



“Where’s all the money gone?”

Financial crisis and global health spending: Priority setting past, present and future

Vice Chancellor's Forum on Global Health

University of Oxford

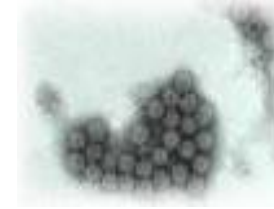
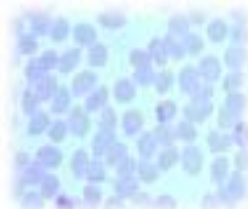
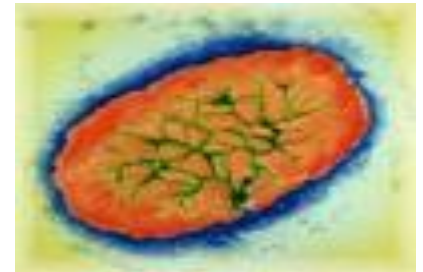
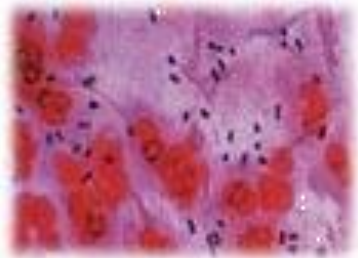
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Preliminary notes on the data and sources in these slides

- Some slides and notes have been added compared to the original presentation to aid those reading this without the benefit of a speaker to explain certain details.
- Many data issues should be borne in mind when reading these slides.
- The data on R&D was gathered in 2007, the first year in a multi-year study. One-year data is subject to the lumpiness of grant-making. In time, as more years are added, the data will become more 'smooth' and 'accurate'. Furthermore, the raw figures don't tell us how much 'should' be spent on specific components of R&D; this requires knowledge of scientific possibilities and costs, and proper integration of burden-of-disease analysis. At some point a priority-setting mechanism might be built off of this work, but this is not there yet. The G-FINDER report is [here](#). The launch video for the G-FINDER report is [here](#).

Preliminary notes continued...

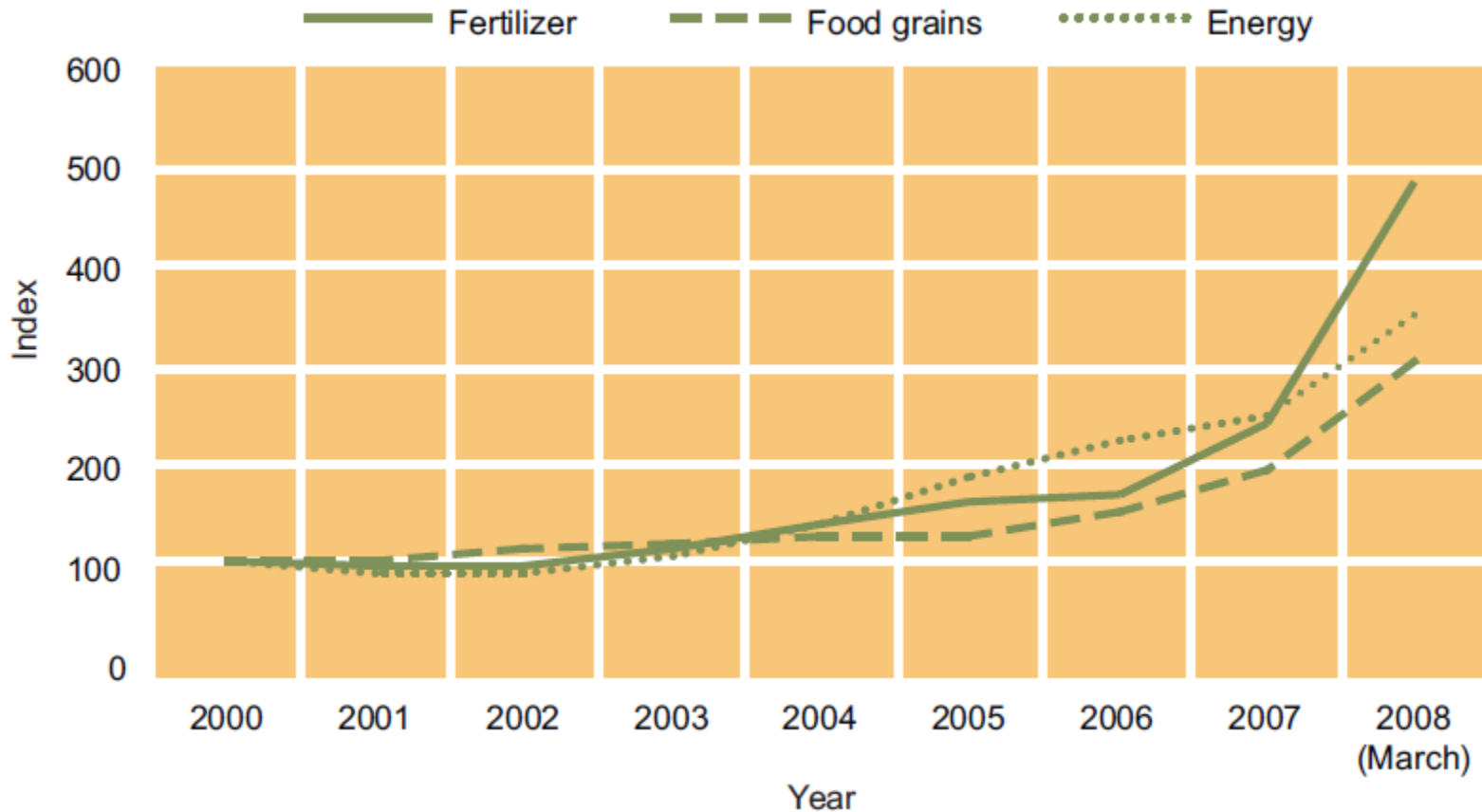
- Measuring maternal mortality is challenging at best. Estimates lie within large uncertainty intervals. Data on maternal mortality is very difficult to collect through surveys. Survey responses tend to be more backward-looking than we might want. The data reported here relies on modelling techniques developed by the World Health Organization, United Nations Children's Fund, and United Nations Population Fund. More on maternal mortality in a previous presentation at the following [link](#).
- Child mortality data in international figures is also very imperfect.
- The ODA figures are also problematic. Many of the figures look a lot better than they actually are because of the way items have been (re)classified to favour a story about large ODA growth.
- This presentation is online for the benefit of wider public debate. Some slides contain material taken from publications elsewhere. Wherever possible sources are cited. However, if any reader spots a problem with the use of material, I will happily change or remove.

What is the impact of
the financial crisis on
the poor?

Consequences of the financial crisis according to the World Bank

- 53 million more people into poverty (<\$2 per day)
- This is on top of the 130-153 million already pushed into poverty as a result of the food and fuel price increases 2005-2008. A crisis on a crisis.
- Additional 44 million malnourished individuals
- Slower growth rates will slow progress in reducing Infant Mortality Rate
 - 200,000 to 400,000 additional children may die every year
 - Up to 1.4 to 2.8 million more infant deaths by 2015 if crisis persists

Crisis on a crisis: Food, energy, fertilizer costs



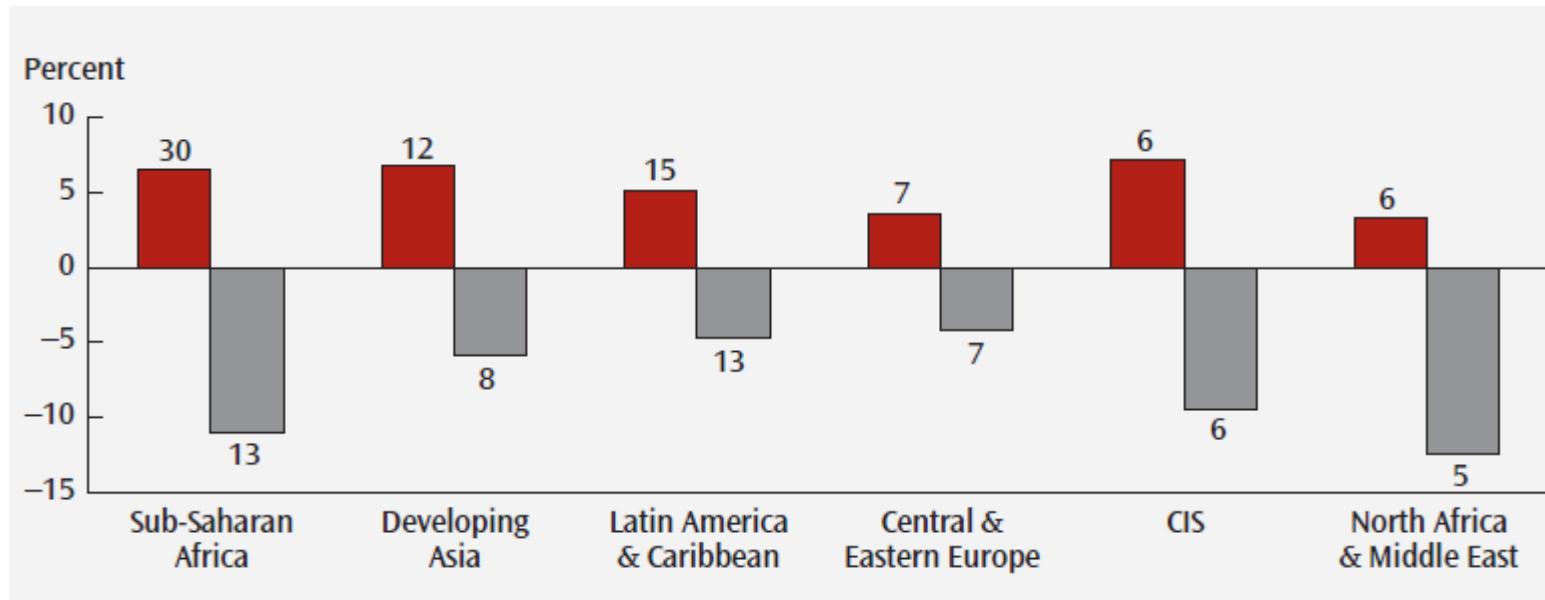
Source: World Bank, Development Prospects Group

Consequences of the financial crisis:

WHO early signs of problems ahead

- 7+ ministries of health in Africa - including some of the poorest - have already been notified that the budget for health will be cut
- Costs of drugs rose in previous crisis (partly because of devalued local currencies). Similar this time:
 - Central Asia prices are up by 30%
 - Countries that have commitments for AIDS treatments are finding budgets squeezed
 - Countries with drug resistant TB finding budgets squeezed
- Plans to create the fiscal space to address the future health needs of the elderly are being shelved

Real 2009 per capita growth rate adjusted for terms-of-trade changes



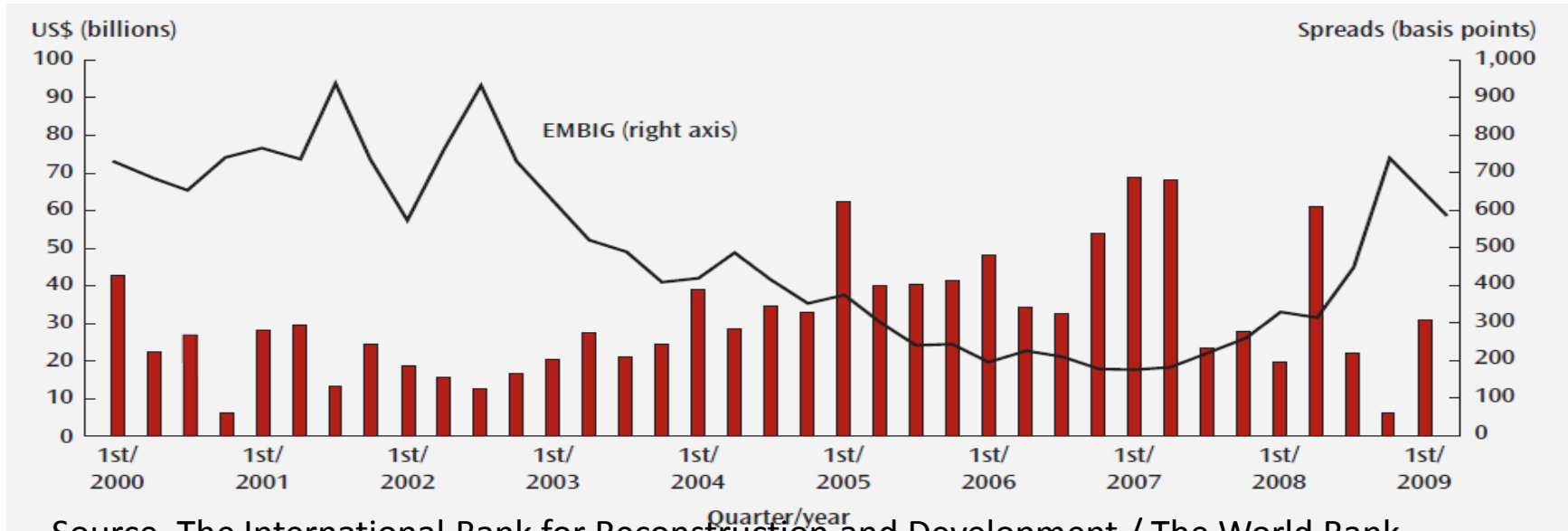
Source. IMF

Terms of trade is an index of the price of a country's exports in terms of its imports. The terms of trade are said to improve if that index rises (Obstfeld and Rogoff, p 25)

- These are the lowest/worst for decades
- Poor countries can't run countercyclical budget policies on anywhere near the scale of rich countries because of higher sovereign risk and lower access to global capital markets

Cost of credit

Bond spreads and issues of international bonds in emerging markets and developing countries



Source. The International Bank for Reconstruction and Development / The World Bank
'Global Monitoring Report 2009: A Development Emergency

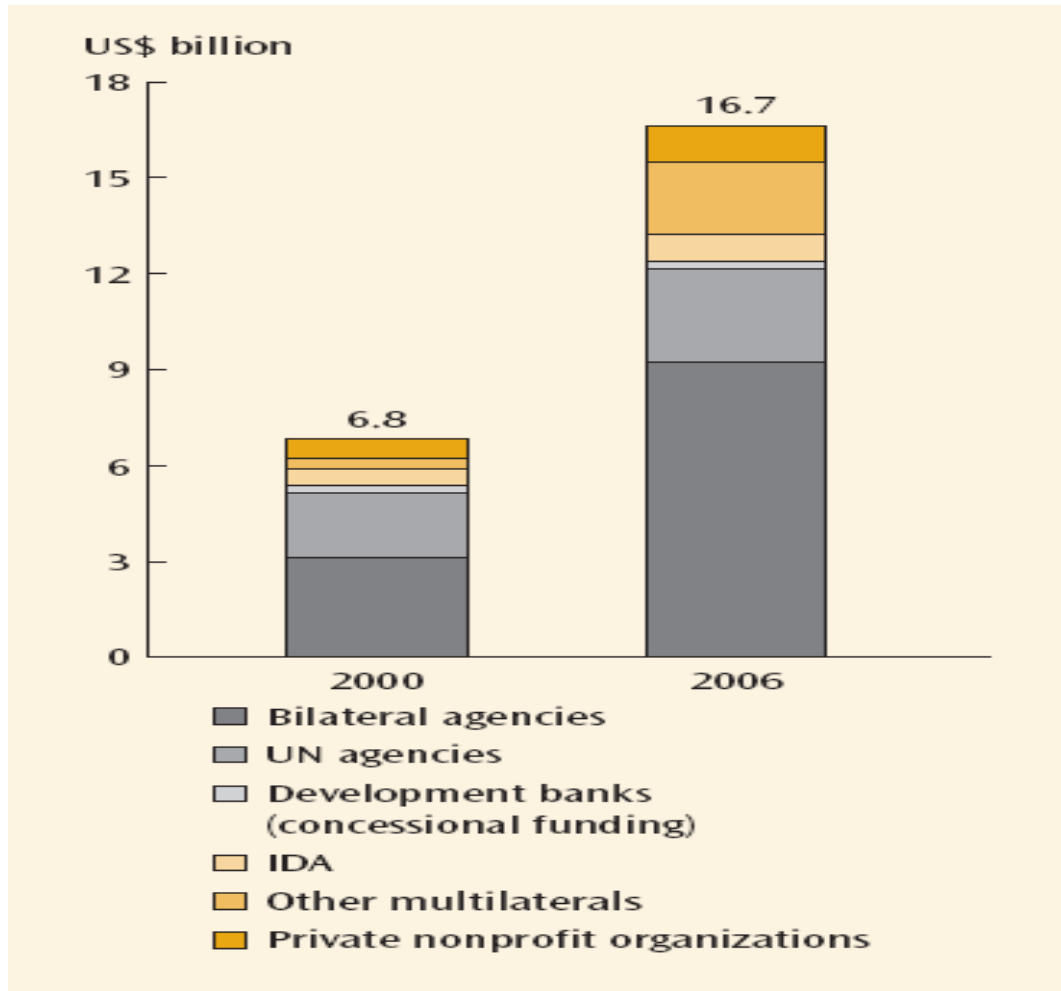
- Banks in rich countries cut lending to improve capital ratios
- With pressure in rich countries to maintain credit there, lending to poor countries cut more than proportionately
- The dangers of a form of protectionism harming the poor

The poor don't get cushioned like the rich



What was the progress in
Global Health Financing,
and ODA, prior to the
crisis?

Growth in commitments to development assistance for health (DAH)



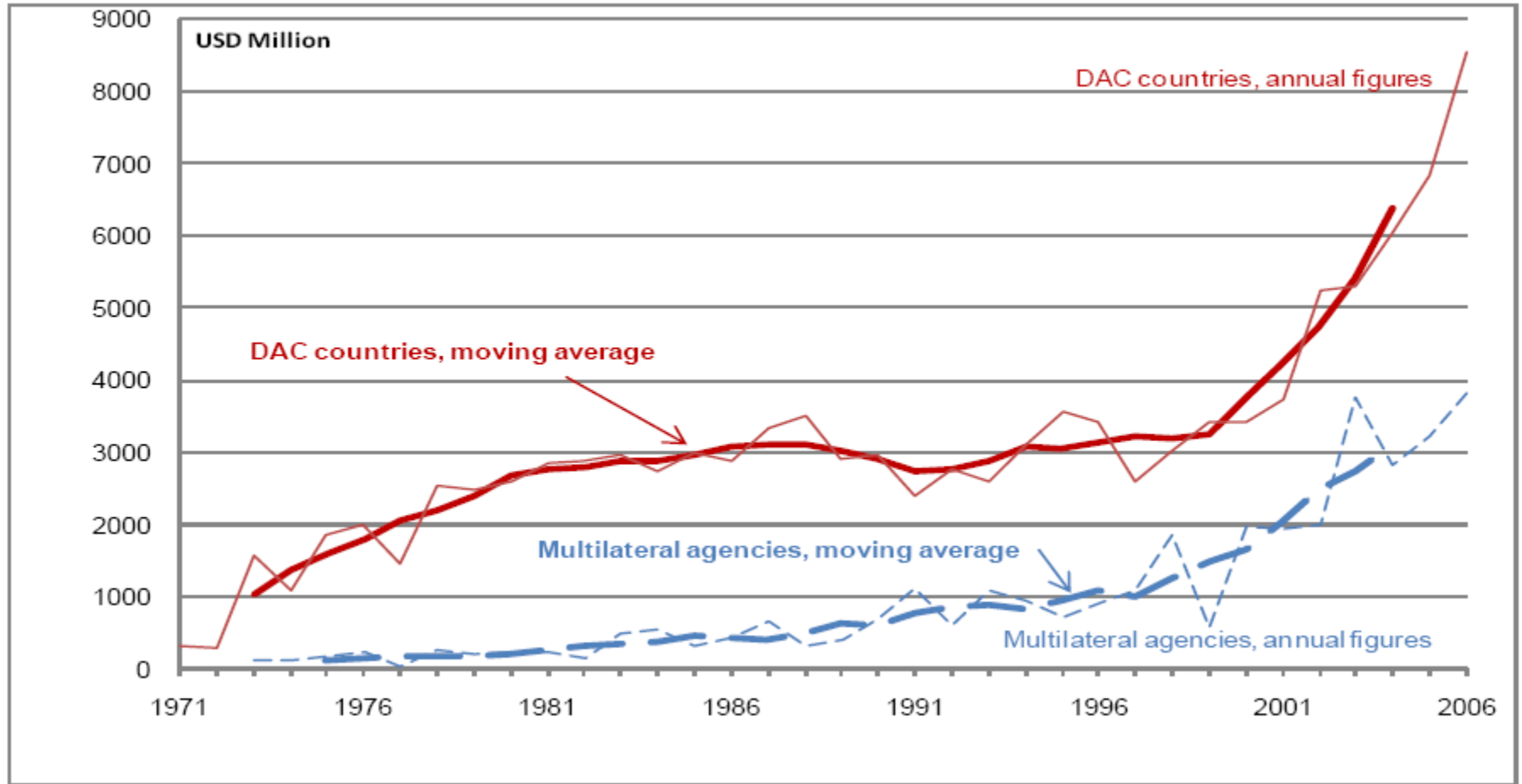
Development assistance for health (from governments, multinational agencies and private foundations) has more than doubled in recent years.

ODA commitments to health \$5.5bn in 2001, \$13.4bn in 2006-07. BMGF \$3bn.

