

Issues in vaccine access and development

MSF/Oxfam consultation

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I. Successes

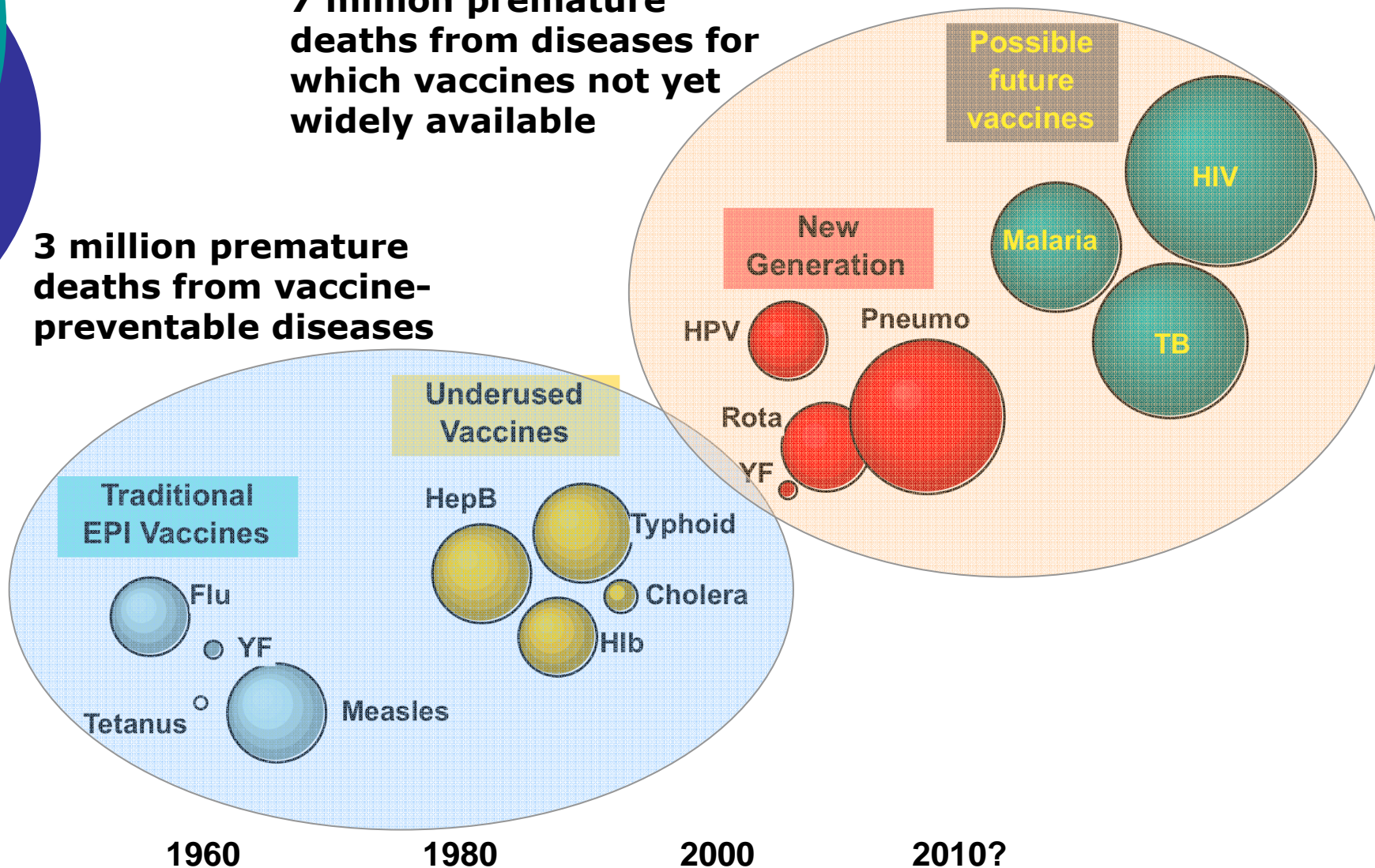
II. Challenges

III. Possible solutions

The Vaccine Challenge

7 million premature deaths from diseases for which vaccines not yet widely available

