

FINANCING AND HEALTH TECHNOLOGY ASSESSMENT OF VACCINE

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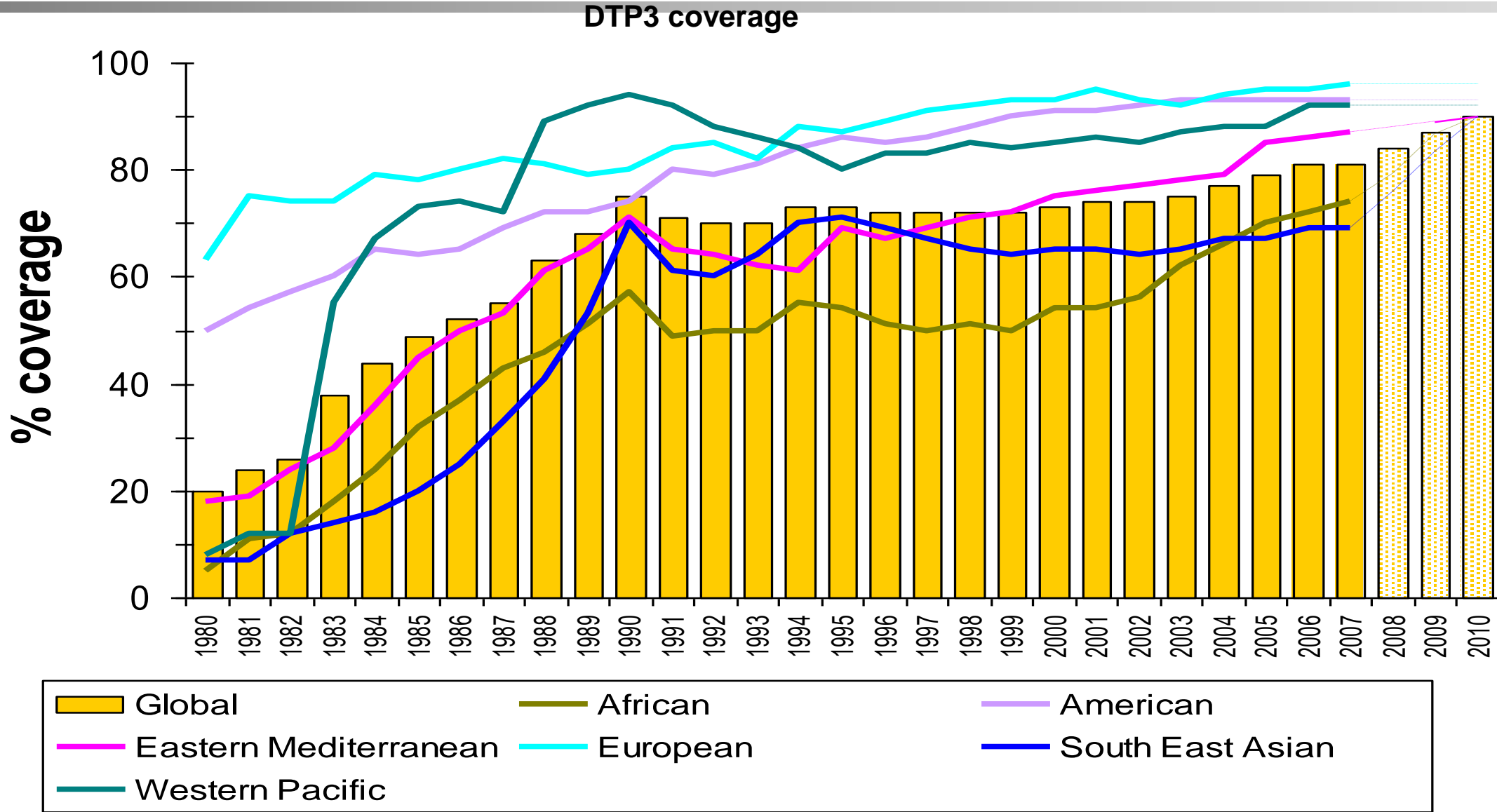
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- Importance of immunization financing
- Current options for financing vaccine
- Health technology assessment (HTA) as financing tool

WHAT CAN STOP US TO REACH OUR COVERAGE GOALS?