Source: World Bank 2008 global monitoring report

IDA = International Development Association, interest-free loans and grants

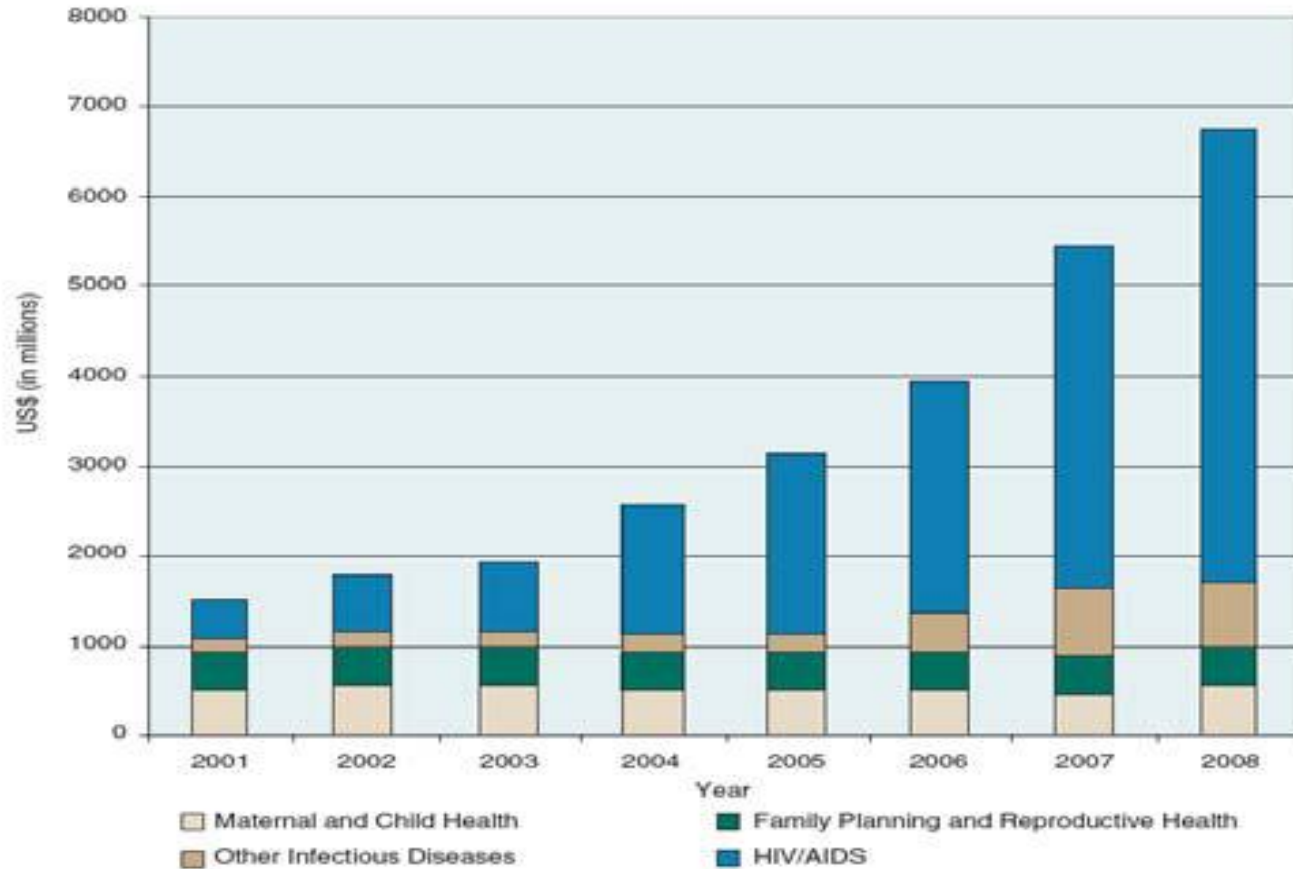
Five year moving averages and annual figures



Source OECD, constant 2006 prices

DAC = Development Assistance Committee

Spending on global health, USA



SOURCE: Committee's calculations based on Salaam-Blyther, 2008.

Most increase in US DAH allocated to fighting HIV/AIDS

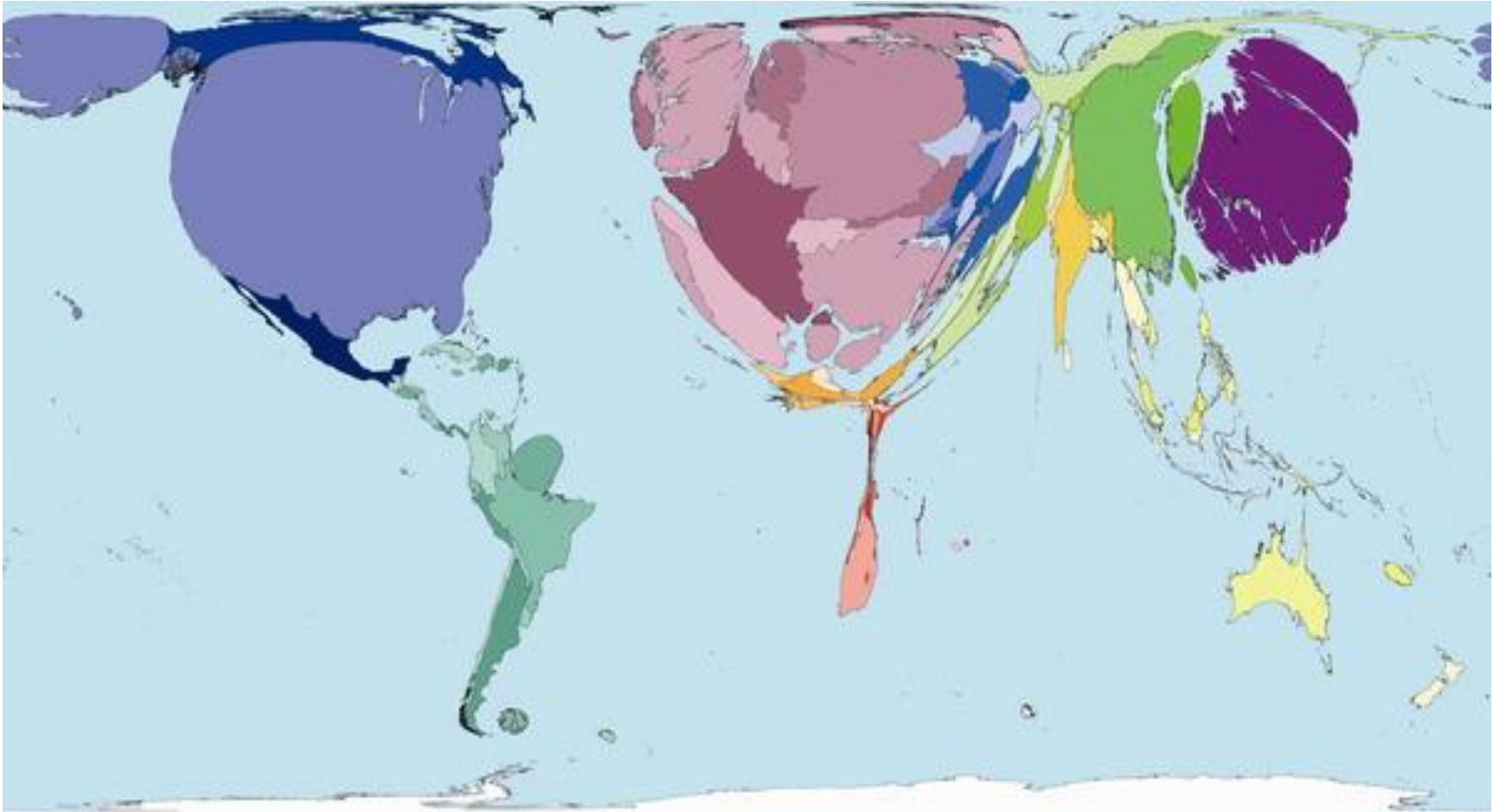
More Money into global health than ever before

- 1993 World Development Report
- HIV 'wake up call' (International AIDS meeting in Vancouver 1996)
- 2000+ Commission on Macroeconomics and Health
- Foundations and influential individuals a catalytic role
- 2002: Global Fund to Fight AIDS, Tuberculosis, and Malaria
- 2002: International Conference on Financing for Development in Monterrey, Mexico. 'Monterrey Consensus'.
- 2003: President's Emergency Plan for AIDS Relief (PEPFAR)
- 2007 International Health Partnership
- 2008: Doha Declaration on Financing for Development
- Political impetus (UK Africa Commission, G8 emphasis, etc.)
- Many governments in low- and middle-income countries have increased their commitments to health
- Mid-2000s lots of funding...but how robust?

A small reality check

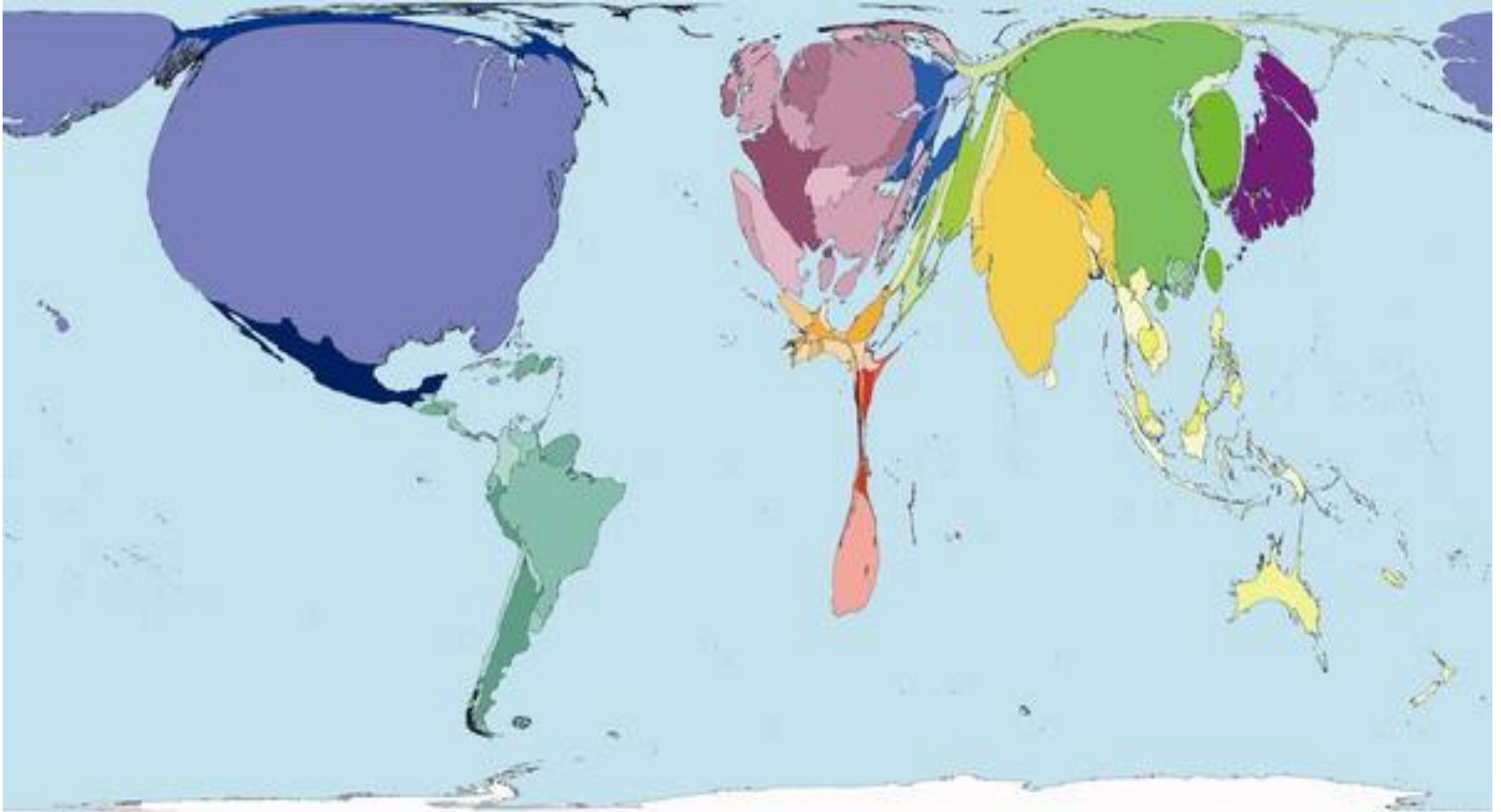
- *In 2006 US\$25 per capita spent on healthcare in poorest 49 countries*
 - (c.f. \$4012 in high-income countries)
- \$13 from private expenditure on health
- \$12 through government budget
 - \$6 contribution of international resources
- Development assistance for health is 25% of total health expenditures

Public health spending



Source: Dorling D (2007) Worldmapper: The Human Anatomy of a Small Planet. PLoS Med 4(1): e1 [doi:10.1371/journal.pmed.0040001](https://doi.org/10.1371/journal.pmed.0040001)

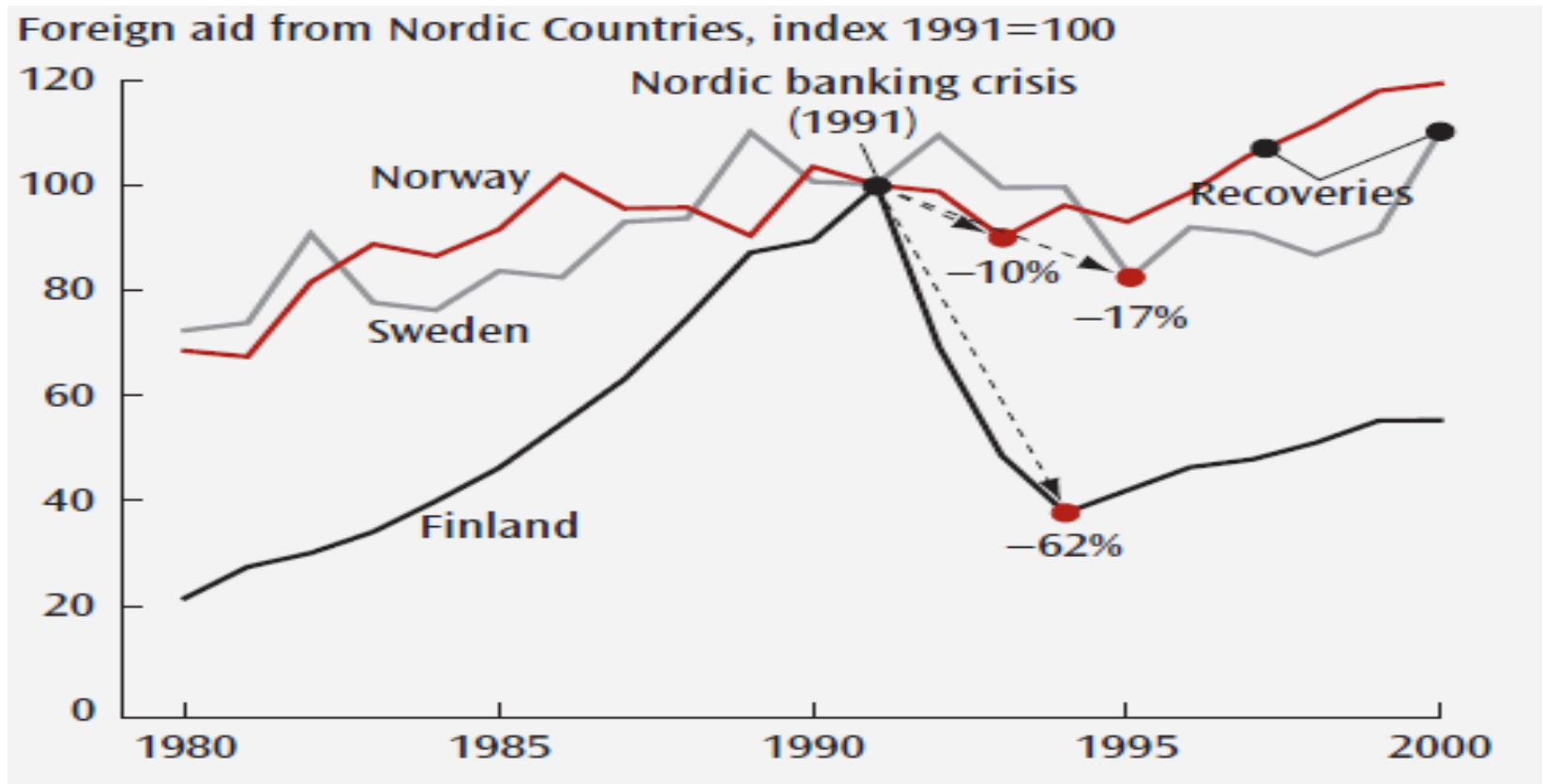
Private health spending



Source: Dorling D (2007) Worldmapper: The Human Anatomy of a Small Planet. PLoS Med 4(1): e1 [doi:10.1371/journal.pmed.0040001](https://doi.org/10.1371/journal.pmed.0040001)

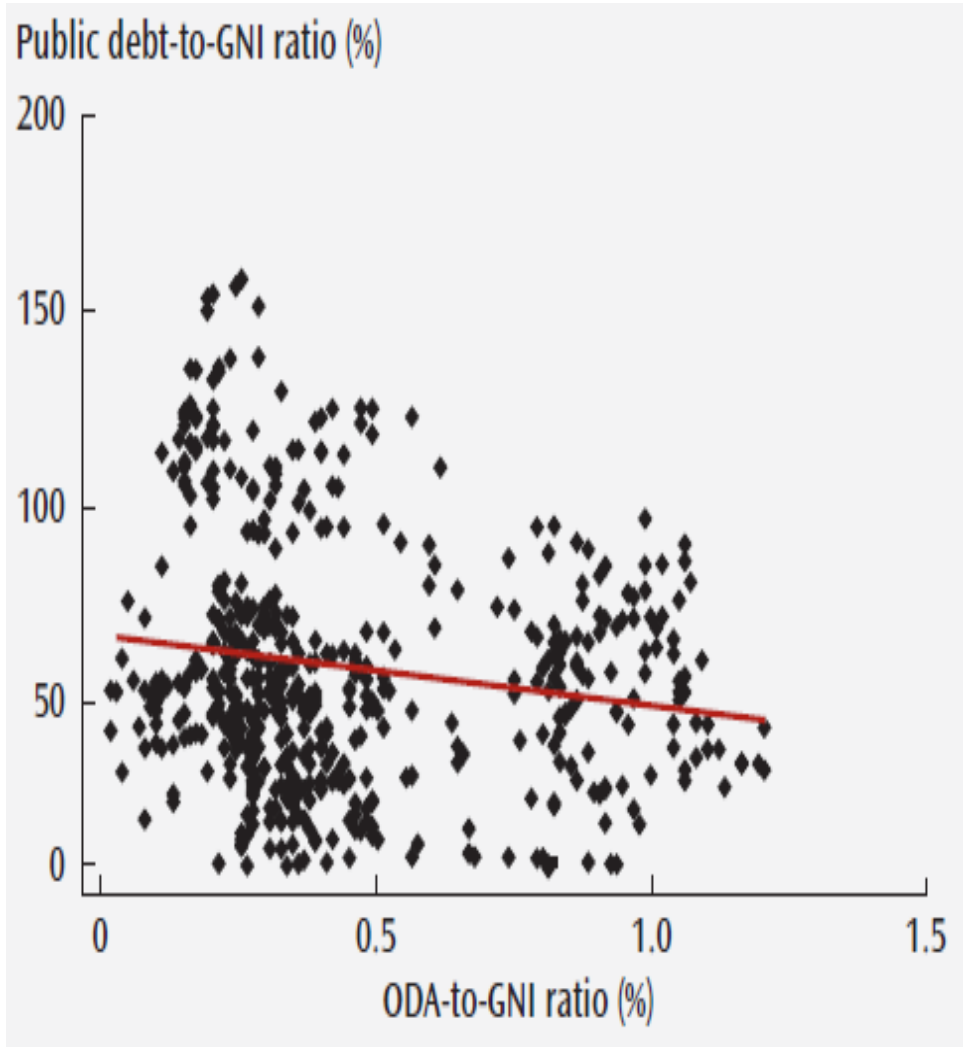
Will the level of external
assistance collapse?

ODA from Nordic countries after Nordic banking crisis



Japan, which experienced a collapse of asset market prices in 1990, saw a sharp drop in aid flows as well.

Deficits, debt and ODA



Ratios of public debt and ODA to gross national income for 22 DAC donors, 1980–2007

- Sample of 15 donor countries, 1980–2004
- Gross public debt a significant determinant of aid: a 10 percent increase in the ratio of public sector debt to GDP is associated with a decline of 0.012 percent in the share of aid in GDP in the short run and of 0.023 percent in the long run
- So, large deficit along with a high stock of public debt = drag on foreign aid

Sources: Faini 2006 and World Bank.

Debt: The biggest bill in history



- Many of those countries that gave heavily towards ODA and global health R&D in the past are now even more in debt
- Spending cuts across governments and competition for scarcer financial resources
- Need to be smarter and more efficient with what we have

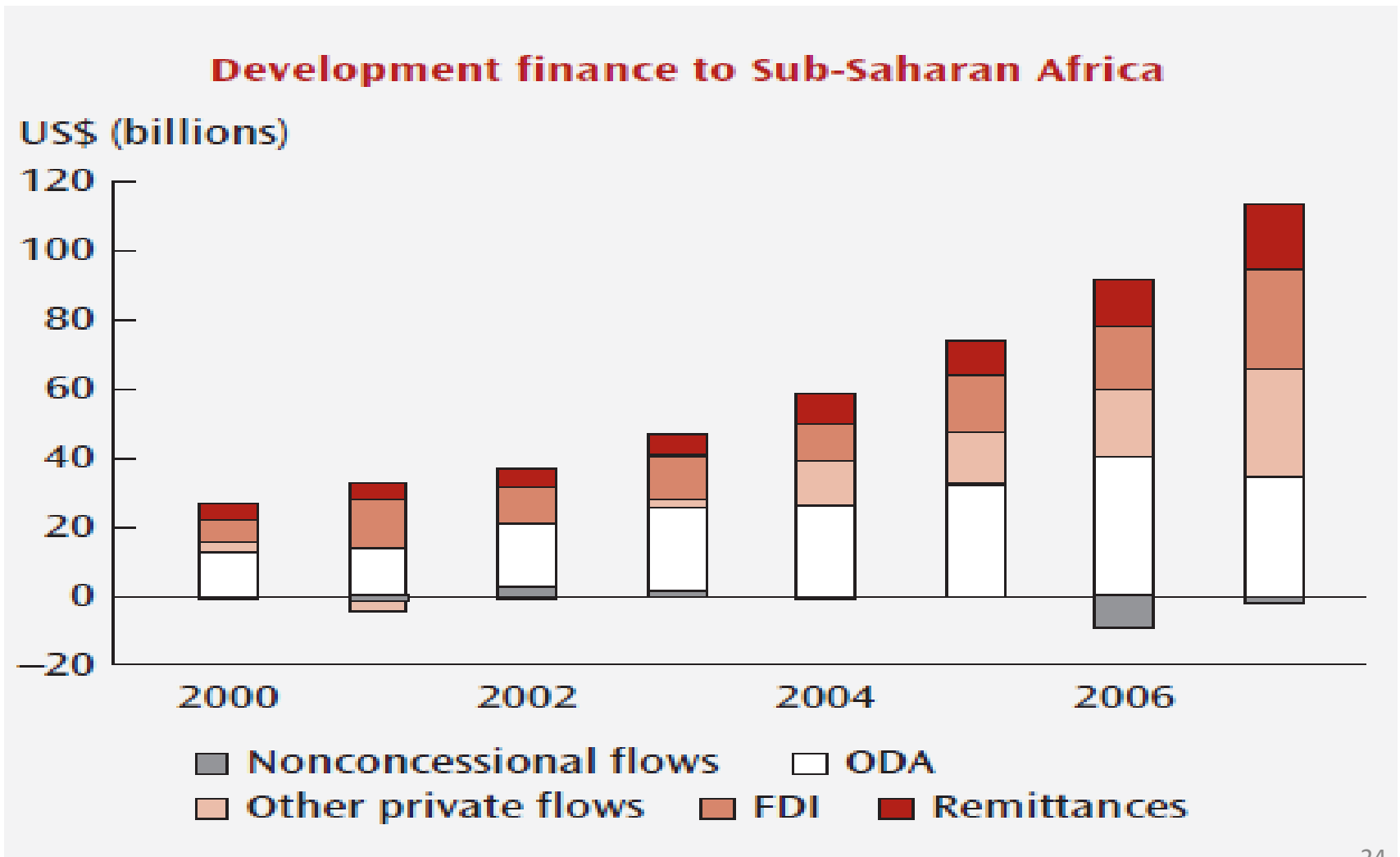
Exchange rate impact on ODA flows

- Recent appreciation of the U.S. dollar against most major currencies will deflate aid volumes measured in current dollar terms
- Much aid fixed in dollars
- International targets for ODA are in U.S. Dollars

Donor	Currency	2007 ODA, nominal US\$ (millions)	Exchange rate change (against dollar), 2008 average to 02/09/09	Change in value of aid, US\$ (millions, held at 2007 levels)
DAC European Union members (less the United Kingdom)	euros	21,694	-0.177	-2,606
European Commission	euros	11,095	-0.177	-1,333
Multilateral funds	SDRs	27,457	-0.083	-1,437
United States	dollars	18,901		0
United Kingdom	pounds sterling	5,602	-0.376	-1,135
Japan	yen	5,778	0.001	709
Other donors		14,529		-1,913
All donors, total		105,056		-7,716

Source: Kharas 2009.