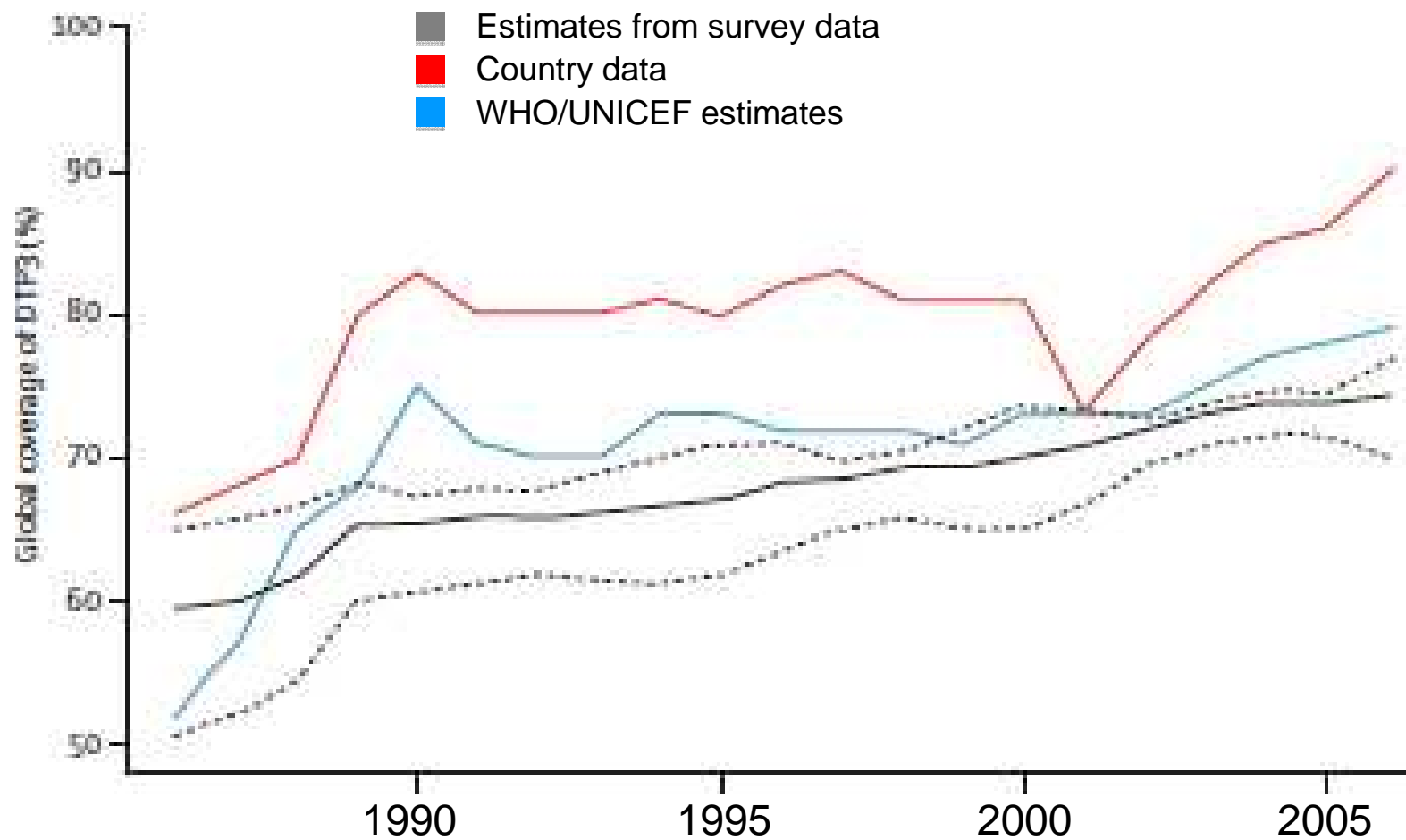
3 million premature deaths from vaccine-preventable diseases