Global Immunization 1980-2007 and projections 2008-2010 to reach 90% global coverage goals in 2010



Source: WHO/UNICEF coverage estimates 1980-2006, August 2007

Importance of Immunization Financing

Vaccination Cost is Higher

- Newer vaccine is pricey
- More types of vaccine in EPI
- Escalating cost
 - USD6 → USD15 per infant

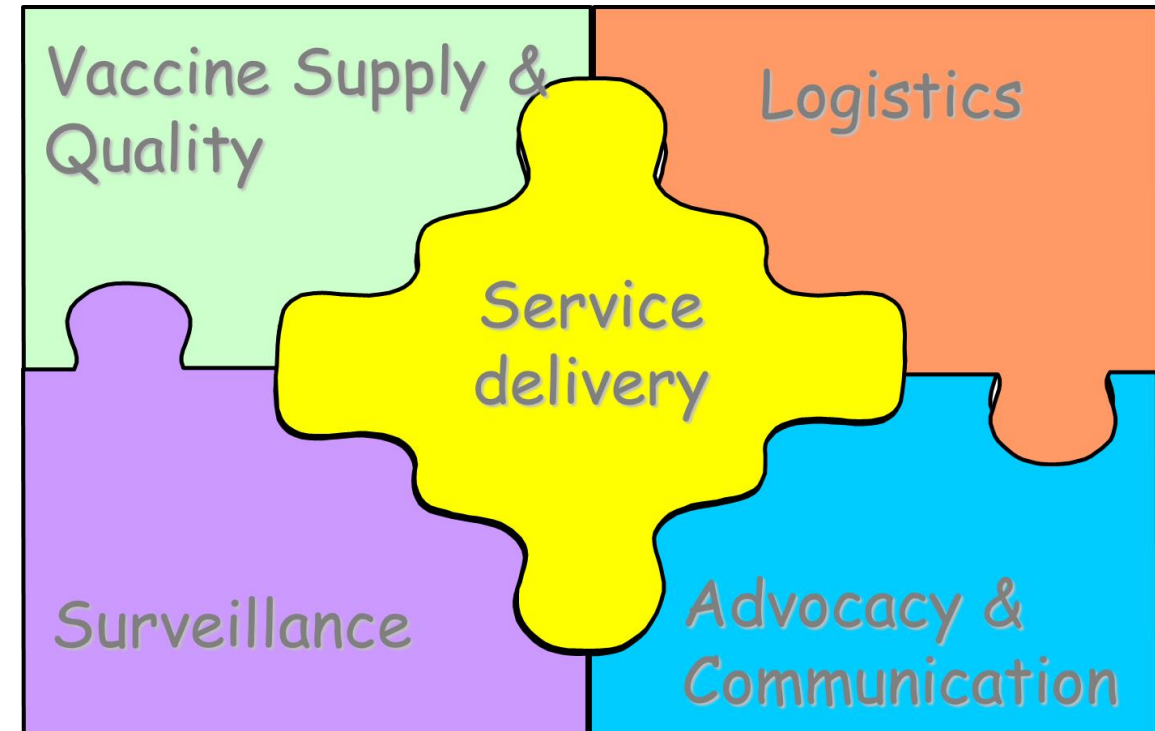
Higher Scaling Up Cost

- Harder to reach in order to increase coverage rate
 - Limited access to health facilities
 - Geographically isolated
 - Caretakers less convinces

Vaccine	UNICEF/ GAVI ¹	PAHO ¹	U.S. public sector	No. of doses as per WHO recommend- ations	Cost of vaccination UNICEF/GAVI/ per child	Cost of vaccination PAHO/ per child	Cost of vaccination U.S./ per child
BCG (PAHO 20 dose vial)	0.11	0.10	--	1	0.11	0.10	--
DTPw	0.18	0.15	--	3+1	0.72	0.60	--
MMR (Zagreb strain for UNICEF & PAHO)	0.93	0.92	18.64	2	1.86	1.84	37.28
Yellow Fever	0.90	0.65 Brazil Origin 1.15 France Origin	--	1	0.90	0.65-1.15	--
HepB (1 dose vial)	0.27***	0.28	10.25	3+1*	1.08	1.12	41.00
Hib (lyophilized)	3.40 (1 dose vial)	2.25 (1 dose vial)	8.66 (10 doses vial)	3+1*	13.60	9.00	34.64
DTP-HepB-Hib (pentaval- ent; 1 dose vial, liquid)	2.94	3.20	--	3+1	11.76	12.80	--
Rotavirus	**	5.15 Rotateq 7.50 Rotarix	59.18 Rotateq 83.75 Rotarix	3 Rotateq 2 Rotarix	**	15.45 Rotateq 15.00 Rotarix	177.54 Rotateq 167.50 Rotarix
Pneumococcal (7-valent for PAHO and U.S., 10- or 13-valent for GAVI)	7.00 (via AMC)	20.00	91.75	3	21	60.00	275.25

Why Need to Consider Financing Option?: Complexities of Immunization Program

- Immunization is a **program**, not vaccine alone.
- Resource requirement for national immunization program **not fully integrated** and **discussed** within national health sector budget