ODA is part of the total...some of these other components will fall too



Source: World Bank

What were neglected disease R&D flows like on the eve of the crisis?

Main source of the next few slides:

Moran M, Guzman J, Ropars AL, McDonald A, Sturm T, Jameson N, Wu L, Ryan S, Omune B (2009) “Neglected disease research and development: how much are we really spending?” *The George Institute for International Health*. February 2009.

Please go to full report link, launch, and related articles [here](#)

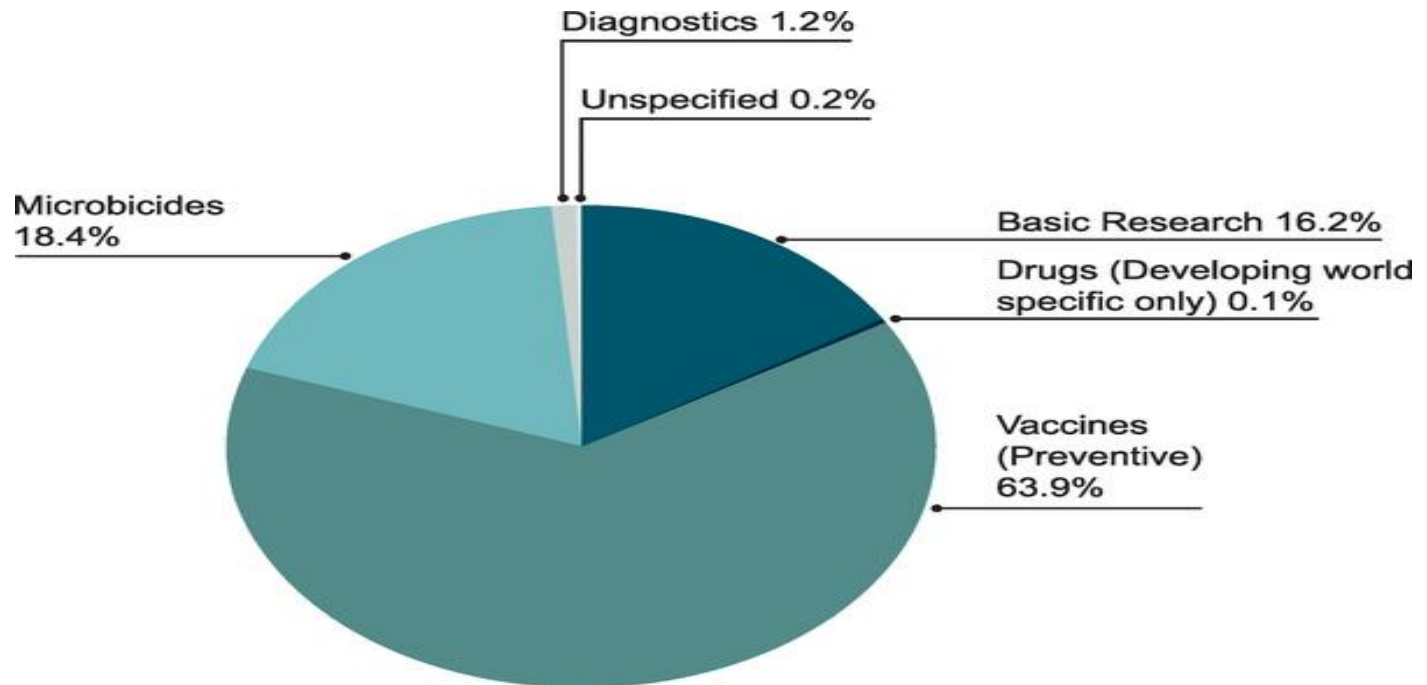
G-FINDER (Global Funding of Innovation for Neglected Diseases): Global R&D spend

Disease	Amount (US\$)	% of Total Funding
HIV/AIDS	1,083,018,193	42.30
Malaria	468,449,438	18.30
Tuberculosis	410,428,697	16.03
Kinetoplastids	125,122,839	4.89
Diarrhoeal diseases	113,889,118	4.45
Dengue	82,013,895	3.20
Helminths (worms and flukes)	51,591,838	2.02
Bacterial pneumonia and meningitis	32,517,311	1.27
Typhoid and paratyphoid fever	9,117,212	0.36
Leprosy	5,619,475	0.22
Buruli ulcer	2,412,950	0.09
Trachoma	1,679,711	0.07
Rheumatic fever	1,670,089	0.07
Cannot be allocated to one disease	120,918,862	4.72
<i>Core funding of a multi-disease R&D organisation</i>	110,921,673	4.33
<i>General diagnostic platforms</i>	4,791,152	0.19
<i>Adjuvants and immunomodulators</i>	2,685,148	0.10
<i>Delivery technologies and devices</i>	2,520,889	0.10
Other R&D	51,619,120	2.02
Grand Total	2,560,068,749	100.00

- Just over US\$2.5 billion invested into R&D of new neglected disease products in 2007
- HIV/AIDS, TB, and malaria receiving nearly 80%
- Similar high-burden diseases as measured by DALYs (disability-adjusted life years), such as pneumonia and the diarrhoeal illnesses, together less than 6%
- Heavy focus on drugs and vaccines
- Investment in new diagnostics patchy
- Platform technologies (applicable to many diseases), such as vaccine adjuvants, diagnostic platforms, and delivery technologies, less than 0.4%

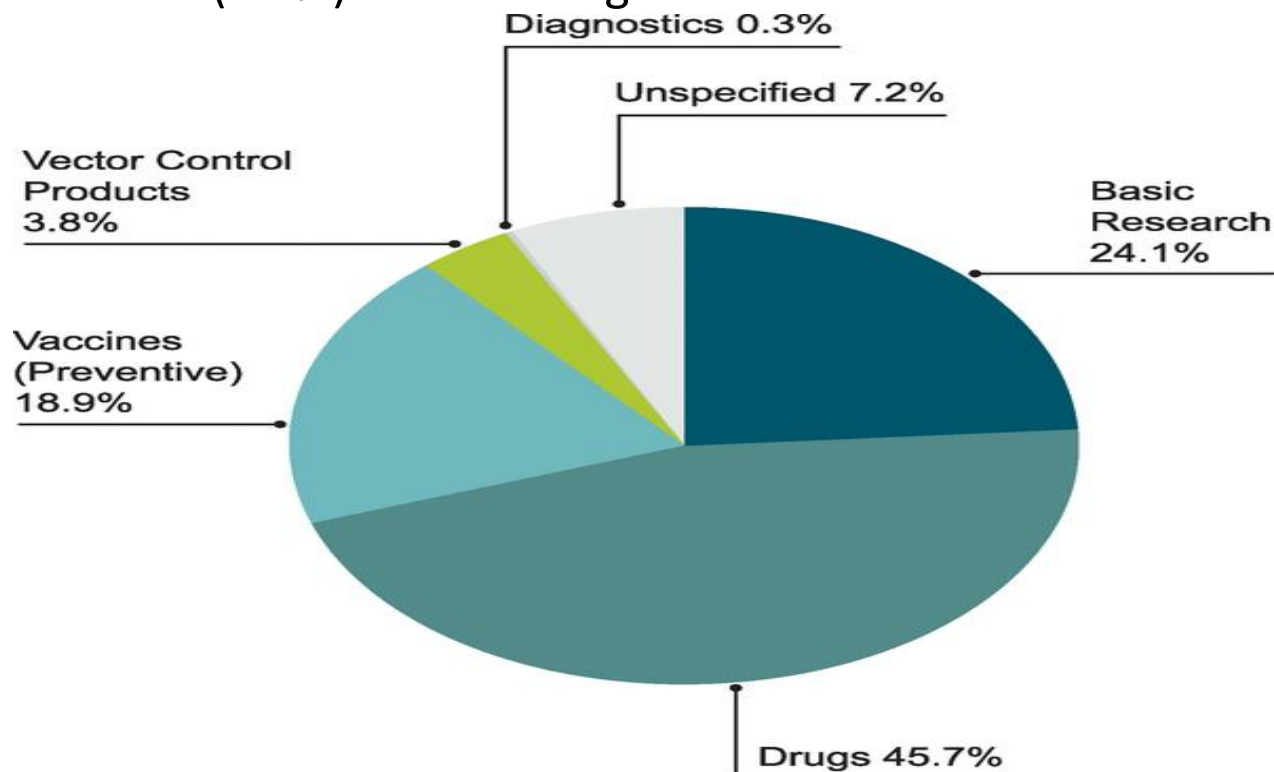
G-FINDER: HIV R&D Funding in 2007

- Total R&D funding for HIV/AIDS = US\$1.08 billion
- US\$692 million (63.9%) vaccines
- US\$200 million (18.4%) microbicides
- US\$176 million (16.2%) basic research
- Less than US\$1 million (0.1%) development of HIV drugs targeted at developing world needs, such as paediatric formulations and fixed-dose antiretroviral combinations



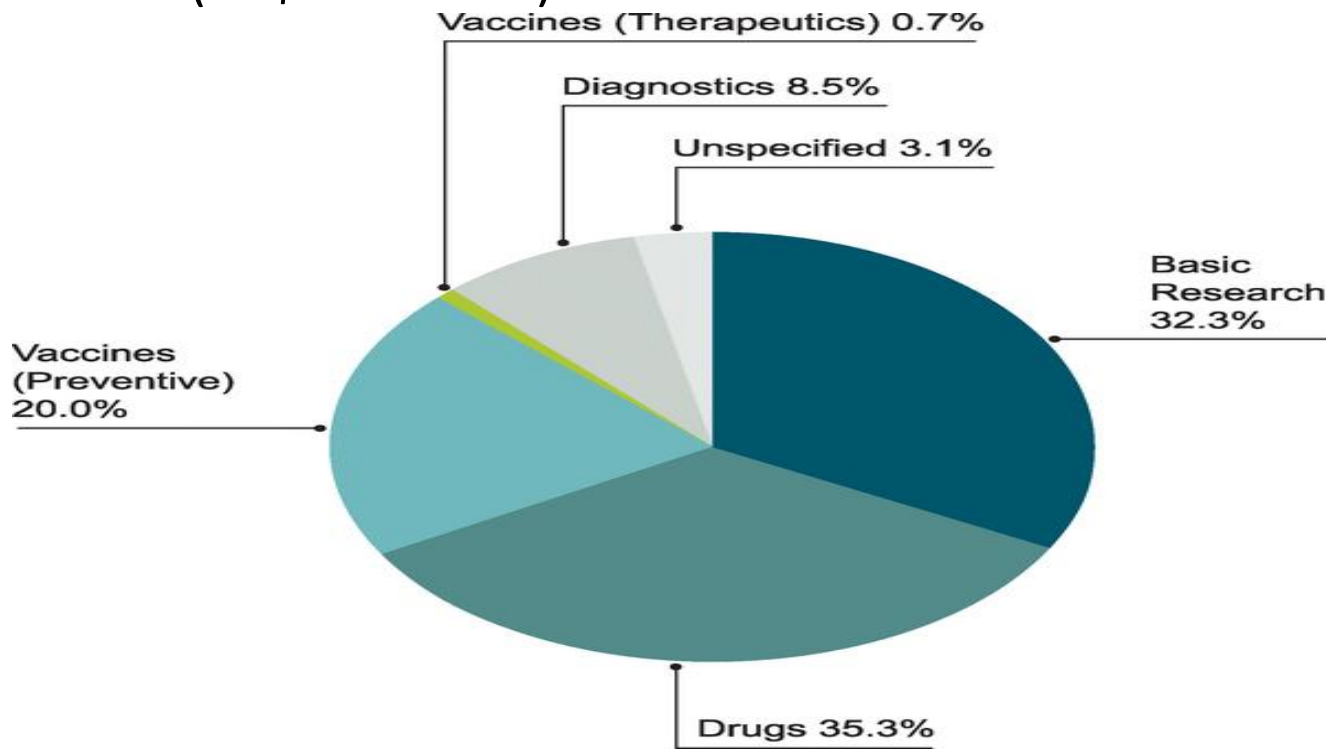
G-FINDER: Malaria R&D Funding in 2007

- Total US\$468.5 million,
- US\$214 million or 45.7%) Drug development
- US\$113 million (24.1%) Basic research
- US\$88.4 million (18.9%) Vaccines
- US\$17.7 million Vector control products, such as insecticides and biological control measures
- US\$1.6 million (0.3%) Malaria diagnostics



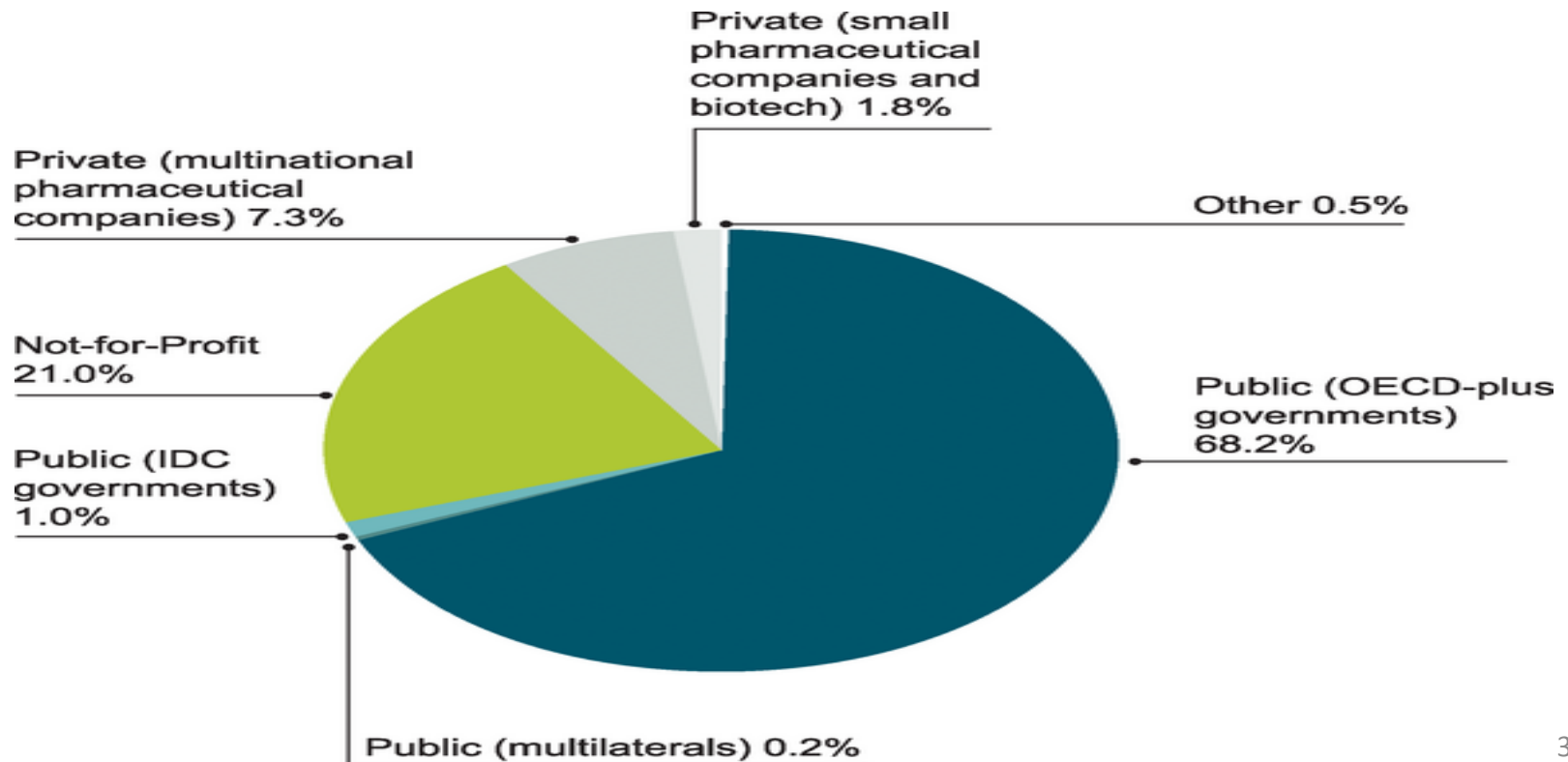
G-FINDER: TB R&D Funding in 2007

- US\$410.4 million.
- Drugs US\$145.1 million (35.3%)
- research at US\$132.4 million (32.3%). TB vaccines were funded at similar levels to malaria vaccines in both actual and relative terms, receiving US\$82.3 million (20%) of total TB funding. However, TB diagnostics fared dramatically better, receiving 8.5% of global TB investment (US\$35 million)



G-FINDER: Funding by sector in 2007

- Neglected disease funding remains primarily the realm of public and philanthropic donors, who collectively invested US\$2.3 billion or 90% of the total funding in 2007



G-FINDER: Funding by sector

- Public donors, including government and multilateral groups, provided US\$1.78 billion (69%)
- Philanthropic and not-for-profit funders US\$538 million (21%)
- Only two IDCs were included in year one of the survey, they represented 1% of global spending. IDC figures are expected to be substantially larger in subsequent G-FINDER surveys due to the inclusion of India, China, and Cuba
- Private pharmaceutical industry US\$231.8 million (9%).
 - Small companies and biotechs US\$46.2 million (20% of industry)
 - Multinational firms contributing US\$185.7 million (80%)

G-FINDER: Funding by government/public

Rank	Country	Amount (US\$)	% of Total Funding
1	United States of America	1,250,935,091	70.39%
2	European Commission	121,366,882	6.83%
3	United Kingdom	100,781,214	5.67%
4	The Netherlands	34,088,694	1.92%
5	Ireland	24,271,557	1.37%
6	Brazil	21,970,169	1.24%
7	Sweden	21,566,527	1.21%
8	Canada	19,134,610	1.08%
9	Australia	18,166,780	1.02%
10	Russia	16,666,666	0.94%
11	Belgium	15,851,130	0.89%
12	France	13,892,238	0.78%
	Total Public Funding	1,777,173,493	

- The US Government = bulk of investment of US\$1.25 billion (70%) through its various institutes and departments
- European Governments and the European Commission = US\$384.9 million (22%)
- UK, the Netherlands, Republic of Ireland, and Sweden dominating the field
- The increasing role played by some non-G7 economies was notable, with Brazil ranking as the 6th largest government funder and Russia as the 10th

G-FINDER: Funders by organisation

- Heavy reliance on a few donors
- Twelve organisations provided around 80% of global funding
- NIH and the Bill & Melinda Gates Foundation collectively investing US\$1.51 billion or 59.5% of the total

Rank	Funder	Amount (US\$)	% of Total Funding
1	US National Institutes of Health	1,064,859,791	41.75%
2	Bill & Melinda Gates Foundation	452,102,715	17.72%
3	European Commission	121,366,882	4.76%
4	US Department of Defense	86,914,578	3.41%
5	United States Agency for International Development	80,600,336	3.16%
6	Wellcome Trust	59,985,371	2.35%
7	UK Medical Research Council	51,716,968	2.03%
8	Department for International Development	47,565,987	1.86%
9	Netherlands Ministry of Foreign Affairs	33,951,646	1.33%
10	Pasteur Institute	31,617,540	1.24%
11	Irish Aid	24,271,557	0.95%
12	Swedish International Development Agency	21,529,014	0.84%
	Sub Total	2,076,482,385	81.11%
	Total R&D Funding	2,560,068,749	

G-FINDER: Who got? Role of PDPs

PDPs and TDR	Amount (US\$)
International AIDS Vaccine Initiative	81,297,482
Medicines for Malaria Venture	75,982,931
European and Developing Countries Clinical Trials Partnership	50,803,467
International Partnership for Microbicides	46,311,916
Aeras Global TB Vaccine Foundation	40,121,983
Global Alliance for TB Drug Development	39,587,358
PATH Malaria Vaccine Initiative/PATH Meningitis Vaccine Project	38,024,679
TDR	32,675,307
Drugs for Neglected Diseases initiative	28,520,251
Institute for One World Health	27,377,321
Other PDPs	123,671,134
Total Funding to PDPs and TDR	584,373,827

TDR, Special Programme for Research and Training in Tropical Diseases.
doi:10.1371/journal.pmed.1000030.t005

Relationship between research funding and burden of disease

Condition	Global BoD (Million DALYs)	% of Total Global BoD	R&D Funding US\$ Millions	R&D Funding US\$ per DALY
All BoD ¹	1,470	100	105,900	72
HIV/AIDS + TB + Malaria ¹	167	11.4	1,400	8.4
CVD ²	148.19	9.9	9,402	63.45
Diabetes ²	16.19	1.1	1,653	102.07
HIV/AIDS ²	84.46	5.7	2,049	24.26
Malaria ²	46.49	3.1	288	6.2
TB ²	34.74	2.3	378	10.88

¹ Financial data for 2001 from *Monitoring Financial Flows for Health Research, Volume 2*, Global Forum for Health Research, 2004; BoD data from WHO Global Burden of Disease, World Health Organization, 2002.

