

Global Distribution of Donor Funding for HIV and Responses to Constrained Resources

UNAIDS/World Bank Economics Reference Group
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Intro

- Builds on work for UNAIDS (with Robert Greener), forthcoming in HPP.
- Addresses following questions:
 - Consequences of global crisis.
 - How have donors allocated HIV/AIDS funding in the past?
 - Against observed past donor behaviour, what are consequences of slowdown in external aid?
 - What are implications of slowdown in resources for donor funding policies?

Results

- Permanently reduced outlook for HIV/AIDS financing owing to global crisis.
- Steepest HIV/AIDS financing burden occurs in low-income countries.
- Donor funding described by simple rule (share is declining with GNI per capita).
- Following funding slowdown, need to allocate donor funding more selectively (towards high HIV prevalence, low GNI per capita).

Context: Global funding for HIV/AIDS under pressure

- Demand for HIV/AIDS services (notably treatment) continues to increase in most countries (even where HIV prevalence has stabilized or is declining).
- Changed global macroeconomic and fiscal environment, perception of reduced availability of external funding.
- High rates of external funding of HIV/AIDS programs (e.g., compared to public health in general). Thus, HIV/AIDS programs particularly vulnerable to slowdown in funding.

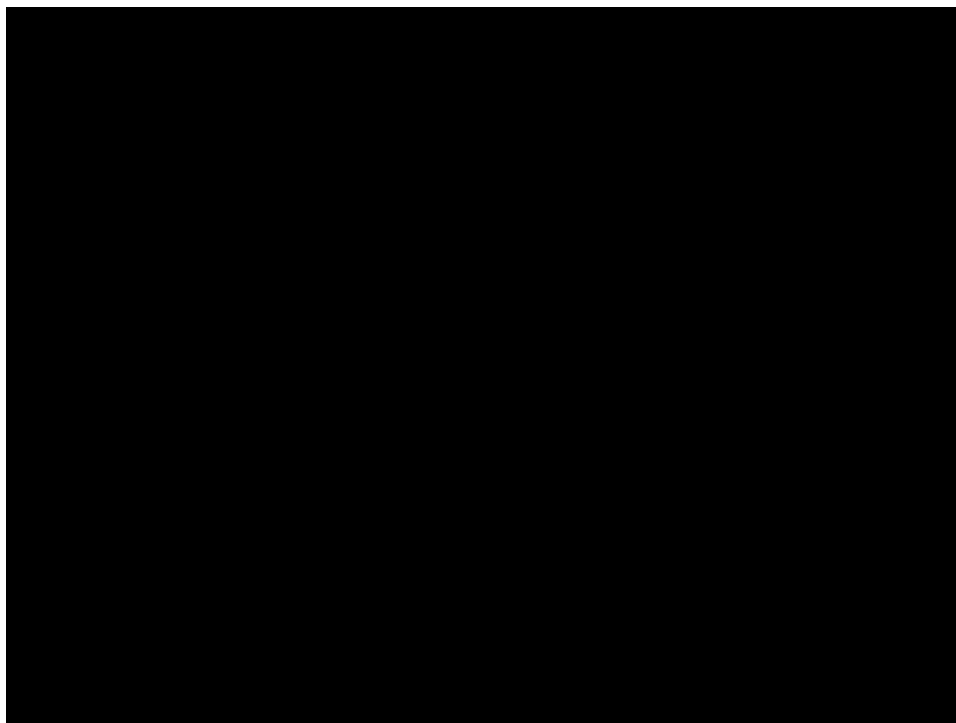
Global Context: This time It Is Different

- Global crisis has not only resulted in a slowdown in growth and increased uncertainty, it has permanently changed the fiscal context of external aid.



Consequences of Global Crisis

- Similar situation as in U.S. in many other donor countries, European debt crisis.
- Fiscal consolidation will take many years, even decades.
- Permanently changed environment for HIV/AIDS financing.