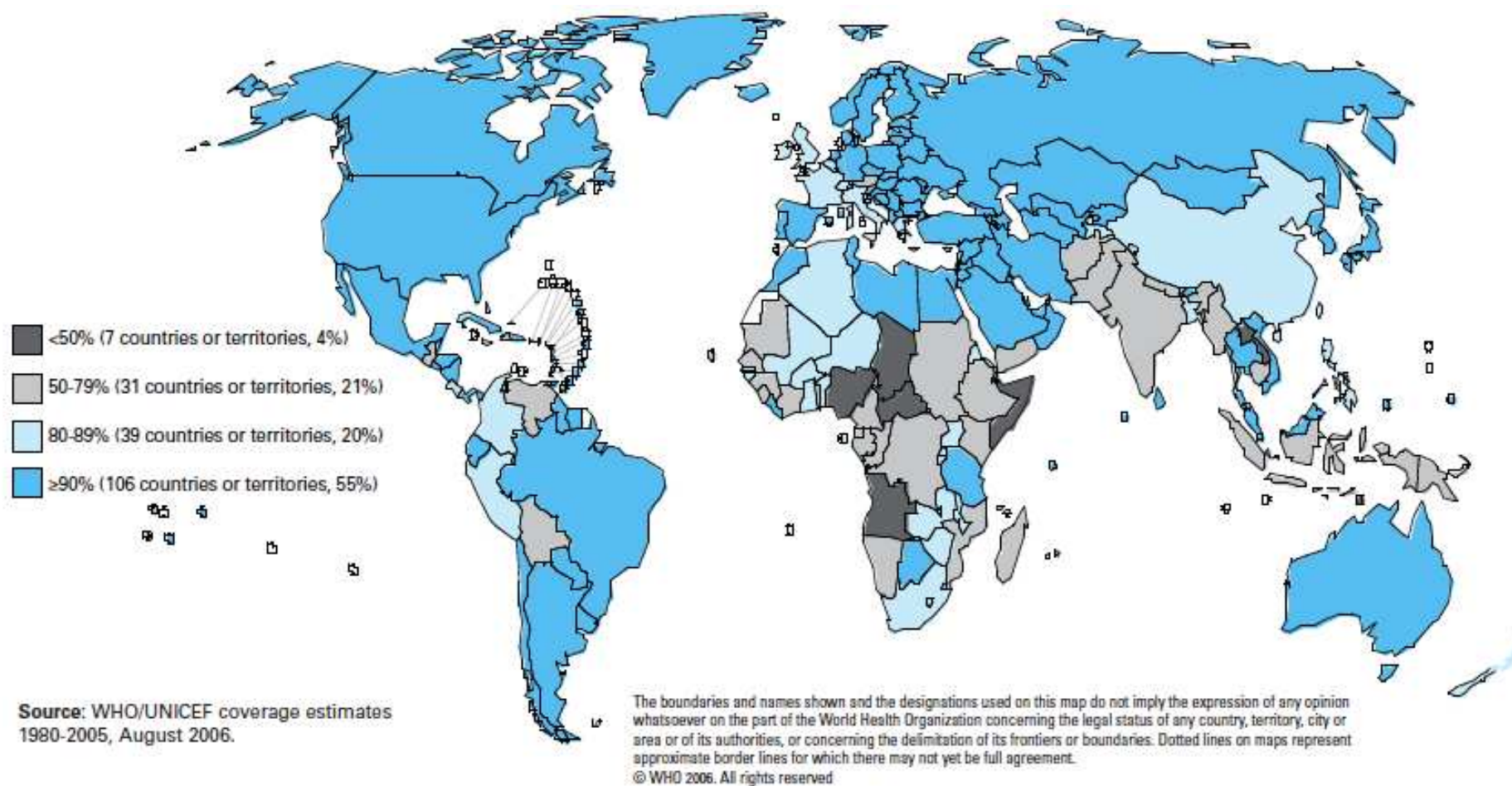
Successes over last decade

- Continuing increasing in basic immunization coverage
 - But great disparities remain.
- Introduction of additional vaccines into EPI package
 - But most low-income countries still depend on GAVI funding.
- Development of several important new vaccines
 - But prices very high, vaccines not necessarily adapted to developing country needs.