² Based on bibliometric assessment of R&D spending presented by G Lewinson et al. (Forum 8, Mexico City, November 2004) and work by the Malaria R&D Alliance.⁹

Source: Global Forum for Health Research “Monitoring Financial Flows for Health Research” (2006)

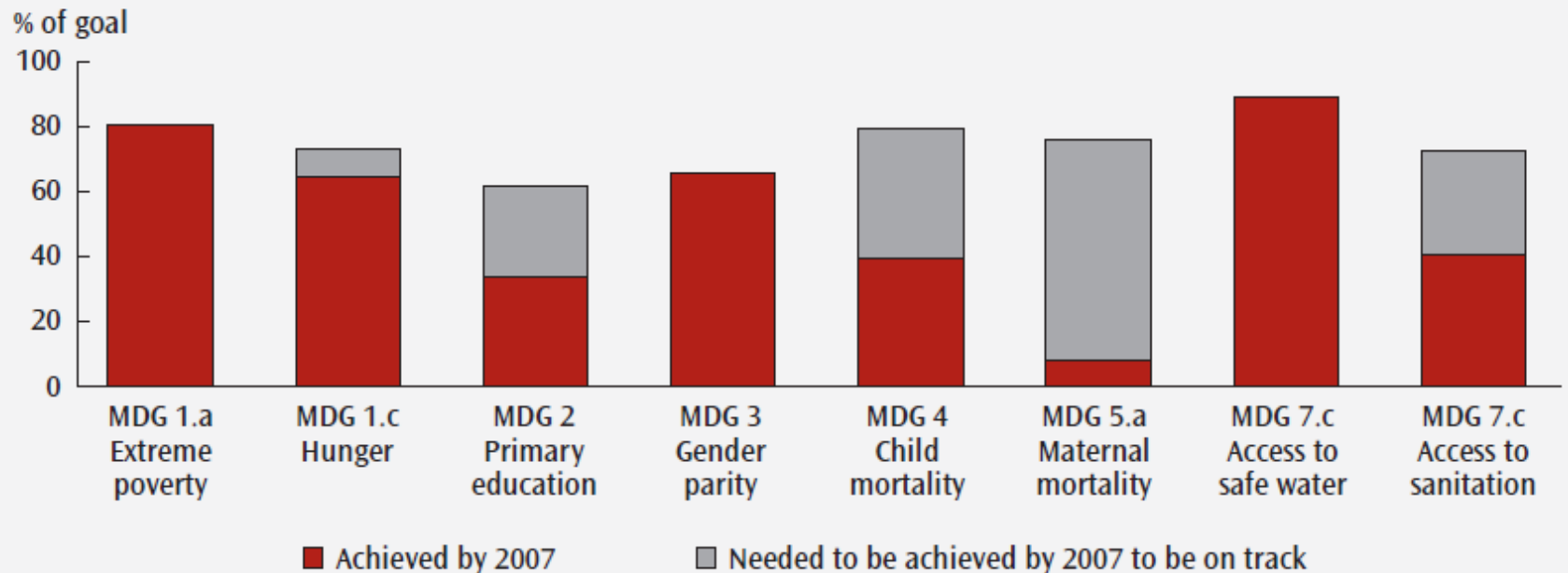
http://www.globalforumhealth.org/filesupld/monitoring_financial_flows_06/Resourcing%20research%20for%20health.pdf

What was performance
against the MDGs like
on the eve of the crisis?

Performance against Health MDG priorities

- Mid 2008 MDG halfway point
- “We face nothing less than a development emergency”
 - UN Secretary General
- “A global poverty emergency”
 - The U.K. prime minister
- An MDG Call to Action was released
- And this was before the financial crisis hit

MDG on track by 2007?

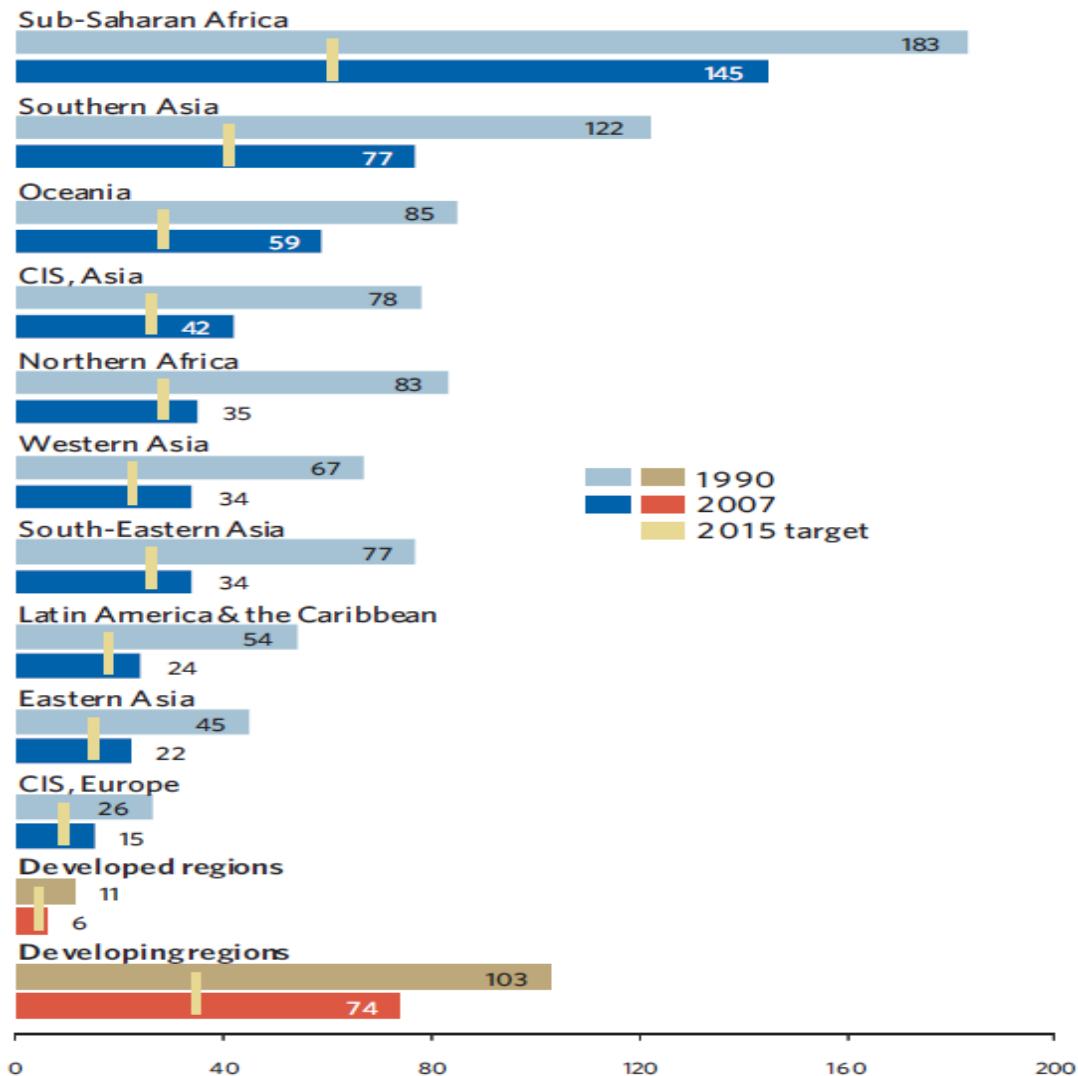


Source: Staff calculations based on World Development Indicators database.

Note: Calculations are based on the most recent year for which data are available. MDG 1.a: Poverty headcount ratio (PPP2005 US\$1.25 a day); MDG 1.c: Underweight under-five children (U.S. child growth standards); MDG 2: Primary education completion rate; MDG 3: Gender parity in primary and secondary education; MDG 4: Under-five mortality rate; MDG 5.a: Maternal mortality ratio (modeled estimates); MDG 7.c: Access to improved water source; MDG 7.c: Access to improved sanitation facilities.

World Bank Global Monitoring Report 2009: A Development Emergency
(large data gaps though)

Performance against Health MDGs: Goal 4 Reduce child mortality



Target 4: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate

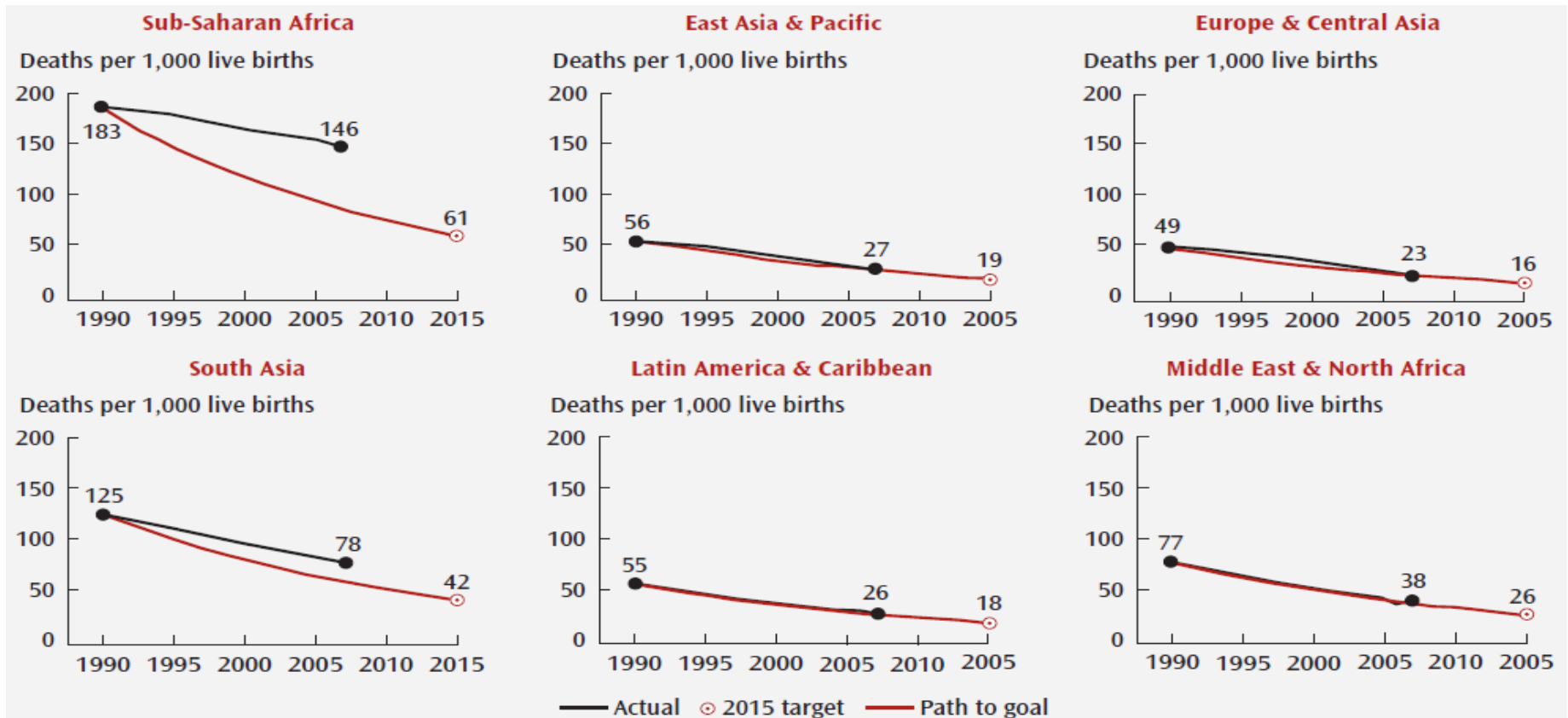
Deaths by age 5 per 1,000 live births

Currently 9 million per year.
3.5million fewer than in 1990

Still nearly 750,000 every month.

That's about 4,000 during our meeting this morning.

Progress of child mortality (chance newborn reaches age 5, per 1000)

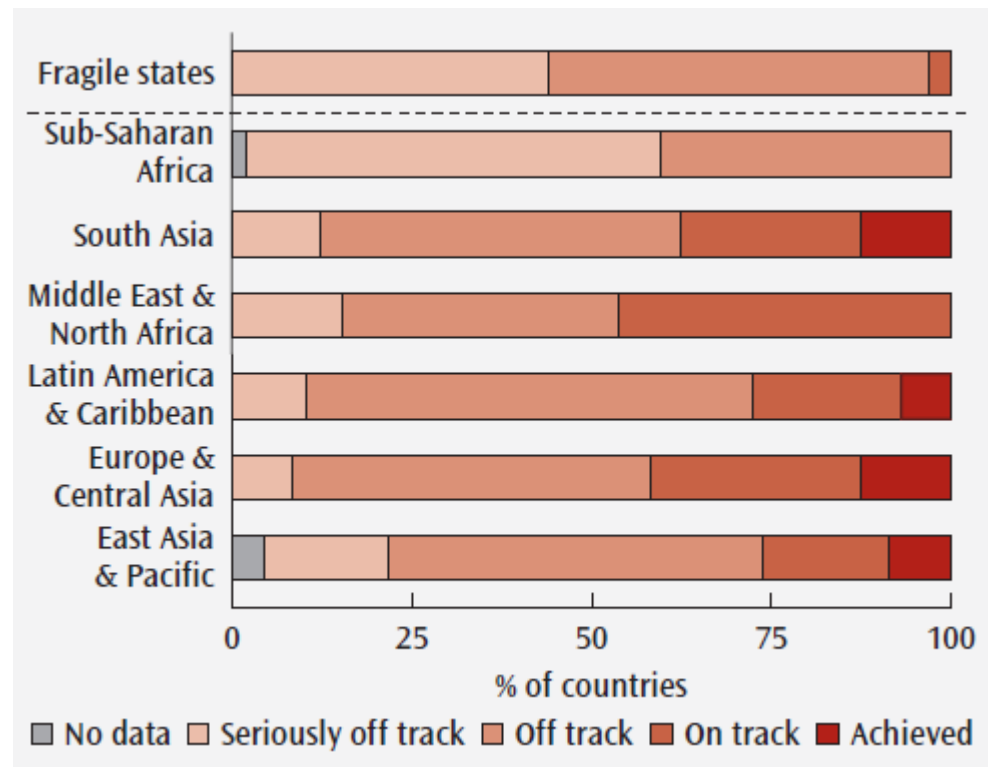


- In 2007, close to one in seven children in sub-Saharan Africa died before his or her fifth birthday. This is half of all under-five deaths
- Given high levels of fertility, the absolute number of under-five deaths rose from 4.2 million in 1990 to 4.6 million in 2007

There is improvement on the way

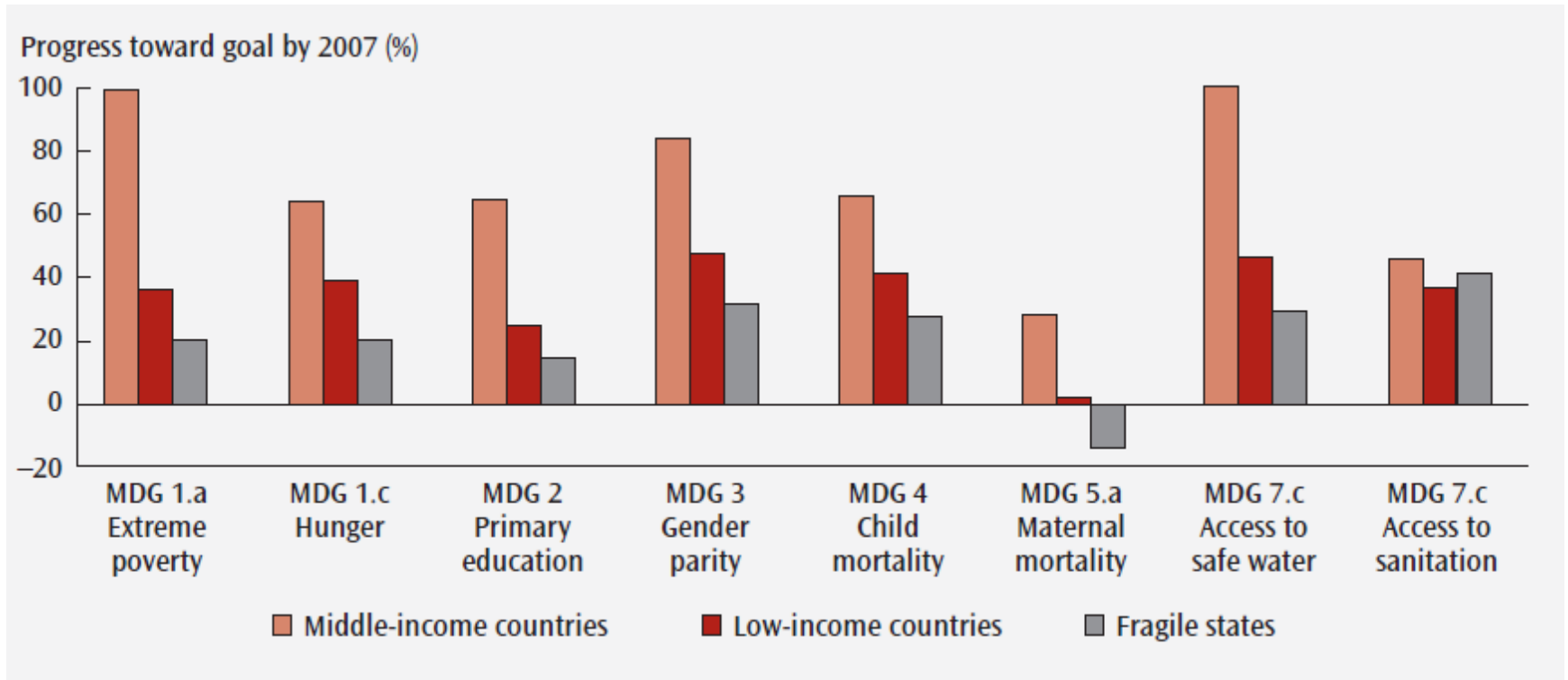
- The figures don't tend to show the expected improvements on the horizon because of recent huge efforts
- Across sub-Saharan Africa, survey data show remarkable improvements in several key child-survival interventions that are expected to yield further declines in under-five mortality over the next few years. These include:
 - Vitamin A supplementation
 - Wider use of insecticide-treated bed nets to prevent malaria
 - Exclusive breastfeeding
 - Immunization
 - Wider coverage of antiretroviral treatment for pregnant mothers who are HIV-positive to help prevent transmission of HIV to their babies.

Proportion of countries on track to achieve the child mortality target



Source: World Development Indicators.

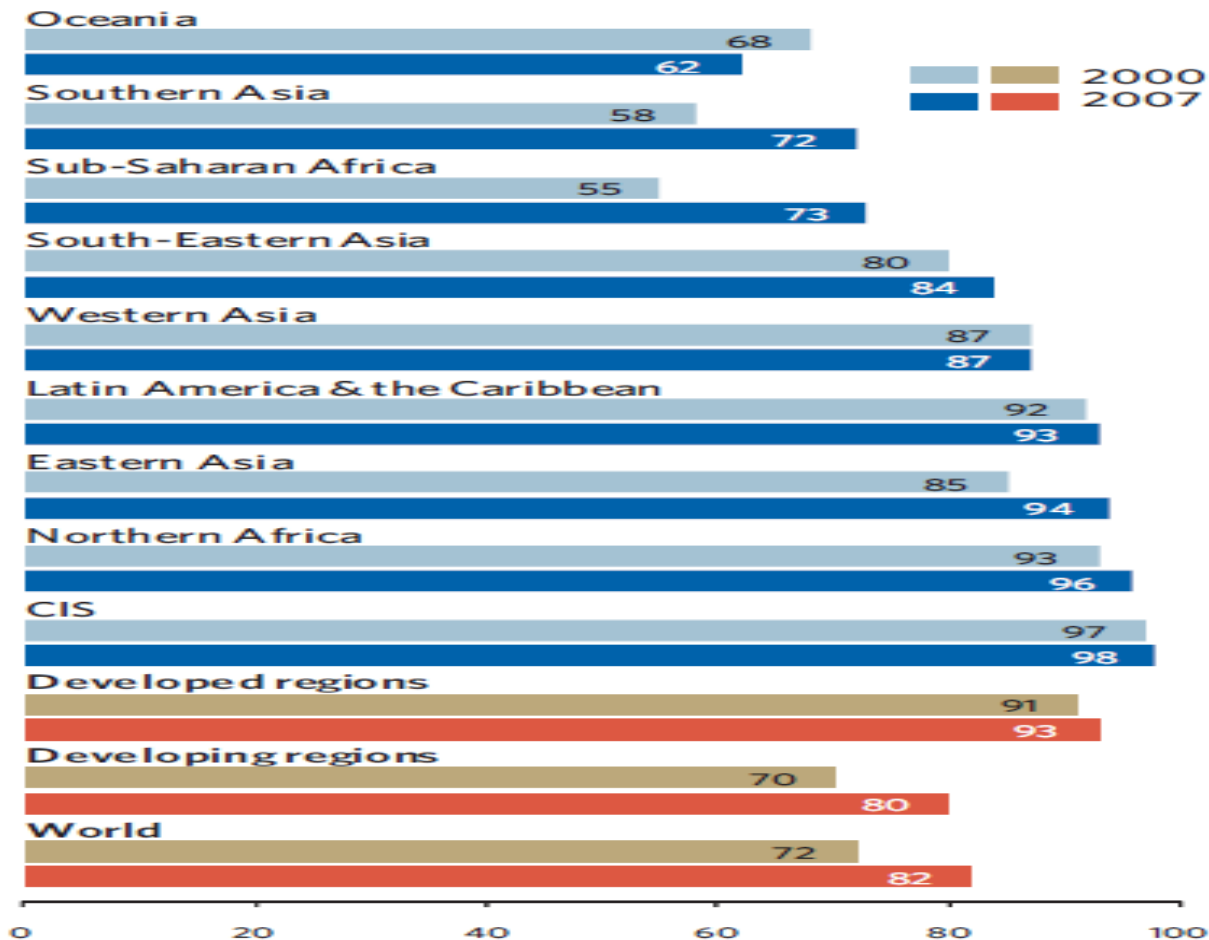
Fragile states have made the least progress towards MDGs



World Bank Global Monitoring Report 2009: A Development Emergency
(large data gaps though)

- Of 49 low-income countries, 26 are fragile states
- About 80% of fragile states have been or are still engaged in conflict