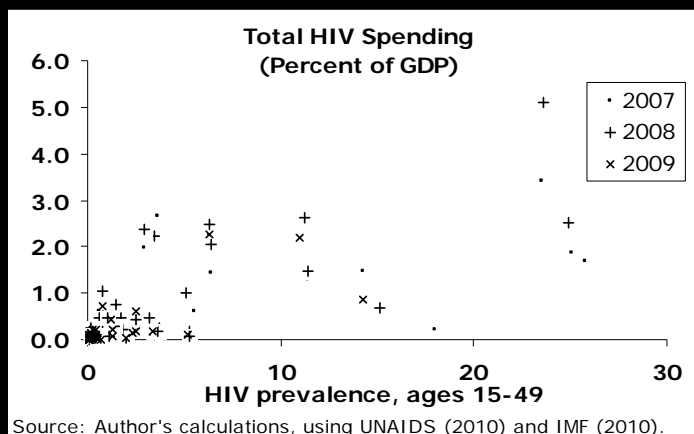


Note on Data

- From now on, principal source of data are spending data from UNGASS reports 2007-2009, as compiled by UNAIDS.
- Breakdown of financing available for 88 countries (188 data points).

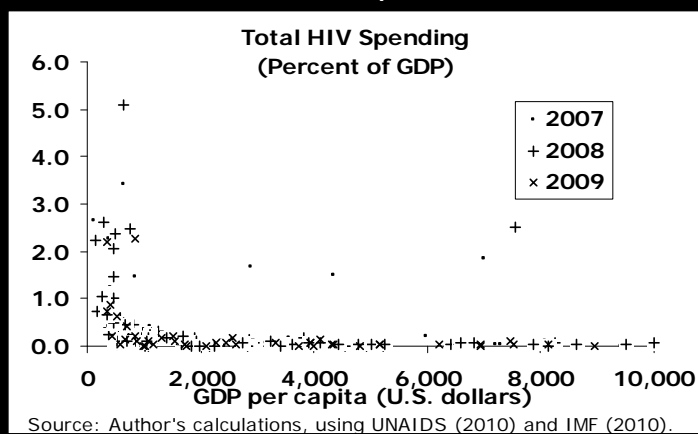
Burden of Financing HIV Programs

- Tends to be higher in countries with high HIV prevalence.

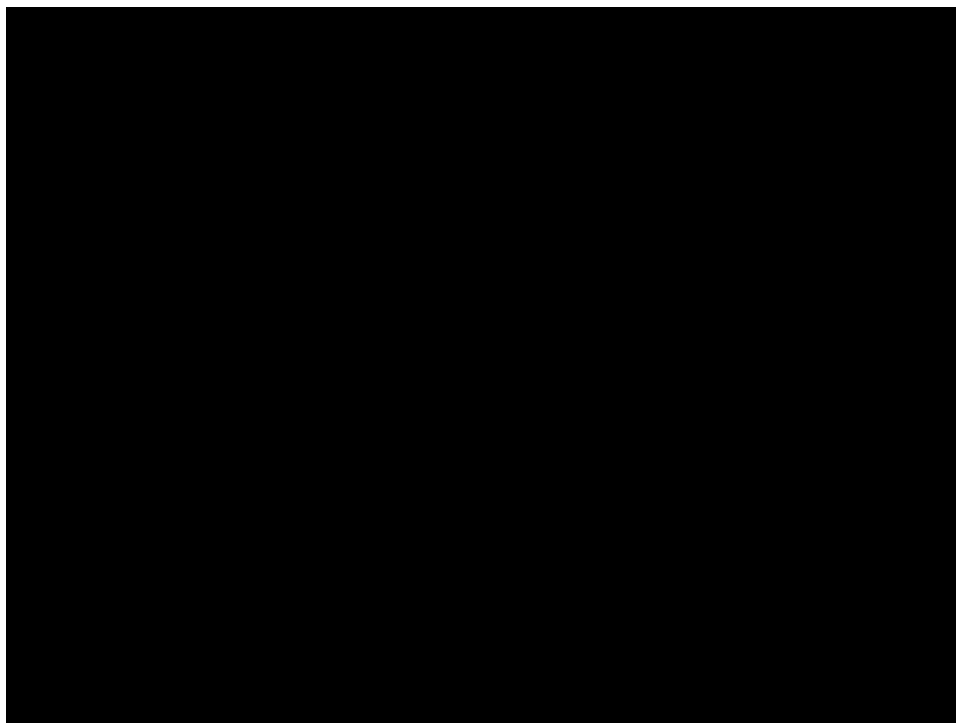


Burden of Financing HIV Programs

- But principal determinant of burden is low level of economic development.