Immunization coverage from surveys

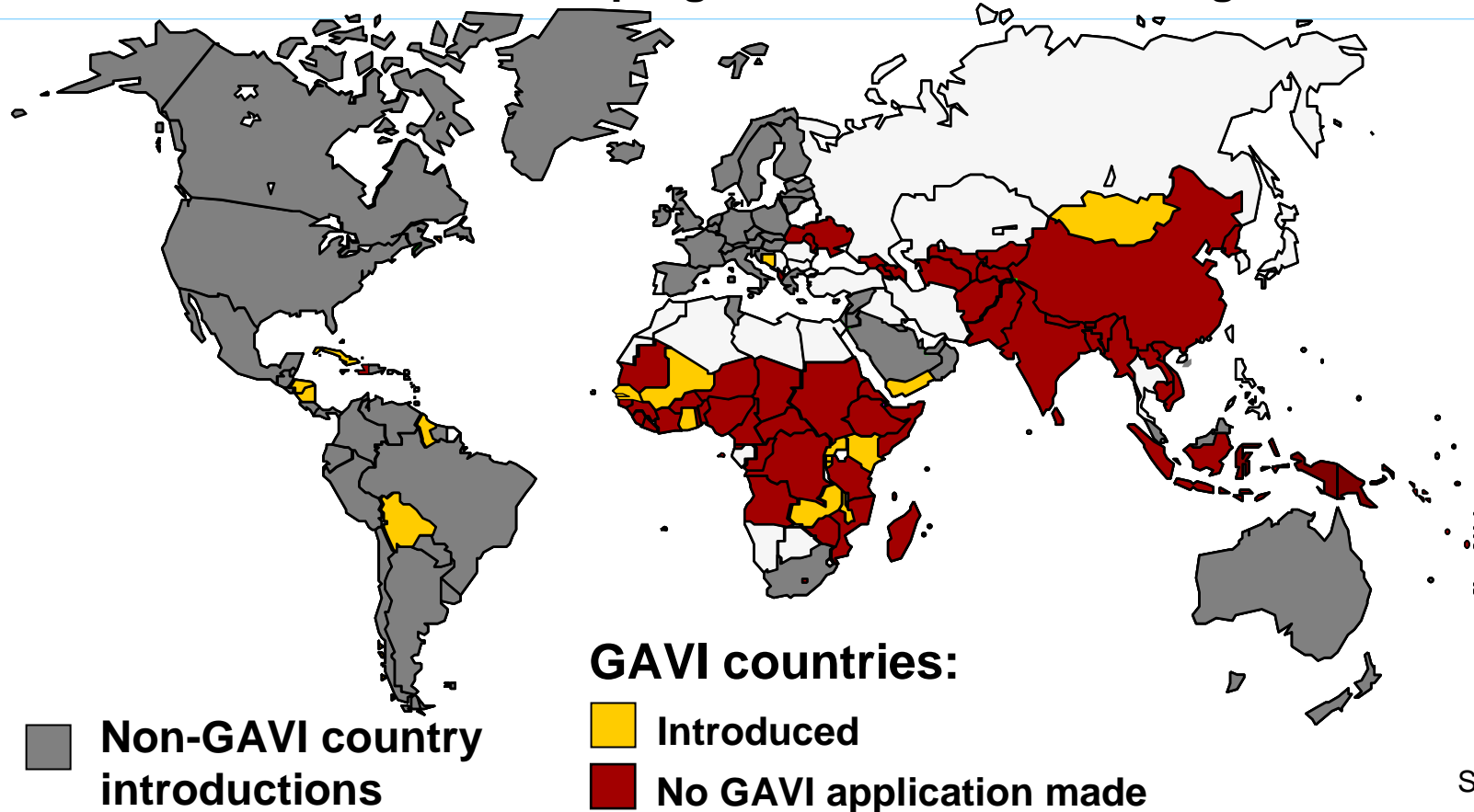


Measles vaccine coverage, 2005



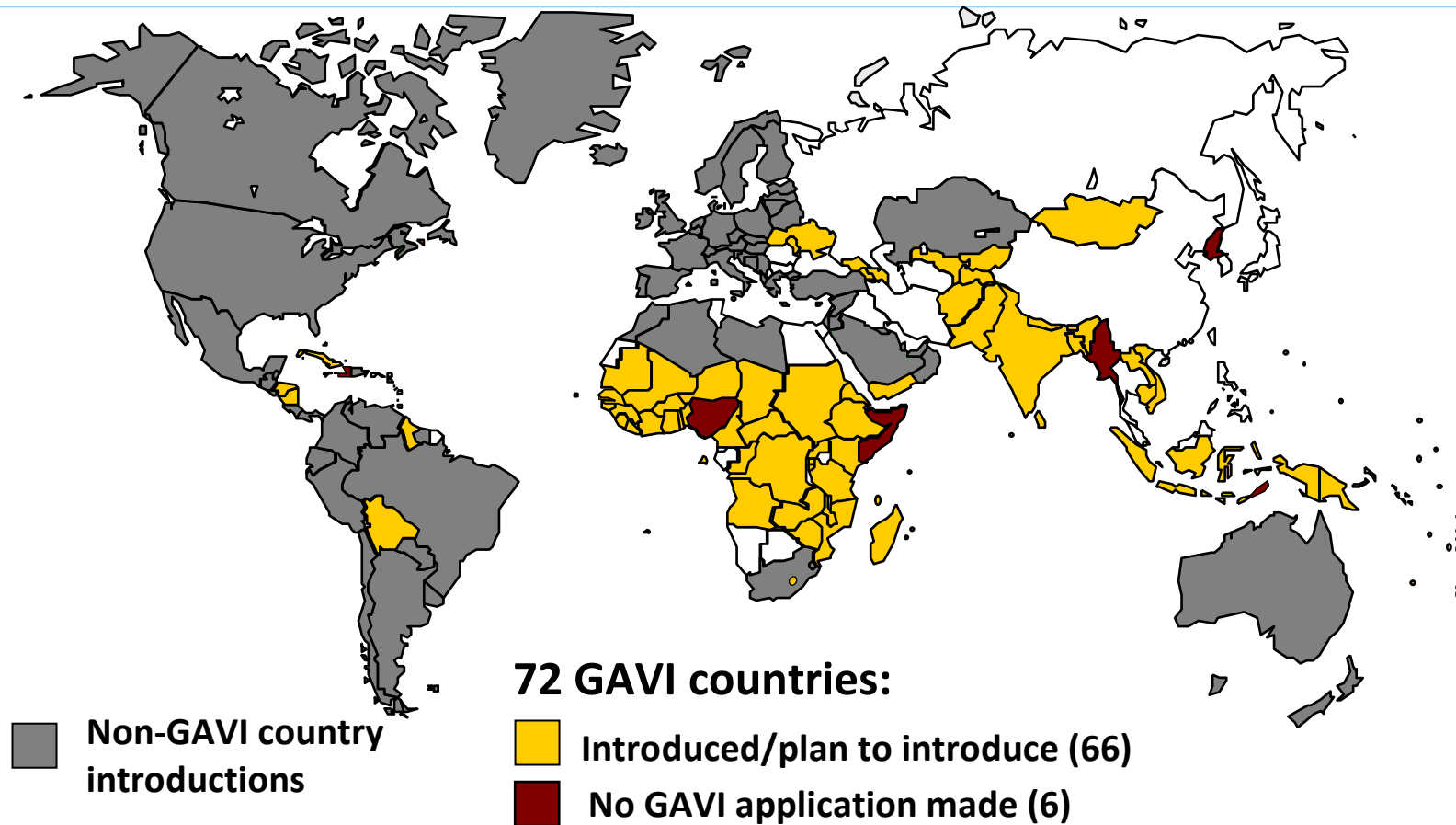
Introduction of newer vaccines, especially HepB and Hib

Routine immunization programs with Hib-containing vaccine 2005



**101 countries, including most PAHO countries,
but only 19 (25%) GAVI countries**

Routine immunization programs with Hib-containing vaccine 2008



Over 130 countries, including 66 GAVI countries, have introduced Hib vaccine or are expected to introduce by 2009-2010

III. Important new vaccines

Vaccine	Global deaths	Licensure
Pneumococcal conjugate	800,000	2000
Rotavirus	500,000	2004
HPV	160,000	2006

None of these vaccines is in widespread use in low- and middle-income countries

Challenges

Access

- Health systems
- Affordability
 - Expense of new vaccines
 - Tiered pricing and middle-income countries
 - GAVI's financial situation