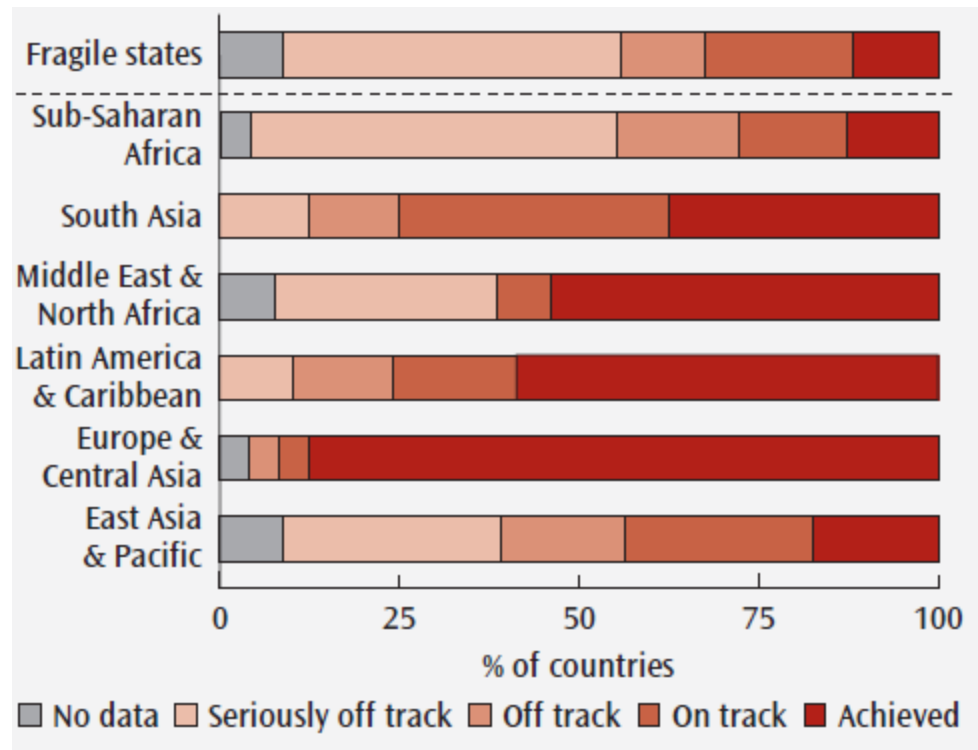
Measles. Percent of children 12-23 months who received one dose of measles vaccine



Measles a success story ...but still a lot to do

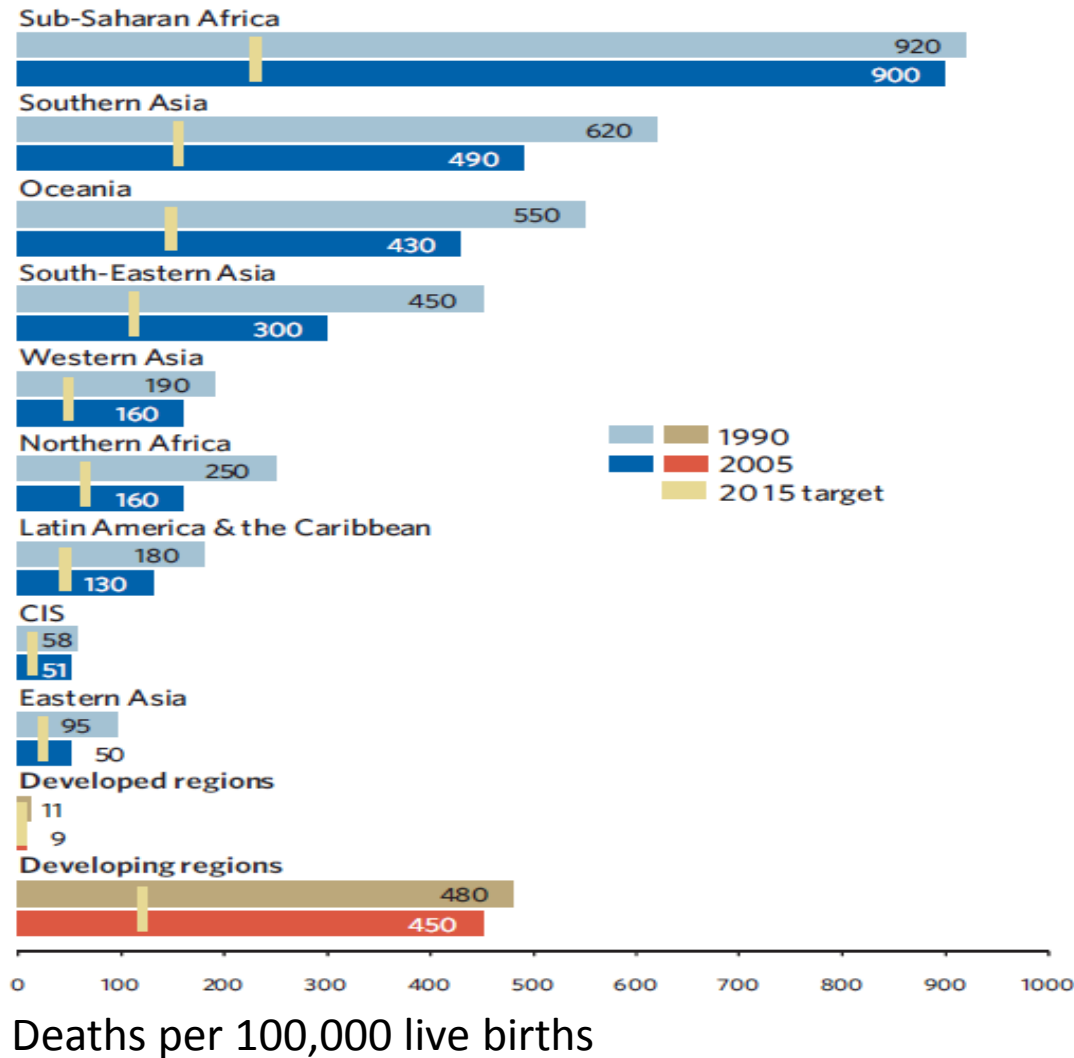
- Measles vaccine costs less than \$1 per child
- 2000-2007 globally measles deaths fell 74%
- 750,000 measles-related deaths in 2000
- 197,000 measles-related deaths in 2007
- Largest reduction in sub-Saharan Africa
- What caused this?
 - Improved immunization coverage
 - Second opportunity for immunization – critical for children left out the first time. Done in 46 of the 47 countries most at risk
 - 576 million second immunizations since 2000
 - Second opportunity critical for community protection
- Measles immunization campaigns deliver other health services too, such as insecticide-treated bed nets and de-worming medicines
- Sub-Saharan Africa and fragile states lagging

Proportion of countries on track for measles vaccination



Source: World Development Indicators.

MDG5: Improve maternal mortality

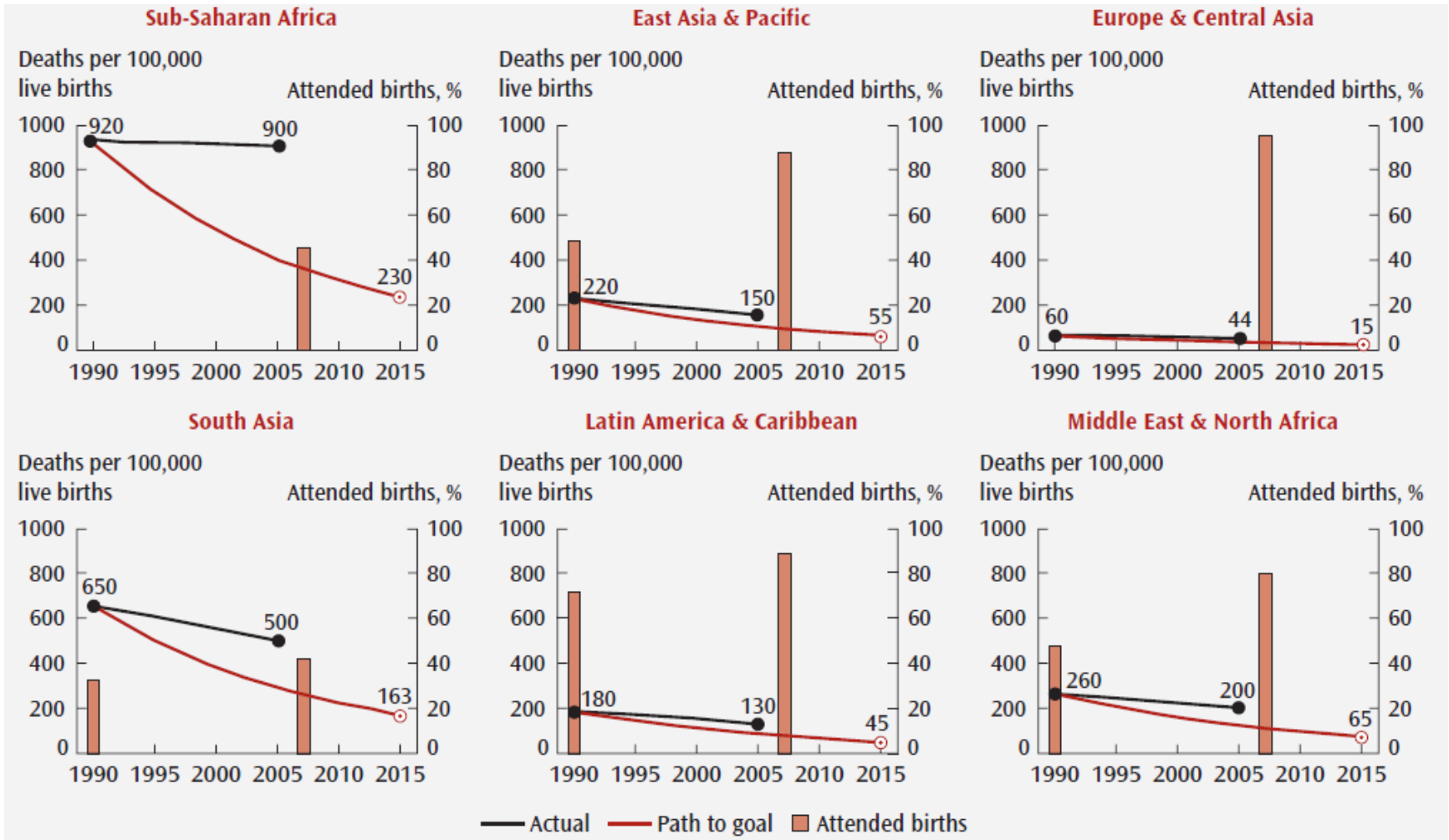


TARGET 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.

Available trend data indicate little progress in developing world as a whole : 480 per 100,000 births in 1990. 450 per 100,000 in 2005.

Small decline reflects progress only in Eastern Asia, Northern Africa, and South-Eastern Asia, to lesser degree Southern Asia. Very little progress made in sub-Saharan Africa.

Maternal mortality rates



Source: World Development Indicators.

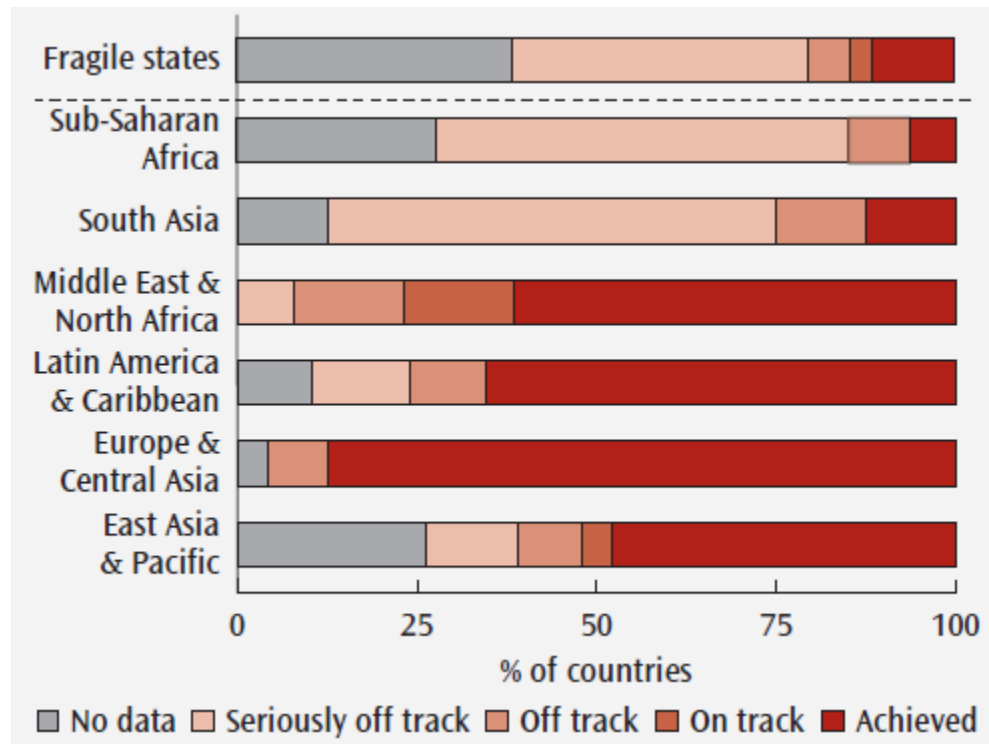
Maternal mortality

- Annually More than 540 000 women die during pregnancy, childbirth, or in the six weeks after delivery
- Maternal mortality is among the health indicators that show the greatest gap between the rich and the poor — both between countries and within them
- Maternal death rates are 100 times higher in sub-Saharan Africa than in high-income countries
- Half of all maternal deaths (265,000) occur in sub-Saharan Africa and another third (187,000) in Southern Asia. Together = 85 per cent of all maternal deaths
- 14 countries have maternal mortality ratios of at least 1,000 per 100,000 live births
- Among all the MDGs, the least progress has been made against MDG5
- Giving birth safely is largely a privilege of the rich

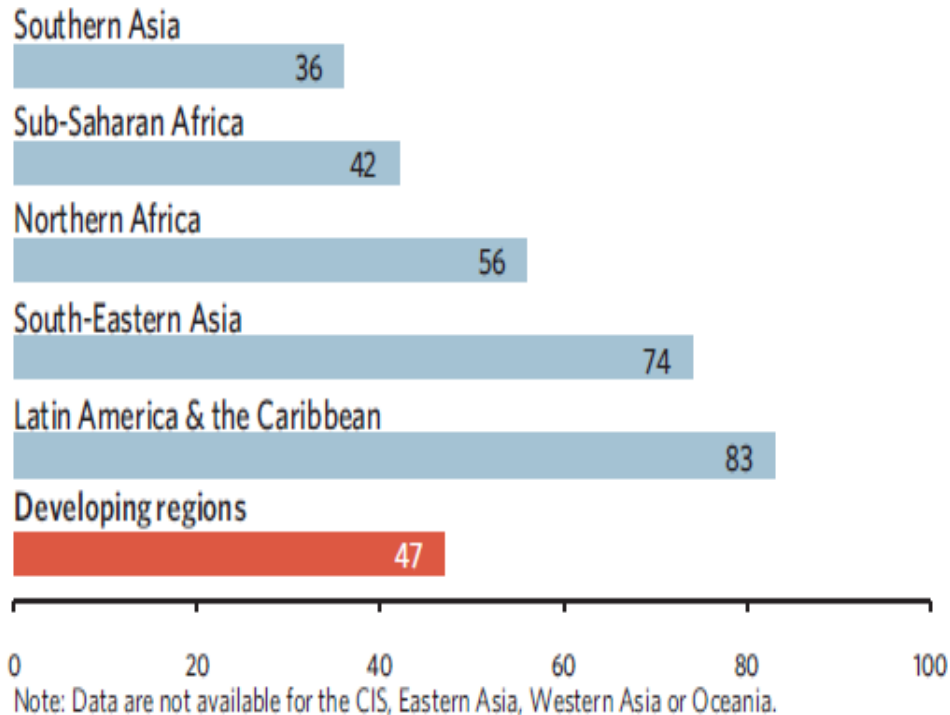
Maternal mortality

- Obstetric complications — including post-partum haemorrhage, infections, eclampsia, and prolonged or obstructed labour — and complications of unsafe abortion account for the majority of maternal deaths
- Anaemia, exacerbated by malaria, HIV and other conditions, heightens the risk of maternal death from haemorrhage
- In sub-Saharan Africa, haemorrhage alone causes 34 per cent of maternal deaths
- Most of these conditions could be prevented or treated with good quality reproductive health services, antenatal care, skilled health workers assisting at birth, and access to emergency obstetric care
- In Southern Asia and sub-Saharan Africa, more than half of all births still take place without the assistance of trained personnel

Proportion of countries on track to achieve attended births target

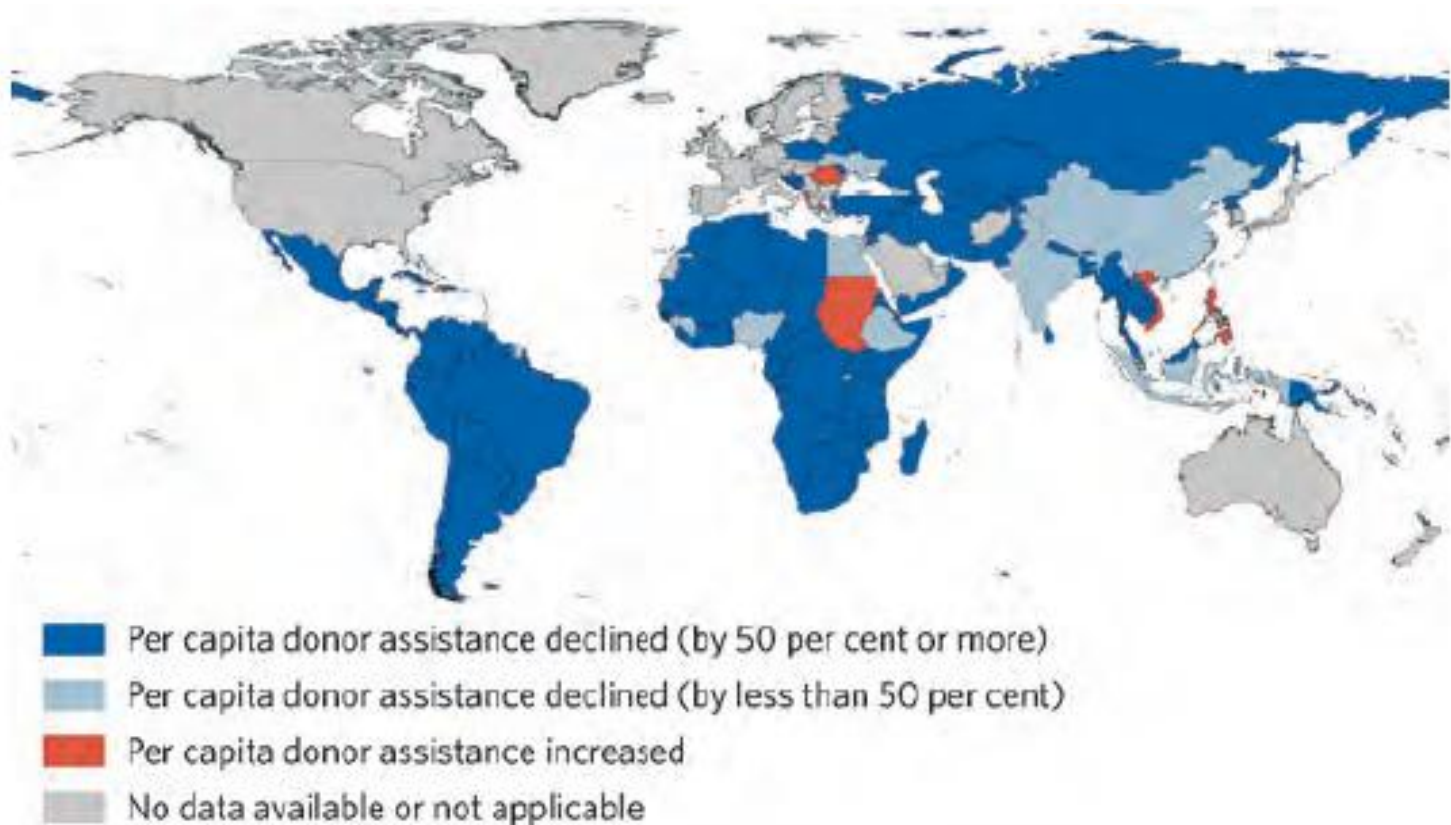


Access to reproductive health

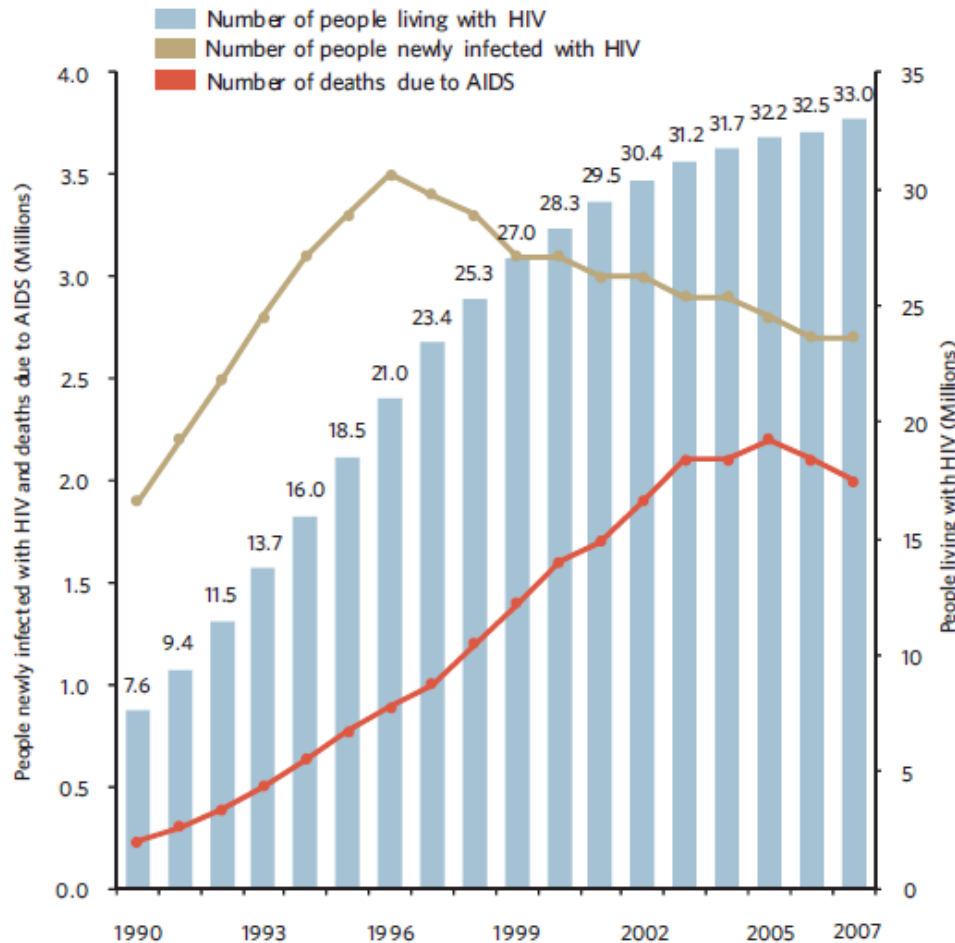


- TARGET 5:B
- Achieve, by 2015, universal access to reproductive health
- Proportion of women (15-49 years old) attended four or more times during pregnancy by skilled health personnel, 2003/2008 (Percentage)
- Fewer than half of pregnant women in developing countries have the benefit of adequate prenatal care

Fall in donor funding for family planning even as progress in maternal health slow



