **Low-Income**
  - Government: 85.0%
  - Pre-Paid: 2.9%
  - Out-of-Pocket: 1.1%
  - DAH: 11.0%
Results

• The three scenarios of DAH reductions highlight differential impacts by country income (see Figures 2 & 3).
  – For example, a 5% decline in DAH in low-income countries represents $341 million, or almost 40% of what those governments are spending on HIV ($883 million). A 10% decline represents $682 million, or 77% of what they are spending.
  – At the same time, such cuts represent much smaller shares of spending in many middle-income countries. For instance, a 5% decline in DAH represents $89 million, or <1%, of what domestic governments are already spending in upper-middle-income countries; it represents $296 million, or 10%, of what lower-middle-income countries are spending.
Figure 2: Reduction in HIV DAH, Three Scenarios, by Country Income, 2015

- **Upper-Middle-Income**: $36, $89, $178
- **Lower-Middle-Income**: $118, $296, $591
- **Low-Income**: $136, $341, $682

US$ millions
Figure 3: Reduction in HIV DAH as Share of Government Spending on HIV, Three Scenarios, by Country Income, 2015
Vulnerability Index 1: DAH Dependency

- If countries are ranked by their reliance on DAH, as measured by share of total HIV spending from DAH:
  - 67 countries rely on DAH for more than 45% of their spending (the average across low and middle-income countries).
  - Most are low- or lower-middle-income countries. However, 10 are upper-middle-income.
  - 34 countries rely on 75% or more of their funding from DAH, 22 of which are low-income.
  - Among the top 10 countries by this measure, all rely on at least 88% of their funding from DAH, 8 of which are low-income (see Figure 4).
Figure 4: Top 10 Countries Ranked by DAH Dependency, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>DAH Dependency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haiti</td>
<td>97.1%</td>
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<tr>
<td>Somalia</td>
<td>96.5%</td>
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<tr>
<td>Mozambique</td>
<td>94.0%</td>
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<tr>
<td>Vanuatu</td>
<td>93.3%</td>
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<tr>
<td>Burundi</td>
<td>90.9%</td>
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<tr>
<td>Guinea-Bissau</td>
<td>89.9%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>89.6%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>89.6%</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>87.9%</td>
</tr>
<tr>
<td>Djibouti</td>
<td>87.9%</td>
</tr>
</tbody>
</table>

- **Low-Income**
- **Lower-Middle-Income**
Vulnerability Index 2: Domestic Government Spending Needed to Fill DAH Gap

• If countries are ranked by the increase in domestic government spending on HIV needed to fill a 5%* DAH gap:
  – 19 countries would have to increase their spending by a third or more to fill the gap, 15 of which are low-income and 4 are lower-middle-income (none are upper-middle-income).
  – Among the top 10 countries by this measure, all would have to increase their spending by at least 50% to fill a 5% DAH gap; the top 5 would need to more than double their spending. All but one are lower-income (see Figure 5).
  – The ranking by this measure is somewhat different than the DAH vulnerability index, reflecting the relative shares of other financing sources for HIV by country.

*5% decline in DAH is used here, although the ranking is the same across the 3 scenarios.
Figure 5: Top 10 Countries Ranked by Government Spending Increase Needed to Fill 5% DAH Gap, 2015

1. Somalia: 1206%
2. Haiti: 347%
3. Liberia: 336%
4. Nepal: 262%
5. South Sudan: 252%
6. Vanuatu: 179%
7. Afghanistan: 166%
8. Mozambique: 165%
9. Burundi: 118%
10. Zimbabwe: 100%
Conclusion

• The ability to identify and track domestic government resources for HIV is essential for understanding the full HIV financing envelope and carefully managing country transitions.
• As this analysis shows, for some countries, even modest declines in DAH would create significant challenges for governments. For others, absorbing such declines would be more feasible, although other barriers to doing so (e.g., equity, human rights, political concerns, and/or donor reductions to other sectors), may exist.
• The findings here provide a new tool for donors and others to help make such assessments if considering reductions in the short or longer term.