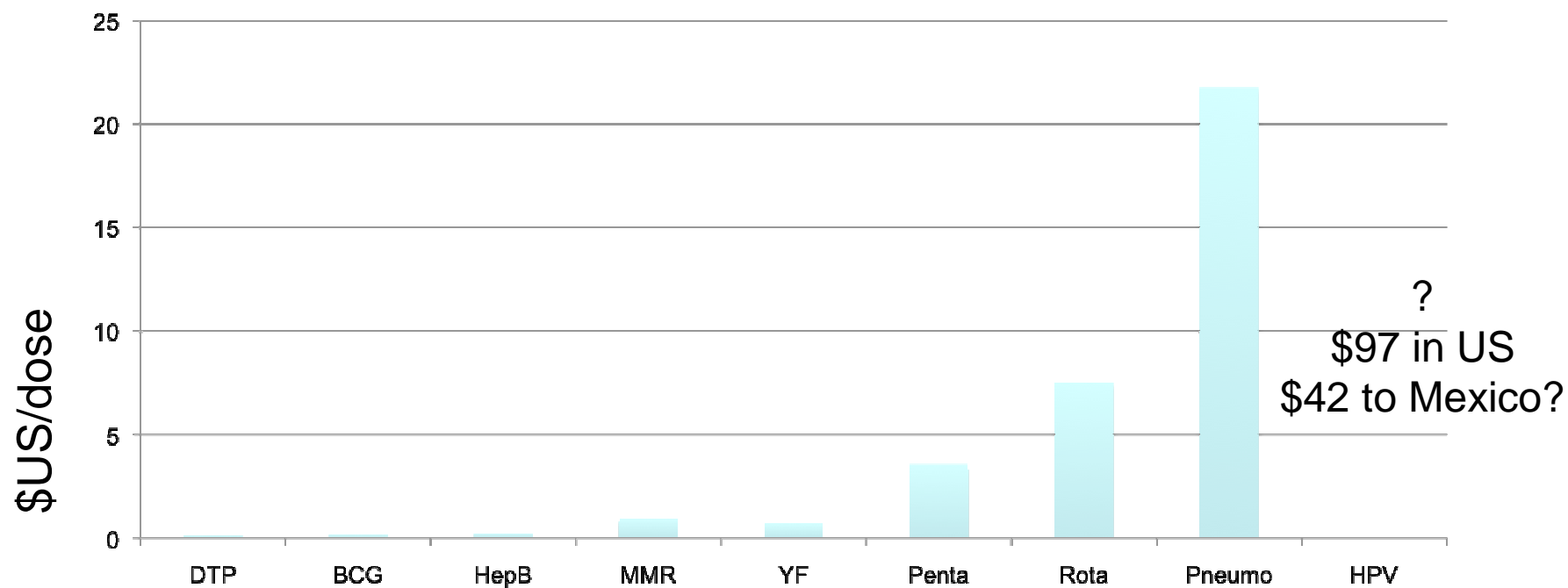
New vaccine development

- Vaccines for “neglected” disease with little or no rich-world market
- More appropriate versions of vaccines

Access challenges: affordability

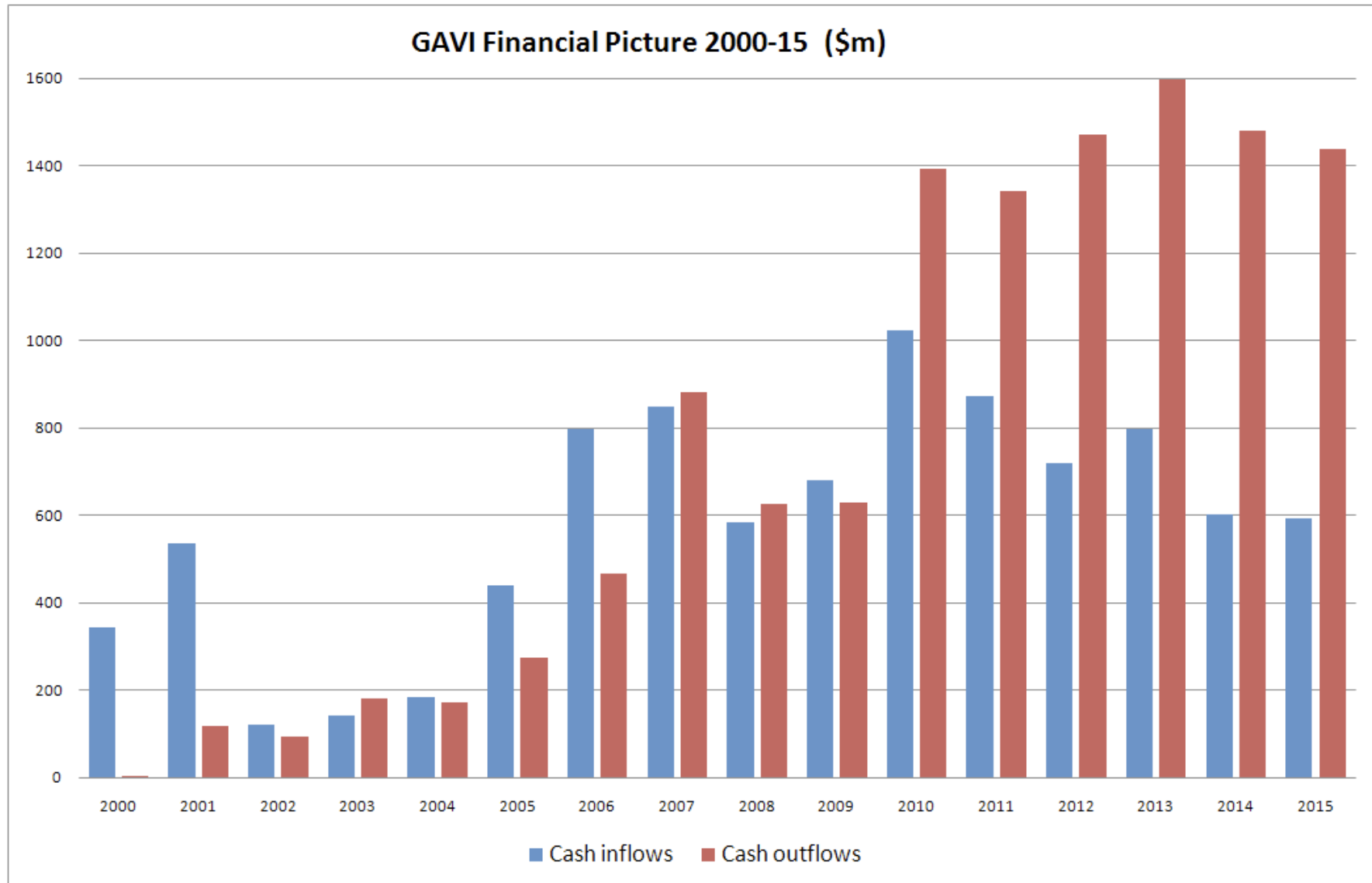
- High prices for new vaccines (US public-sector prices)
 - Pneumococcal conjugate (\$71)
 - Rotavirus (\$57-83)
 - HPV (\$91)
- Tiered pricing
 - A partial solution to high prices for the poorest countries
 - A contentious and inadequate measure for middle-income countries
- GAVI's finances
 - Rapidly growing commitments for penta, pneumo, and rota
 - Decline in special revenues from IFFIm beginning after 2010
 - Effect of economic crisis on donors