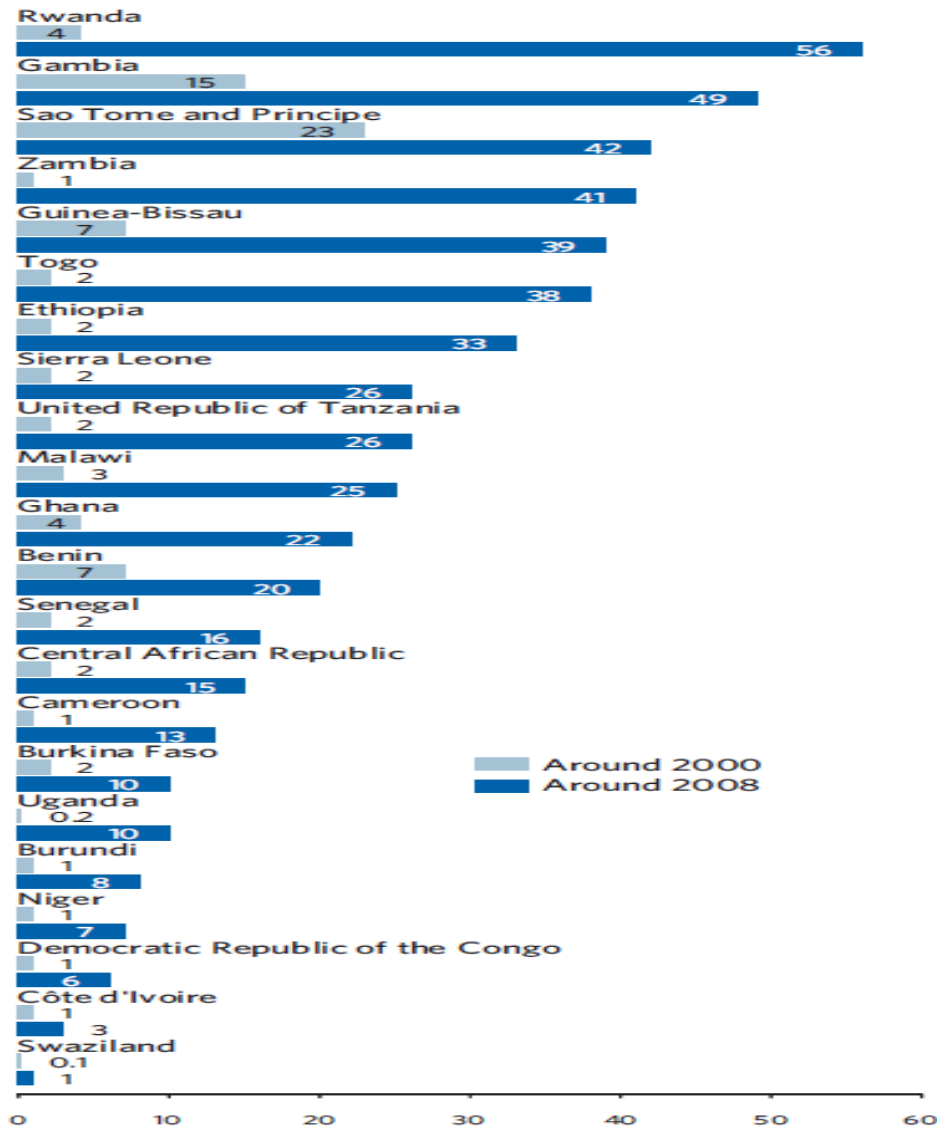
MDG goal 6 Combat HIV/AIDS, malaria and other diseases



TARGET 6A
Have halted by 2015 and begun to reverse the spread of HIV/AIDS

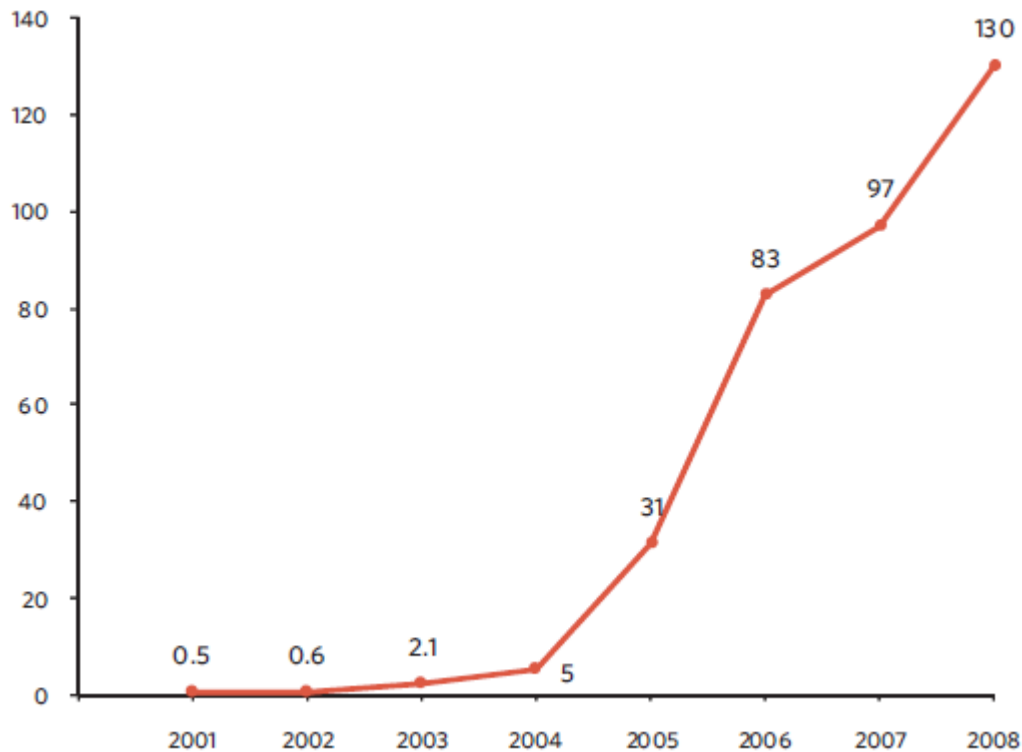
TARGET 6B
Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it

Combat HIV/AIDS, malaria and other diseases



- TARGET 6C
- Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
- Proportion of children under five sleeping under **insecticide-treated bed nets**, selected countries, around 2000 and around 2008 (Percentage)

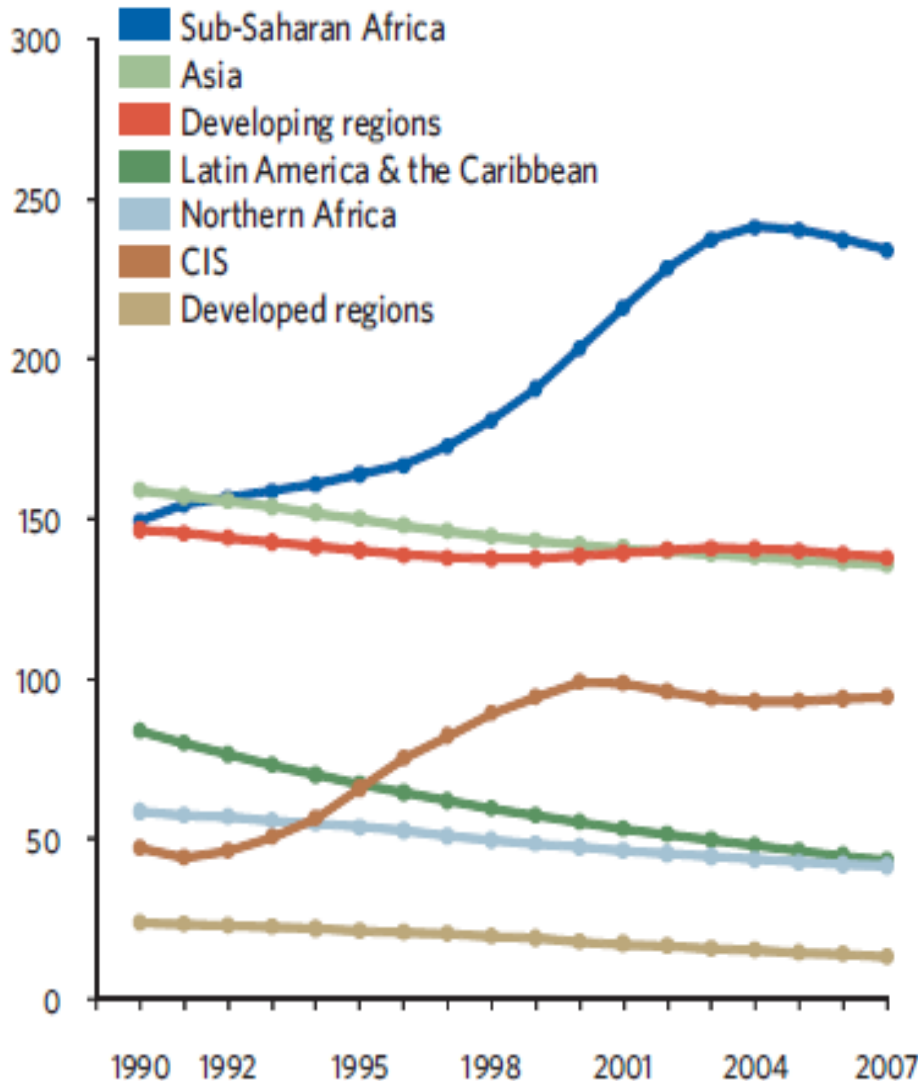
Tackling malaria



Number of doses of artemisinin-based combination therapies procured worldwide, 2001-2008 (Millions)

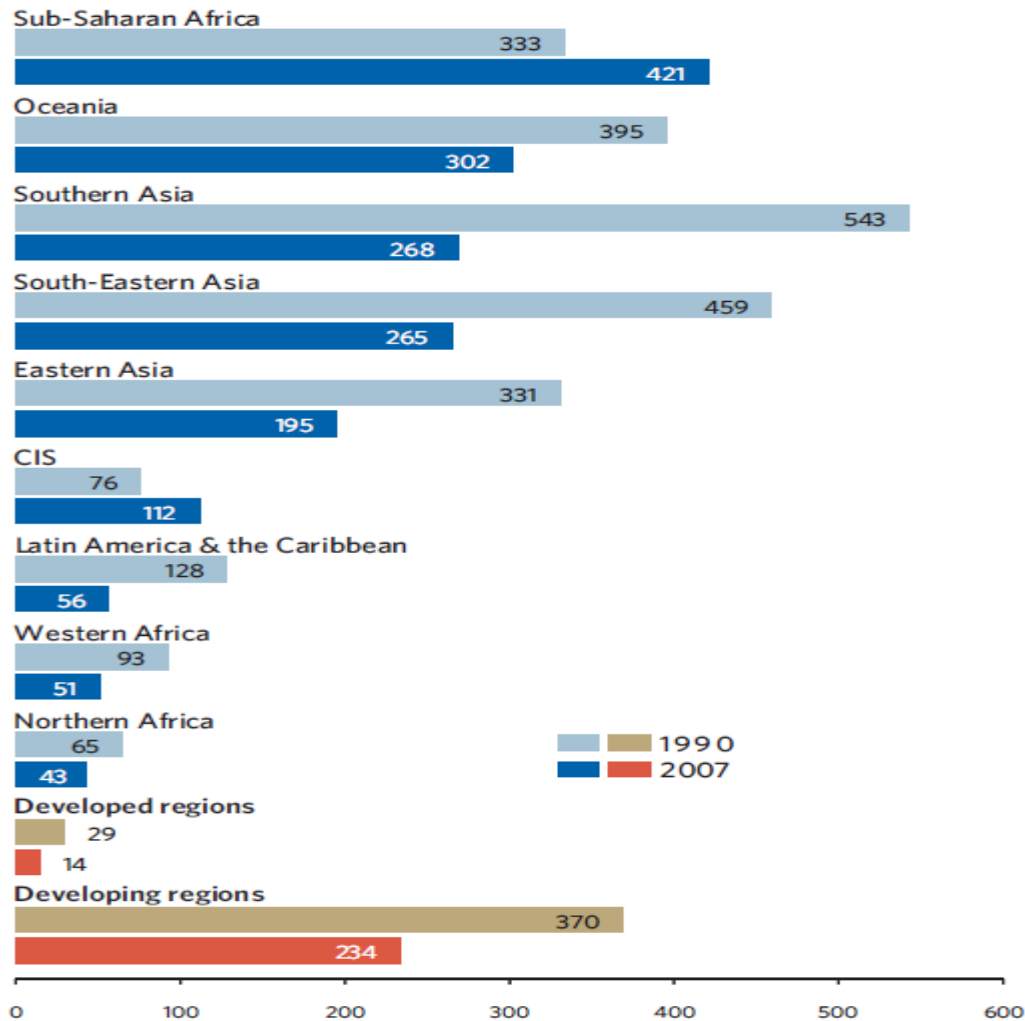
Across sub-Saharan Africa, the use of insecticide-treated bed nets among children jumped from 2 per cent in 2000 to 20 per cent in 2006. In fact, 19 of 22 sub-Saharan African countries with trend data showed at least a threefold increase during this time period; 17 of them saw at least a fivefold increase

MDG: TB



- Incidence of tuberculosis is levelling off, but the number of new cases continues to rise (pop'n growth)
- Number of new tuberculosis cases per 100,000 population (excluding people that are HIV-positive), 1990-2007

MDG: TB



- Tuberculosis prevalence and mortality rates are falling, but not fast enough to meet global targets
- Number of tuberculosis cases per 100,000 population (excluding people who are HIV-positive), 1990 and 2007

What are the current
initiatives to tackle
funding needs?
How are priorities being
set?

Lots of taskforces on ‘innovative financing’

- Taskforce on Innovative Financing for Health Systems
 - *TO raise the required additional resources needed to strengthen health systems in 49 low-income countries in order to achieve the health MDGs, especially those MDGs considered to be neglected, namely MDGs 4 and 5*
 - Two-pronged approach
- WHO Expert Working Group on R&D Financing
- International Health Partnership
- WHO ‘Maximising Positive Synergies’
- Brookings Global Health Financing Initiative
- World Bank group working on innovative finance
- **Lots of common themes**

It's worth pointing out...

- In fact, according to Working Group 1 of the Taskforce on Innovative Financing for Health Systems that if low-income country governments increase the share of government expenditure going to health to at least 12-15%, if OECD member states honour the commitments they have made to increase development assistance, and if the current share of ODA spent on health remains the same...
- there could be no financial shortfall

A common theme: Health systems strengthening



Health systems and GHEs diagram

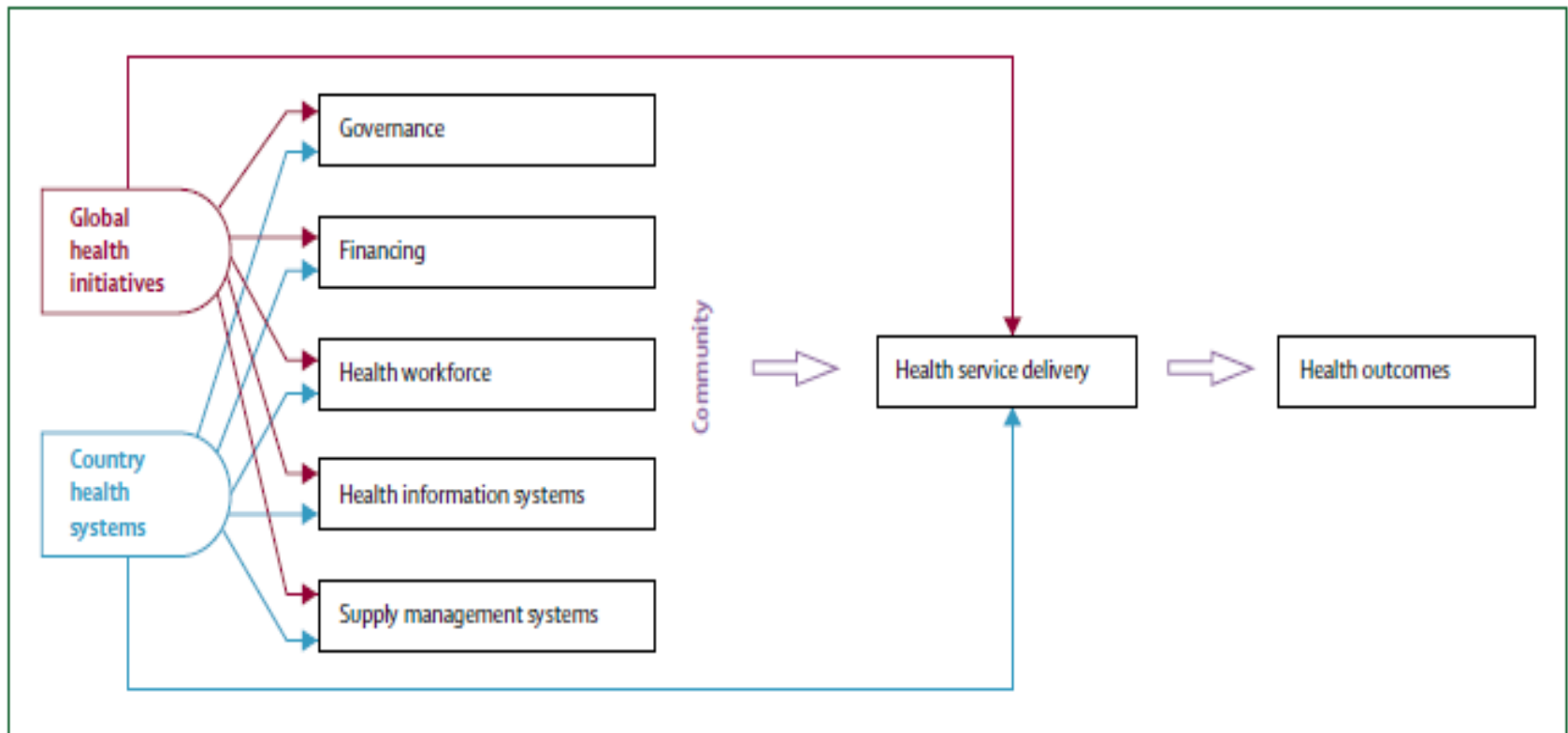


Figure 1: Conceptual framework of the interaction between global health initiatives and country health systems

The following few slides are from WHO 'Maximising Positive Synergies: Between health systems and Global Health Initiatives'

WHO 'Maximising Positive Synergies'

- 250 studies from published and grey literatures, 15 new studies
- Interaction
- Association and not causation
- There is ample evidence of:
 - "strong synergies";
 - "uncertainty/mixed"
 - "serious shortfalls"

Service delivery

- Access
 - Rapid expansion targeted services
 - Expansion of non-targeted services e.g. maternal health
 - Supply-induced demand
- Equity
 - Services free at point of service
 - Focus on marginalized populations
- Quality
 - Promoting universal standards of care
 - Rush to meet targets compromising quality

Governance

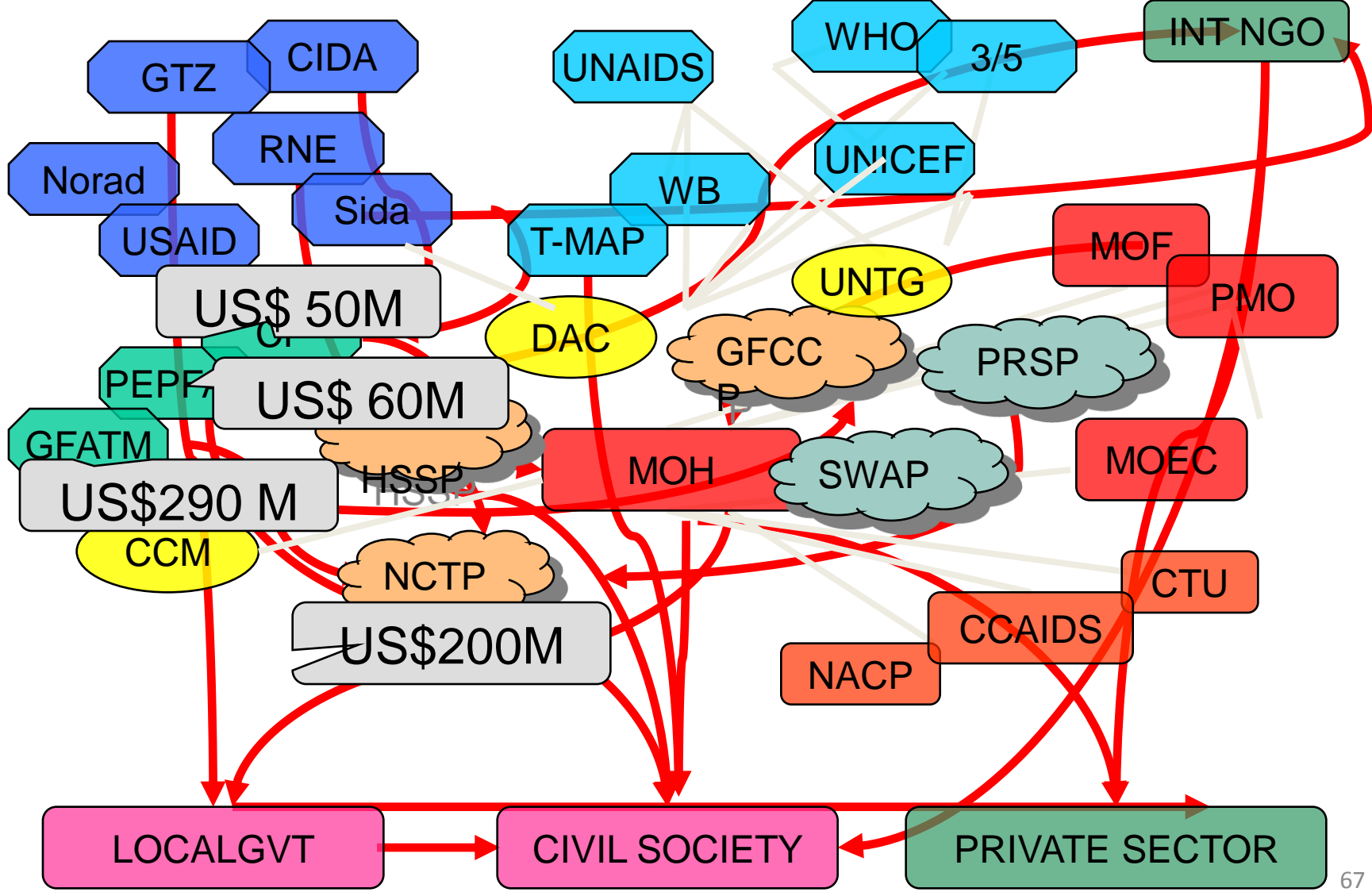
- Planning and Coordination
 - Demands of GHI planning processes overwhelm national capacities

(Note there are 40 bilateral development partners, 90 global initiatives)

 - GHIs responsive to country systems needs through new funding windows
- Community Involvement
 - GHIs have accelerated non-state sector/civil society engagement in health sector planning, delivery and accountability