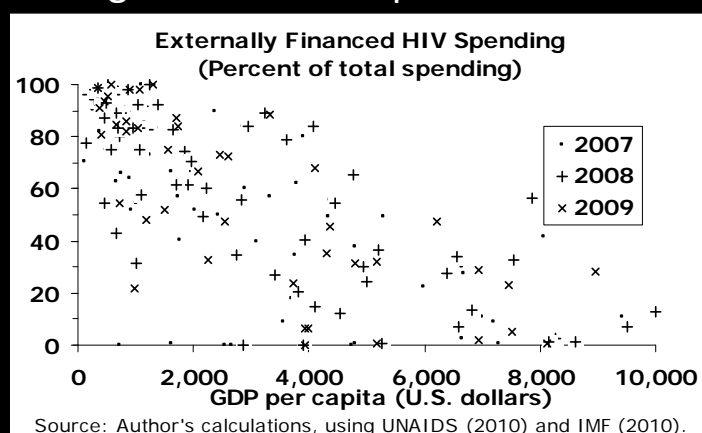


Note: Revenue-to-GDP ratio is lower in low-income countries, figure understates differences in financing challenges across income levels.



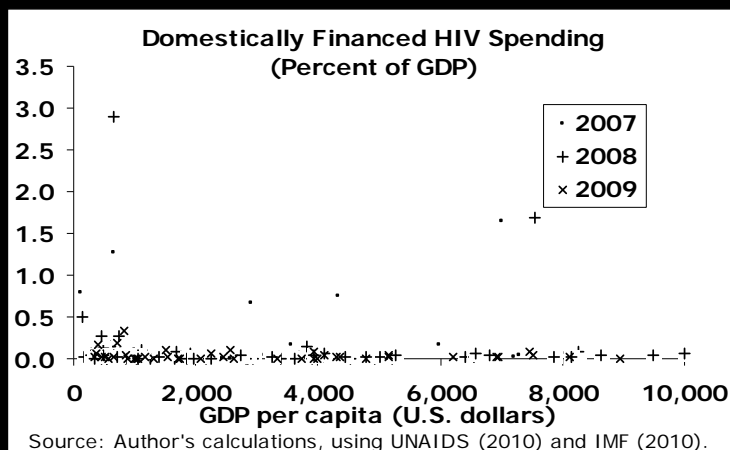
Role of External Funding

- Financing up to 100 percent of HIV/AIDS spending in least-developed countries.



Role of External Funding

- Fairly successful in evening out domestic HIV/AIDS financing burden across countries.



Role of External Funding: Empirical Analysis

Table 1. Determinants of Rate of External Financing

Dependent variable:	External Financing (Percent of total spending)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	80.8*** (21.7)	81.2*** (22.4)	88.8*** (13.2)	81.8*** (19.1)	77.5*** (13.4)	78.6*** (14.1)	90.6 (8.47)	88.2*** (22.9)
GNI per capita (2005 PPP US\$)	-0.0058*** (-12.1)	-0.0058 (-12.2)	-0.00061*** (-9.13)	-0.0057*** (-9.38)	-0.0057*** (-8.10)	-0.0057*** (-8.20)	-0.0057*** (-6.32)	-0.0067*** (-9.94)
Domestic govt. revenues (percent of GDP)			-0.32 (-1.44)				-0.48 (-1.27)	
HIV prevalence (ages 15-49, percent)	0.15 (0.46)		0.37 (1.00)		0.30 (0.69)		0.59 (1.16)	
LIC (=1 if low-income country, =0 otherwise)	11.8*** (2.88)	11.8*** (2.89)	8.17* (1.70)	10.48** (2.32)	12.24** (1.96)	11.96** (1.92)	6.43 (0.88)	
Number of observations	186	186	144	144	88	88	68	68
R-square	0.64	0.64	0.61	0.60	0.65	0.65	0.62	0.60
F-test on exclusions (Prob. On F-test)		0.21 (0.64)		1.13 (0.32)		0.49 (0.49)		1.22 (0.31)

T-ratios in parentheses. One, two, and three stars indicate coefficients significant at the 10-, 5-, and 1-percent level of significance.

Role of External Funding

- Can be summarized by simple rule:

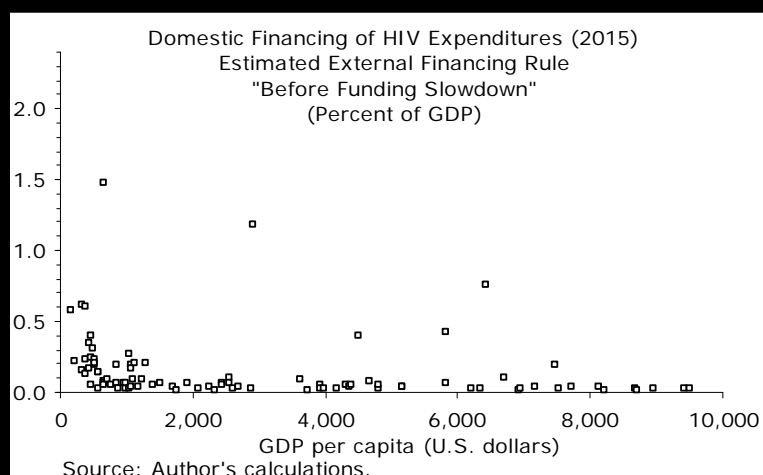
$$\frac{\text{Int}}{\text{Total}} = 78.6 + 12.0 \cdot \text{LIC} - 5.7 \frac{\text{GNIPC}}{1,000}$$

- Share of external financing about 90 percent for least-developed countries, declining with GNI per capita (with jump around LIC-MIC dividing line).
No higher funding shares to countries with high HIV prevalence.

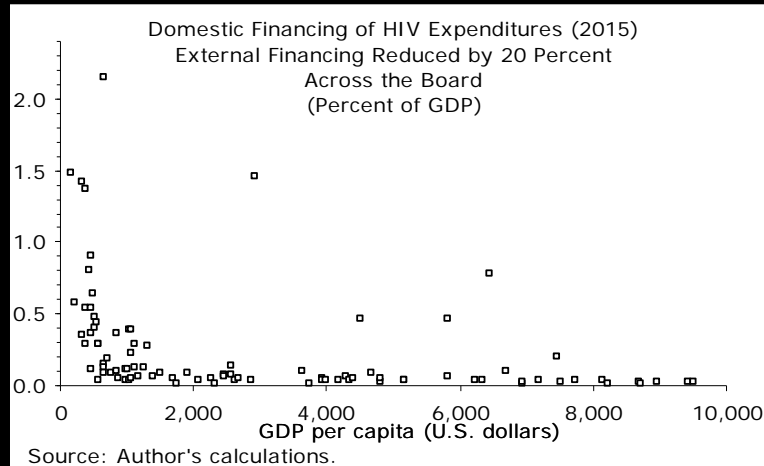
Policy implications of slowdown in external funding

- Largest financing challenges in low-income countries.
- Donors have been funding 80-100 percent of the costs of the HIV program in these countries.
- Therefore, vulnerabilities to slowdown in HIV/AIDS funding concentrated in low-income countries.

Example - 20 % funding drop across the board: before ...



Example - 20 % funding drop across the board: ... and after.



“Estimate” Rule to Avoid Excessive Domestic Financing Burden

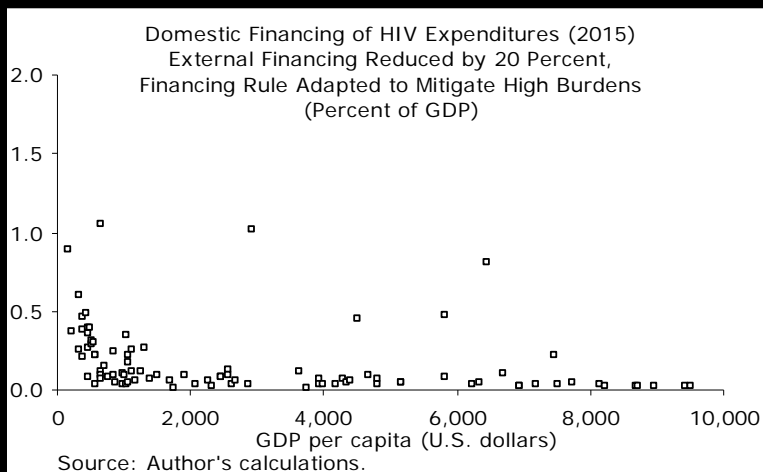
- Apply least-squares criterion: (1) Stay close to estimated rule, (2) avoid large domestic burdens (in % of GDP) after slowdown, (3) stay within budget.
- Policy rule with 20% drop across the board:

$$\frac{\text{Int}}{\text{Total}} = 62.9 + 9.6 \cdot \text{LIC} - 4.6 \frac{\text{GNIPC}}{1,000}$$

- This becomes:

$$\frac{\text{Int}}{\text{Total}} = 69.3 + 12.9 \cdot \text{LIC} - 7.3 \frac{\text{GNIPC}}{1,000} + 0.89 \cdot \text{HIVPREV}$$

Example: 20 % funding drop with changed policy rule.



Results

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Thank you for your attention.