PAHO vaccine prices (2009)



Under current tiered pricing, pneumo vaccine is 6x more expensive than penta; HPV likely to be more expensive still.

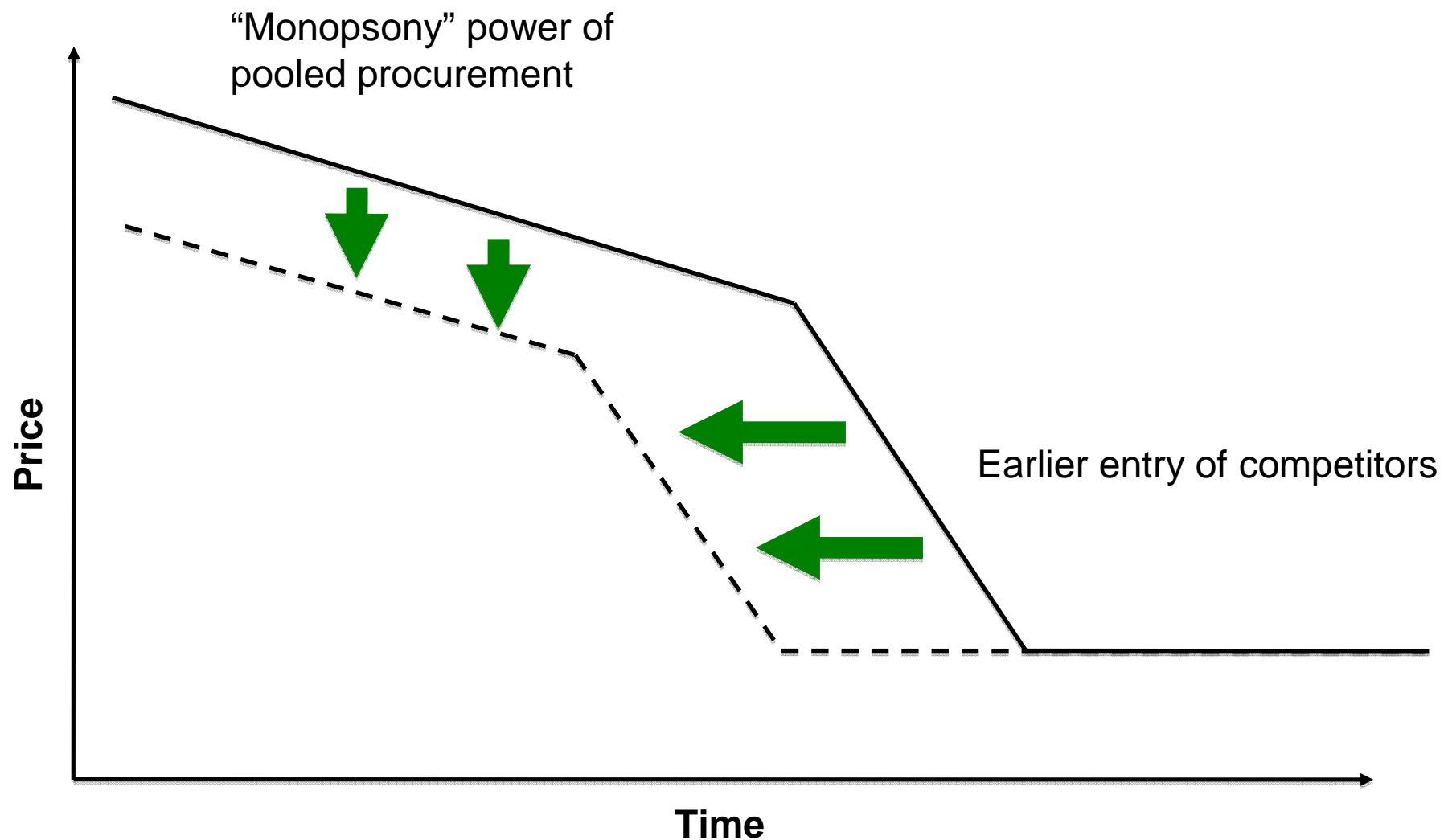
GAVI's financial situation



Possible solutions to vaccine affordability

1. Reduce barriers to entry of new suppliers
 - Transfer technology and know-how
 - Overcome IP barriers
 - Streamline regulatory pathways for “follow-on” vaccines
2. Use pooled procurement mechanisms like PAHO's to enhance bargaining power
3. Develop forms of tiered pricing acceptable to middle-income countries