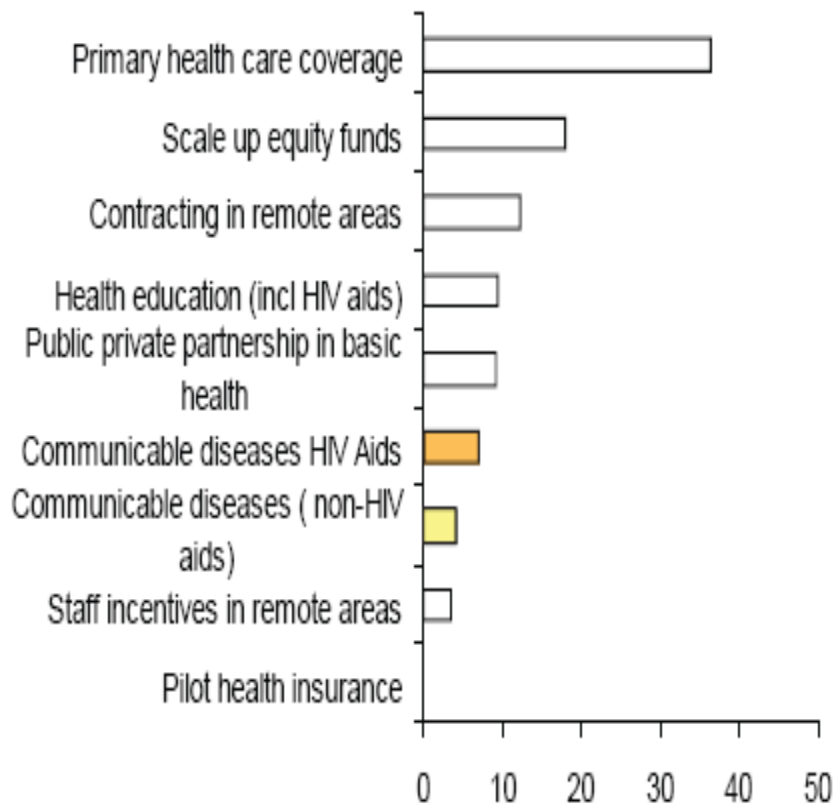
AIDS stakeholders and donors in one African country

(World Bank AIDS Campaign Team for Africa)



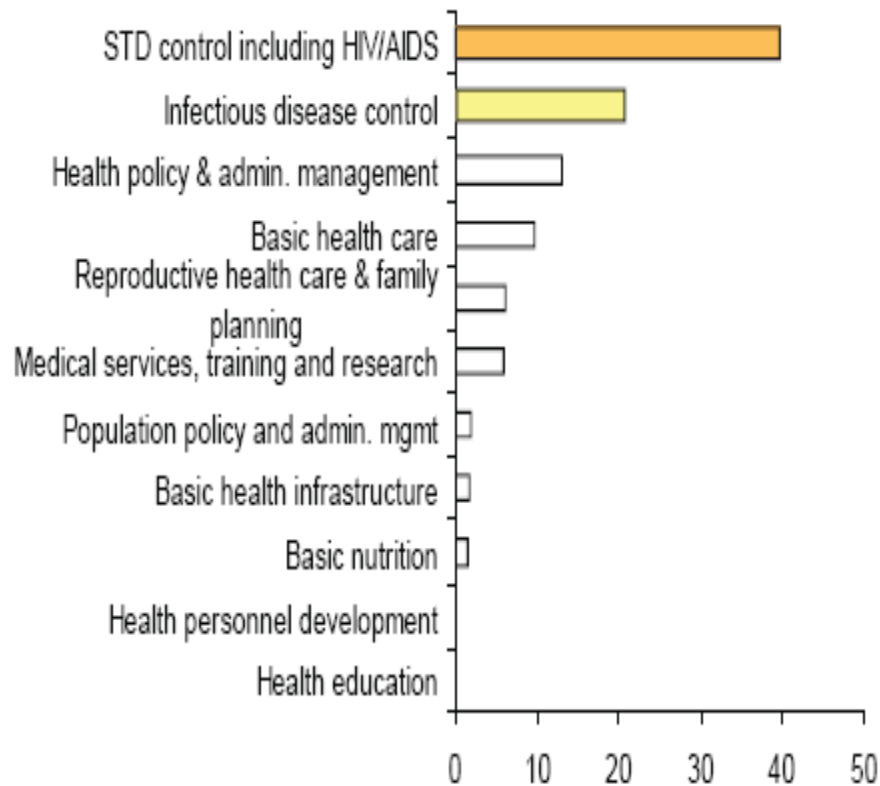
Donor priorities versus country priorities

NSDP: Priority Action Plan for Health 2003-05
(percent of total)



Source: 2002 NSDP

Donor disbursements for Health by Purpose 2003-05
(percent of total)



Source: OECD, CRS database.

Source: National Strategic Development Plan, Cambodia, and OECD/CRS

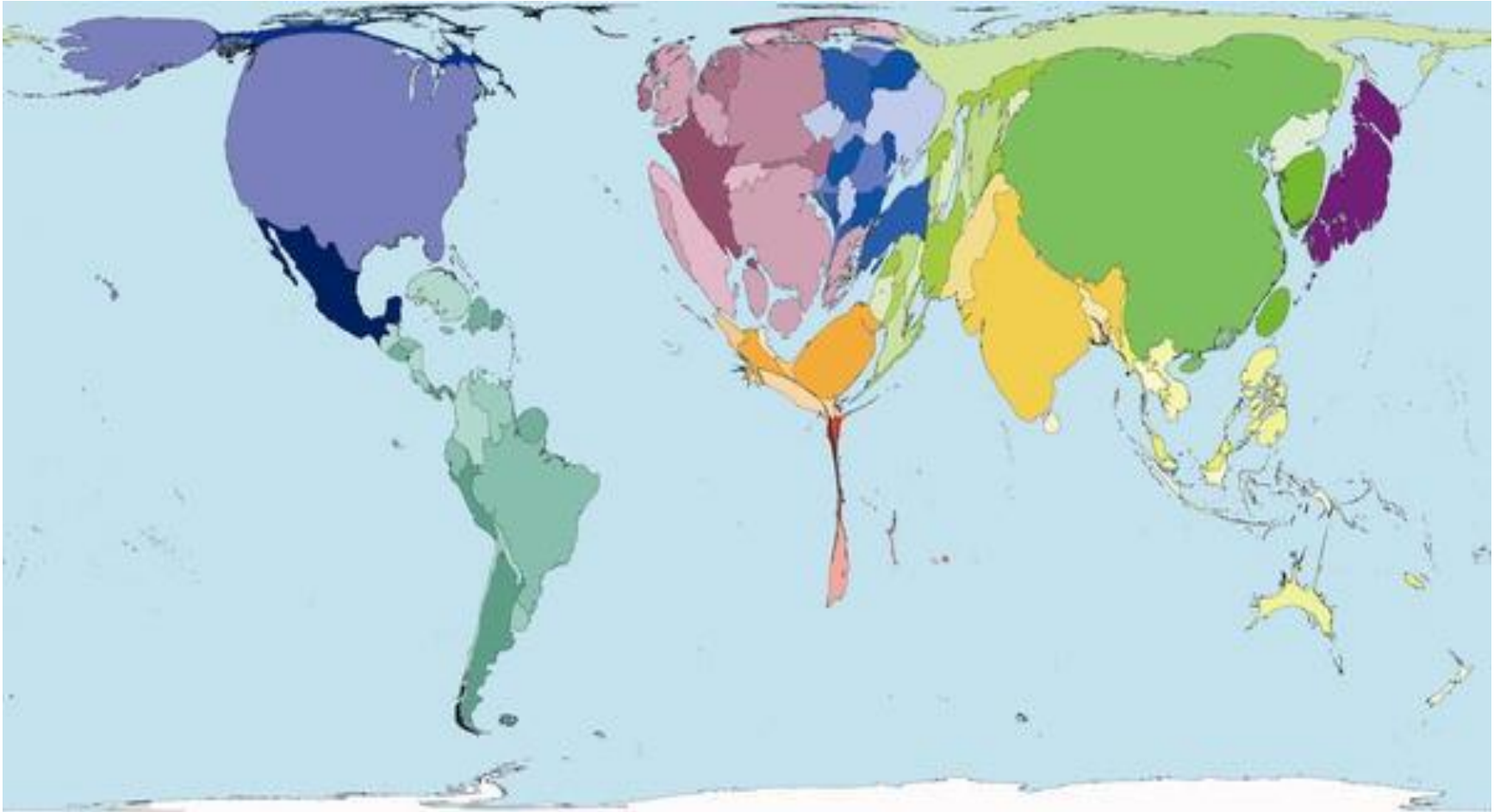
Finance

- Total Financing
 - GHIs linked to recent surge in health ODA
 - Unclear association between GHI and domestic health financing
- Aid Effectiveness
 - GHI funding more; "predictable"; "sustainable" e.g. Innovative Financing mechanisms; "responsive" to global burden of disease;
 - GHI funds skew country priorities
- Out-of-pocket expenditures
 - GHIs have promoted principle of free services and subsidies but have not invested in prepayment systems

Health workforce

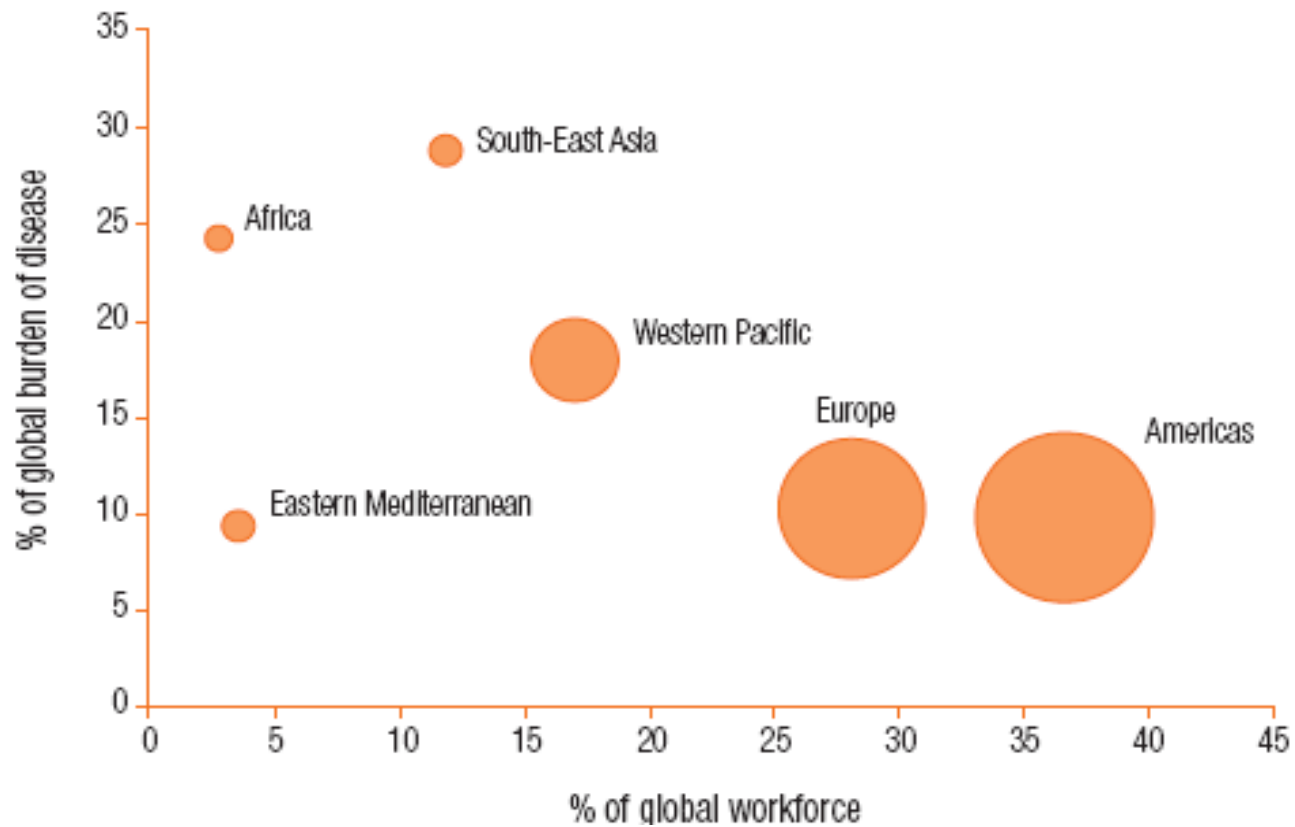
- Production and Strengthening
 - Limited investment in expanding the workforce through pre-service training
 - Better productivity of existing workforce through in-service training, task shifting, supervision and material support
- Distribution
 - Workforce drawn away from non-targeted services
 - Incentives get workers to remote areas
- Retention
 - Brain drain from public to private sector due to better pay

Physicians working



Source: Dorling D (2007) Worldmapper: The Human Anatomy of a Small Planet. PLoS Med 4(1): e1 [doi:10.1371/journal.pmed.0040001](https://doi.org/10.1371/journal.pmed.0040001)

Distribution of health workers by level of health expenditure and burden of disease



Source: WHO World Health Report (2006)

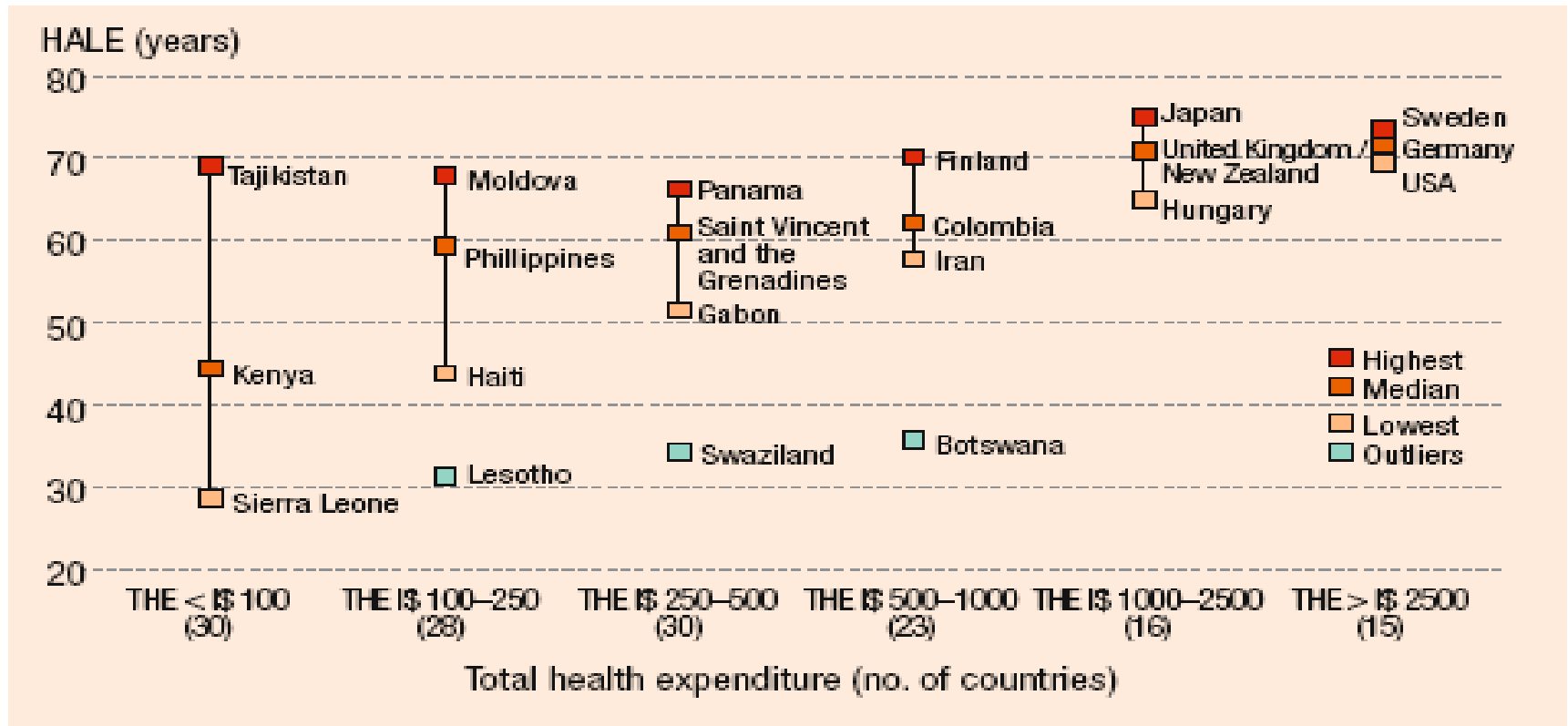
Supply management

- Procurement and Distribution
 - Rapid improvements in availability and affordability of commodities
 - Strong GHI-owned systems duplicate and displace national supply chains
- Quality
 - Improvements in quality through pre-qualification and agreement on global standards

Information systems

- Availability and Accuracy
 - Disease surveillance and service coverage data specific to GHIs is improving.
 - Chronic weaknesses of information systems largely ignored esp. vital statistics and measures of health systems performance
- Use and Demand
 - Dominance of stand-alone information systems is inefficient and burdensome
 - Growing demand and funding for more comprehensive HIS
- Innovation
 - Electronic records are improving efficiency and quality of care

Same per capita total health expenditure, radically different outcomes



HALF: Health-adjusted life year

Source World Health Report 2008

'INNOVATIVE FINANCE'

Review of Shortlist of Innovative Financing Mechanisms

(in alphabetical order)

Introduction

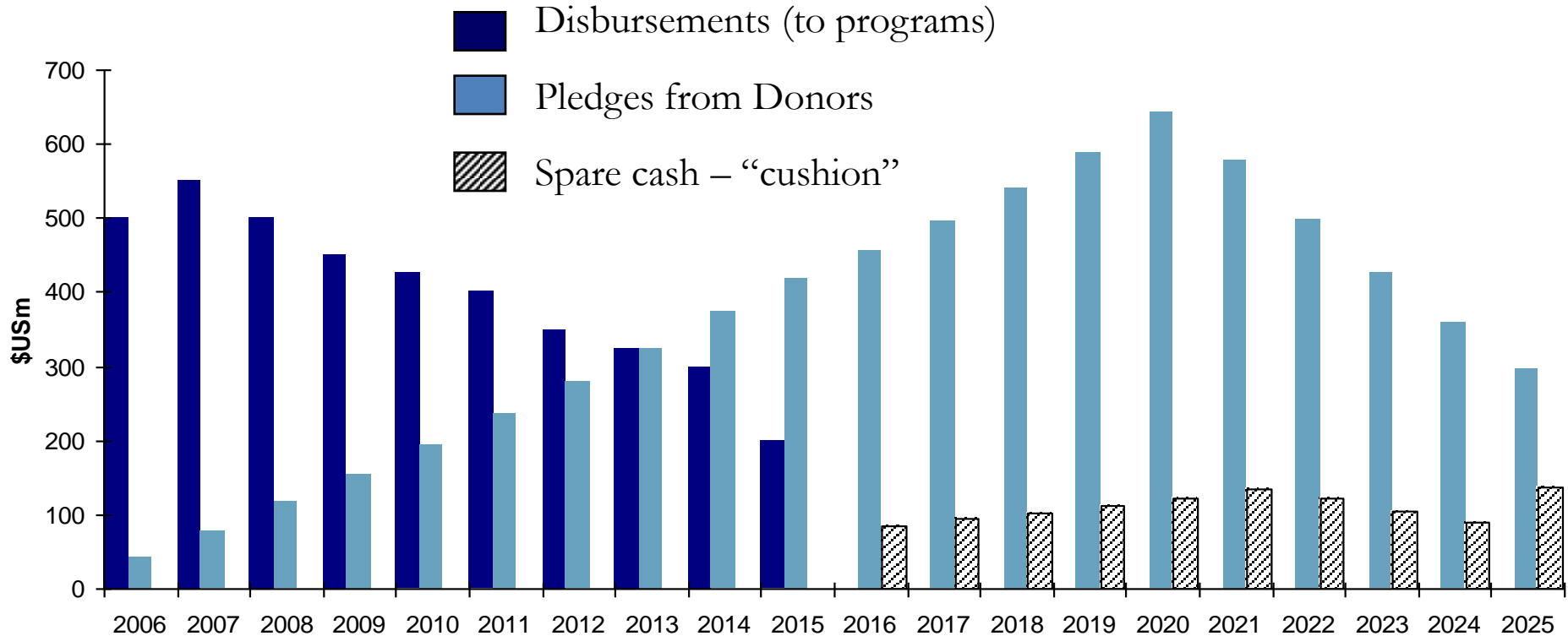
I. Advanced Market Commitment (AMC)	3
II. Airline Ticket Voluntary Solidarity Contribution	5
III. Auction and/or Sales of Greenhouse Gas Emissions Permits	7
IV. Blended Value Product Line for Health Systems	9
V. Buy-downs	11
VI. Currency Transaction Levy (CTL)	13
VII. Debt2Health	16
VIII. De-Tax	18
IX. Global Lottery	20
X. Global Premium Bond	22
XI. Health Systems Funding Platform (Multi-Donor Trust Fund)	25
XII. Impact Investment Fund for Health Systems	26
XIII. Investment Fund for Private Delivery of Health Services	29
XIV. Long-Term Grants	32
XV. Mobile Phone Voluntary Solidarity Contribution	34
XVI. Output-Based Aid	35
XVII. Private Giving Campaign	38
XVIII. Procurement Mechanism	40
XIX. Public-Private Health Advisory Platform	42
XX. Results-Based Financing (RBF)	44
XXI. Scaling up the International Finance Facility for Immunisation (IFFIm)	47
XXII. Seed Mechanism	50
XXIII. Solidarity Levy on Airline tickets	52
XXIV. Tobacco Taxes	54

Four of the more recent financing mechanisms in use at the moment

- Solidarity Contribution on Air Tickets/UNITAID
 - International Finance Facility for Immunization (IFFIm)
 - Advance Market Commitments for Vaccines (AMC)
 - Affordable Medicines Facility for Malaria (AMFm)
-
- Raising money
 - Channelling funds
 - Financing mechanisms part of the way priorities are set