4. Explore mechanisms for separating prices from R&D costs
5. Find sustainable funding for GAVI

Pressures on vaccine prices



Research and development challenges

First or better vaccines against “neglected” diseases (malaria, TB, HIV, but also dengue, other parasitic diseases)

- ▶ Private sector will not invest sufficiently in vaccines that don't promise large markets

Versions of existing vaccines better adapted to developing countries needs

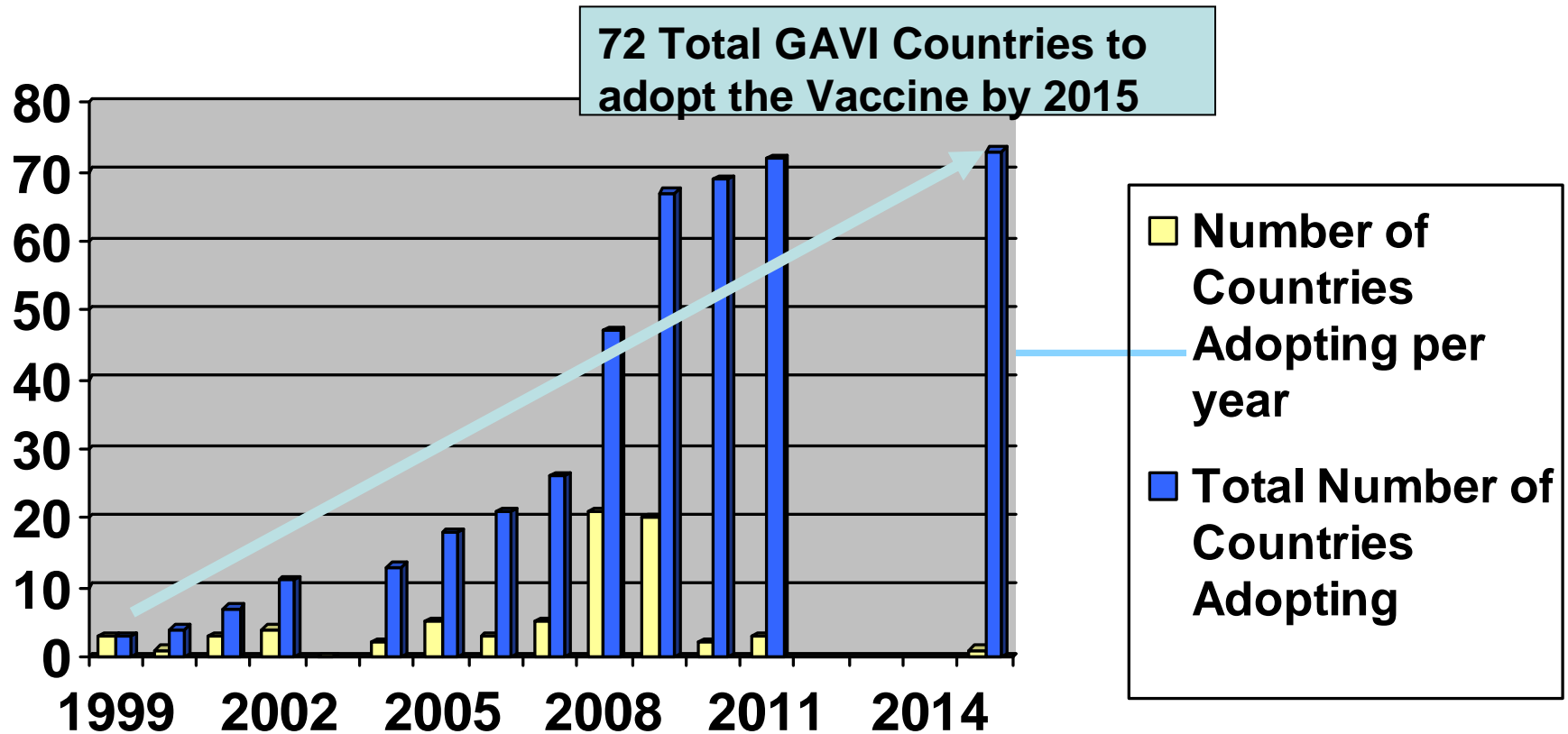
- ▶ Relying on hand-me-downs often results in vaccines that are:
 - against the wrong serotypes
 - in the wrong presentations
 - too expensive

Possible solutions to R&D challenges

- PDPs and partnerships like the Meningitis Vaccine Project
 - Donor “push” funding
 - Partnerships with the product developers, including developing country firms
 - Built-in “access provisions”
- “Pull” funding mechanisms, including prizes
 - De-linkage of price from R&D costs
 - Alignment of reward to innovation with public health benefit
- Access to technology
 - Enhance and exploit R&D capacity of emerging suppliers
- Governance & priority setting: who decides?

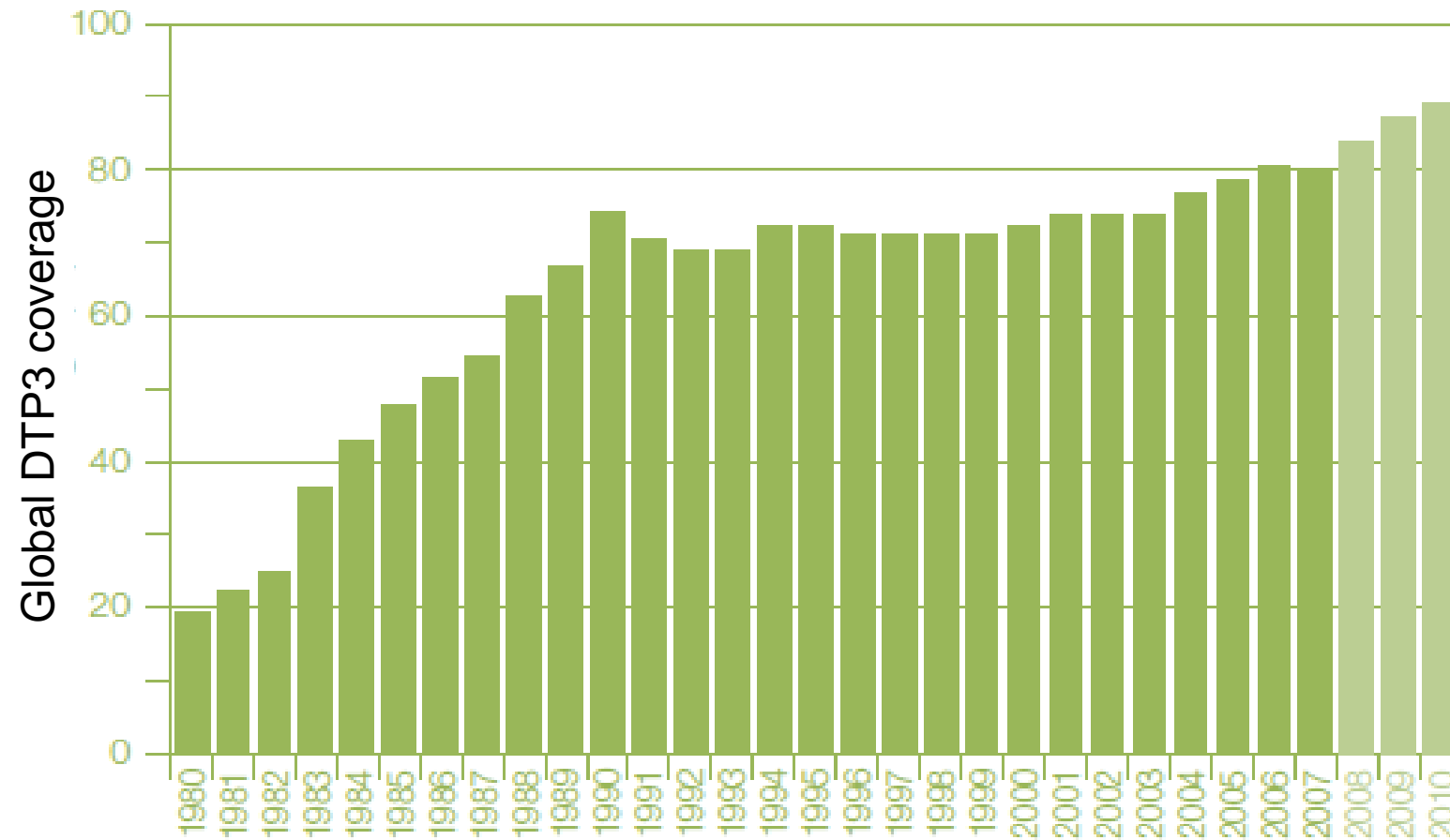
Back-up slides

Country adoption and adoption assumptions for GAVI-eligible countries



61 of 72 GAVI countries will have introduced Hib by end 2009.

I. Continued increase in immunization coverage in developing countries



WHO, UNICEF, World Bank. *State of the world's vaccines and immunization, 3rd ed.* Geneva, World Health Organization, 2009.