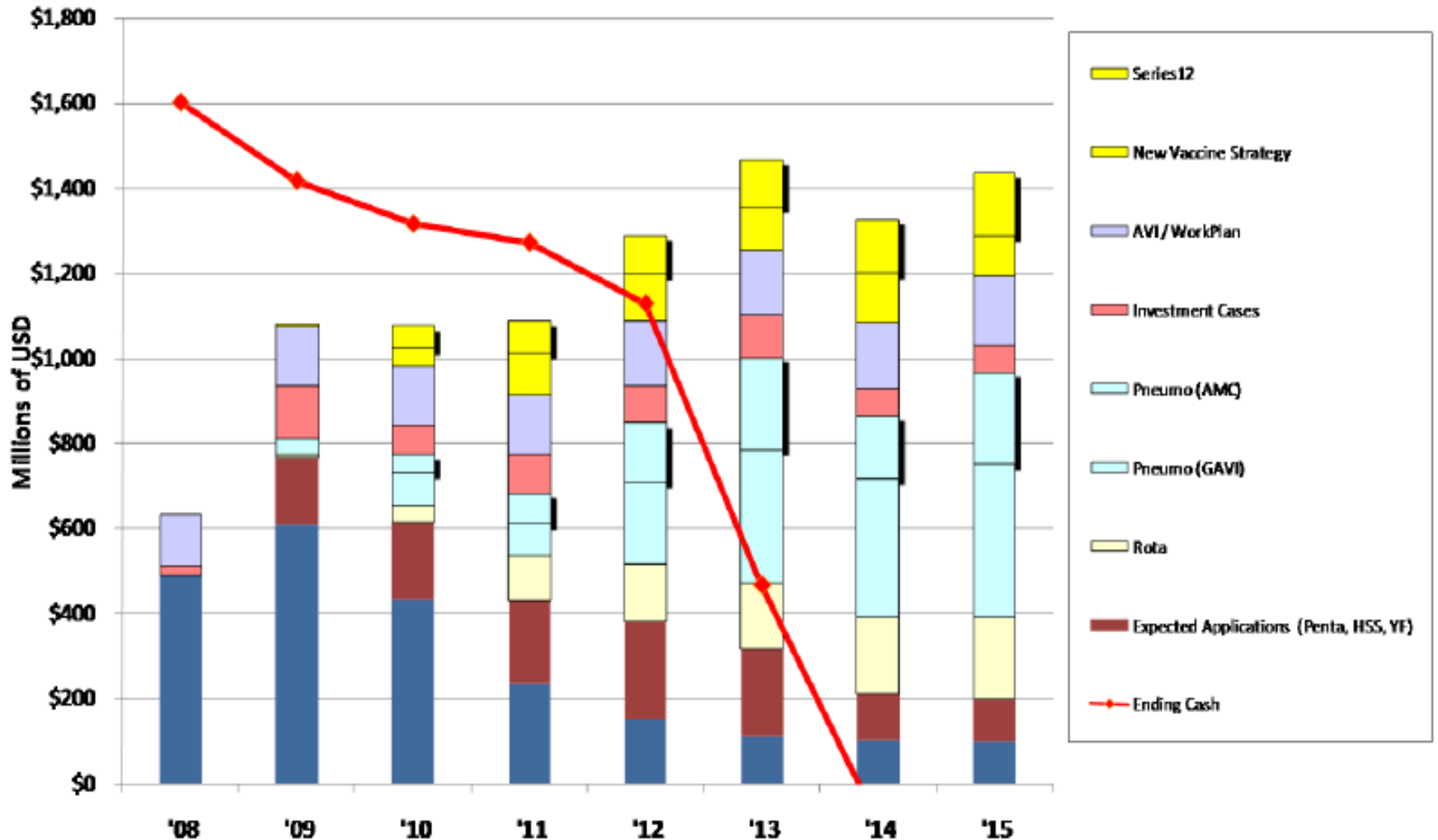
IFF: Donor pledges and disbursements

Long term commitments used to generate near-term resources



GAVI

GAVI Spending Projections and Cash Balance 2008-2015



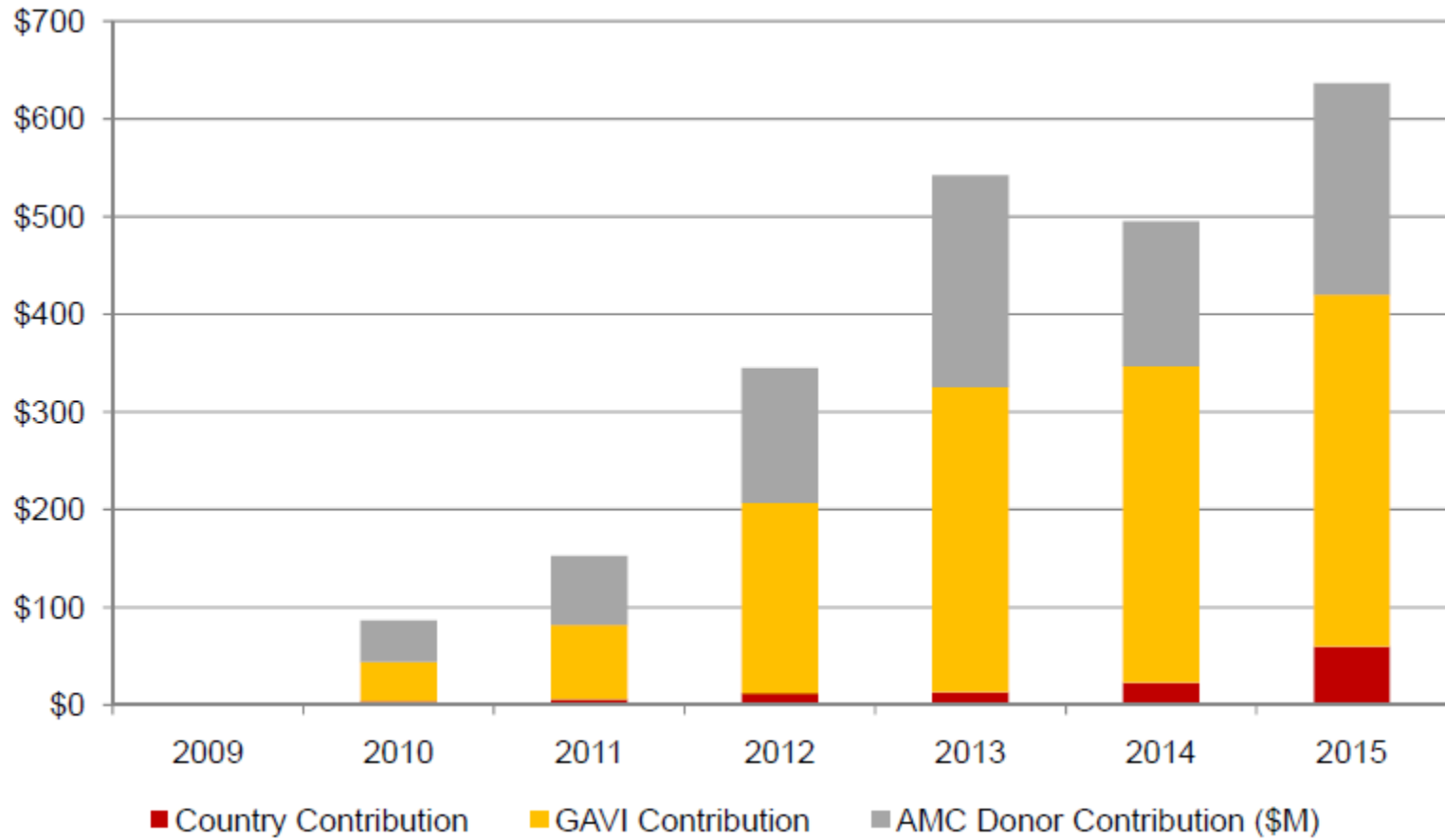
Costs: Maximum contributions

Years	2010	2011	2012	2013	2014	2015	Cumulative (\$M)	
							2010-2015	2010-2020
AMC Donor Contribution (\$M)	42	70	138	216	148	216	831	1,500
GAVI Contribution (\$M) (no inflation)	40	76	195	313	324	360	1,308	3,381
Country contribution (\$M)	4	6	12	13	23	60	118	667
Total	86	153	345	542	495	637	2,257	5,548

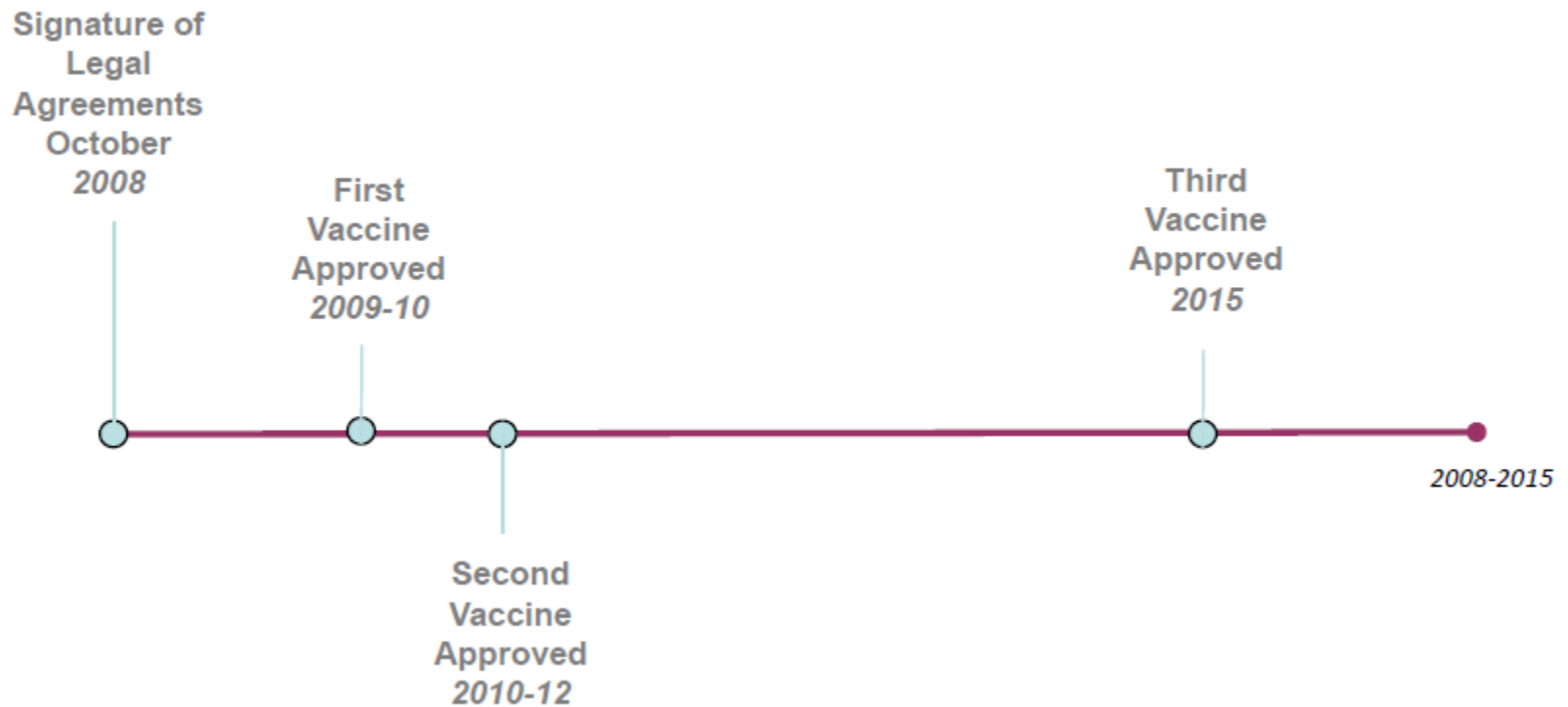
Source: GAVI Alliance & Fund Board meetings 25 & 26 June 2008

- Total pneumococcal vaccine costs (bottom right-hand corner) of \$5.5bn+
 - AMC \$1.5bn
 - GAVI own funds \$3.4bn
 - Country contributions (mostly from donor sources) just under \$700m
 - Not included, system strengthening needs of the program

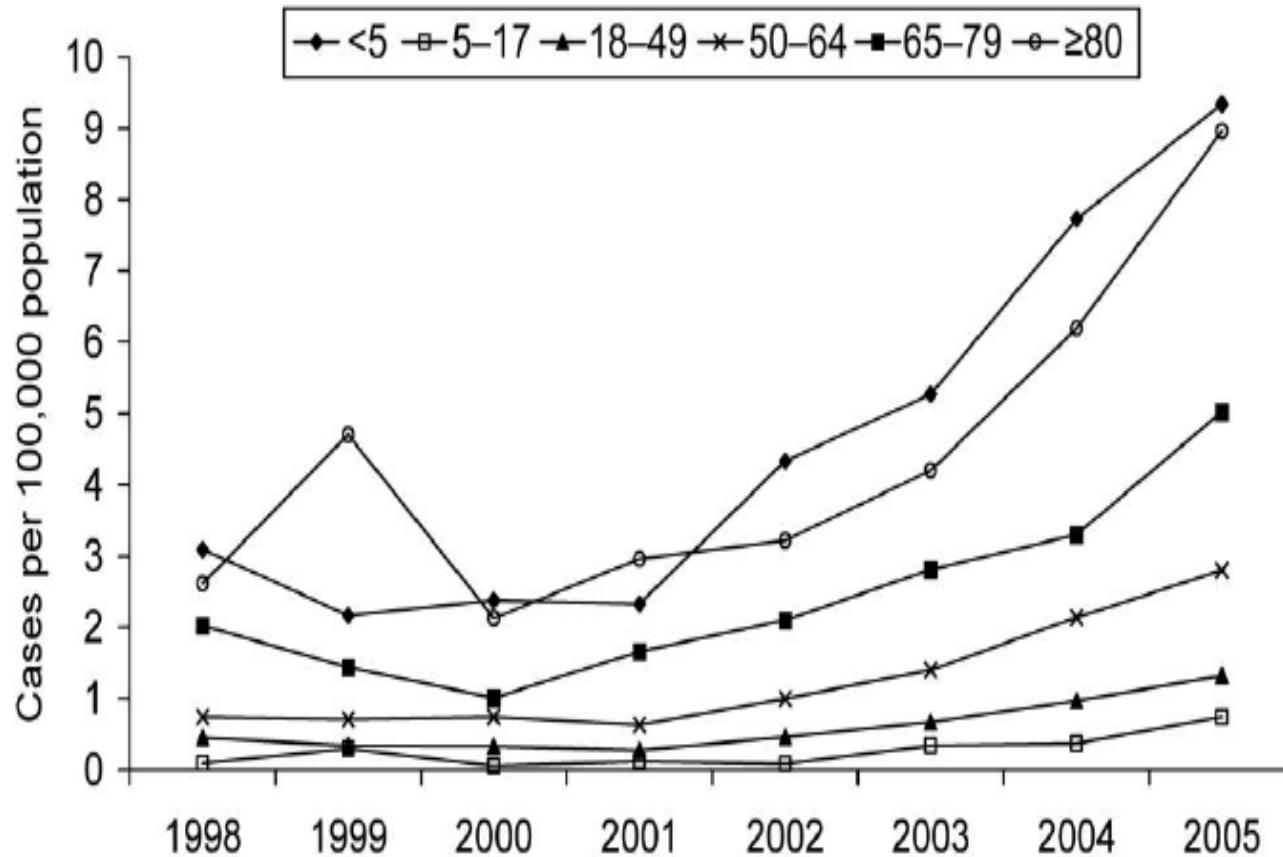
Costs: Maximum contributions cont...



Timeline

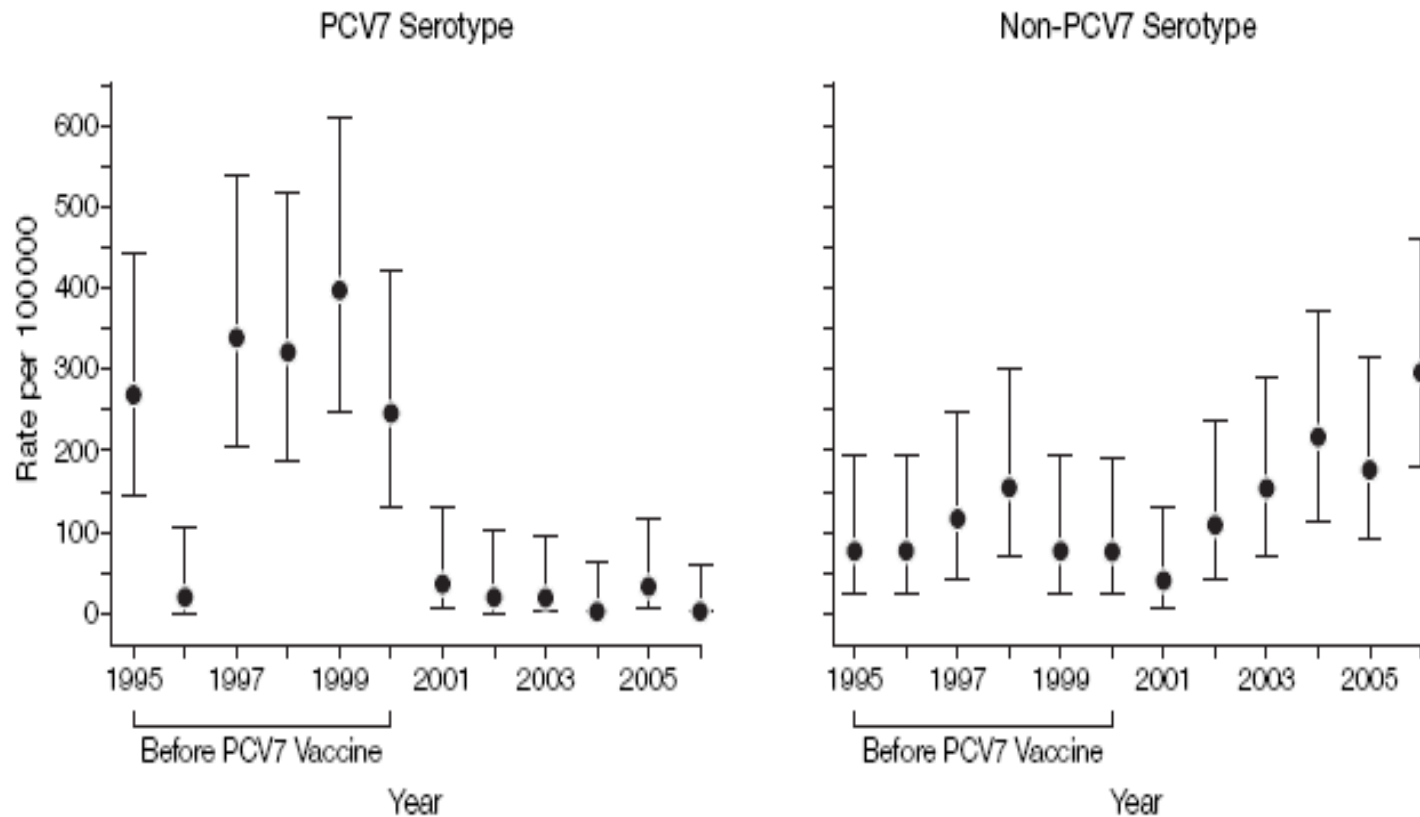


Age-specific incidence of serotype 19A replacement disease in the USA



Moore et al, *J Infect Dis* 2008;197:1016

Invasive pneumococcal disease among Alaskan Native children <2 yrs of age

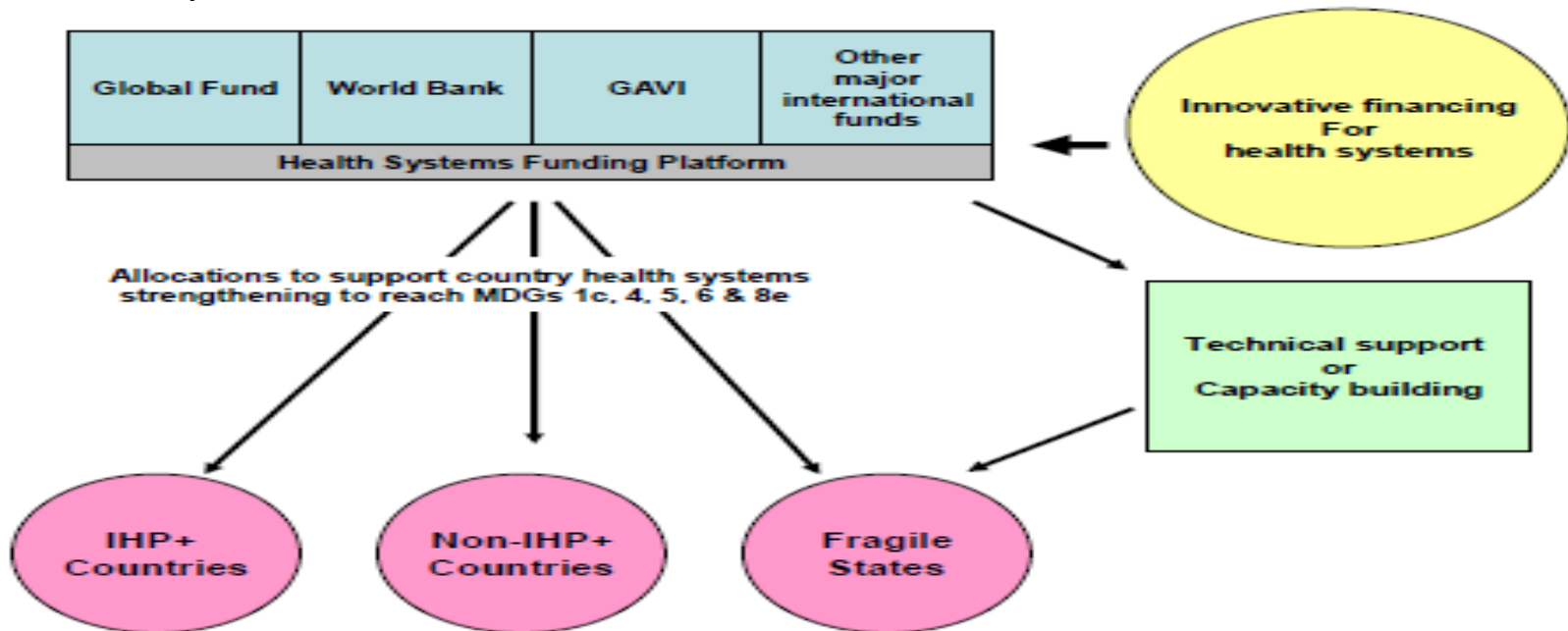


Error bars indicate 95% CI

Singleton et al, JAMA 2007;297:1784

Proposed health system funding platform

As proposed by High Level Task Force on Innovative International Financing for Health Systems



- “joint programming”
- “A single funding arrangement (alongside a single plan and a single apparatus for monitoring and evaluation) will be used to support the health system strengthening activities that are needed to accelerate progress towards the MDGs.”
- Governance, priority-setting and accountability?
- Who spends what on what and through whom?
- GAVI and Global Fund have large shortfalls on current activities and are seeking replenishments soon

Consequences of crisis for the poor

- *“Health is not an expendable luxury item that can be dispensed with during a crisis. It is the very foundation for responding to the crisis. Health is the human capital for moving towards recovery. And health systems are the social institutions, the social capital, that make response and recovery possible.”*
- *Margaret Chan, Director-General, World Health Organization*
- http://www.who.int/mediacentre/news/statements/2009/financial_crisis_20090401/en/index.html

Thank you