Why Need to Consider Financing Option?: Increasing Options

- International Finance Facility for Immunisation (IFFIm)
- Advanced Market Commitments (AMCs)

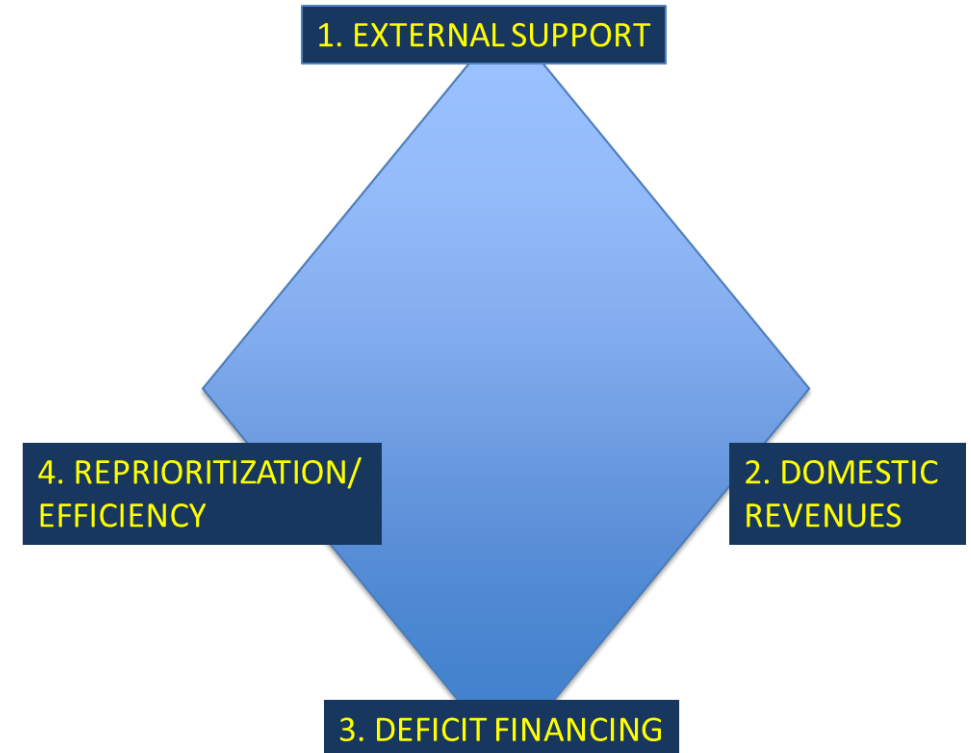


+USD4bil to LI countries

- How immunization is financed will affect other health care program and effectiveness of the health system.

Fiscal Space: Availability of *room in a government's budget that allows it to provide resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy.*

FISCAL SPACE FOR IMMUNIZATION



Expanding Fiscal Space for Immunization

FISCAL SPACE FOR IMMUNIZATION

1. EXTERNAL SUPPORT

New donor/grant/loan fund e.g. GAVI

Gov fund freed up from non-health care sector e.g. reduced defense spending

Gov fund freed up from other health intervention e.g. HTA

4. REPRIORITIZATION/ EFFICIENCY

Efficiency in running immunization program e.g. reduced wastage

2. DOMESTIC REVENUES

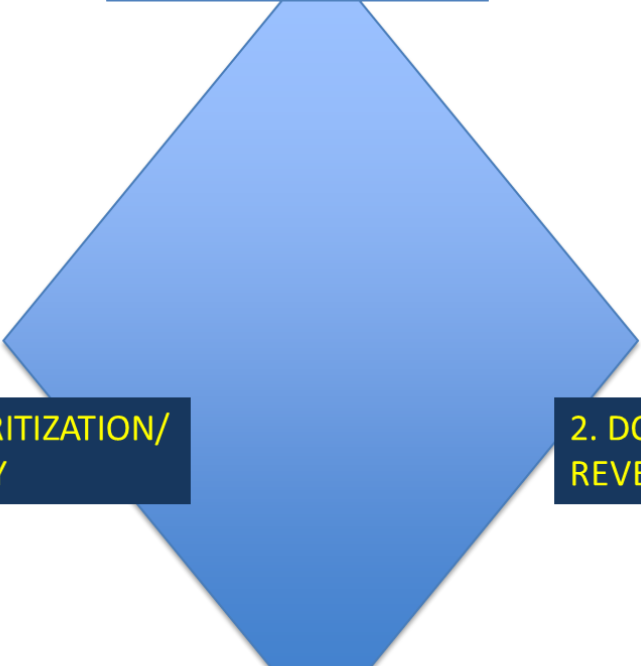
New gov revenue/resources e.g. earmarked taxes

3. DEFICIT FINANCING

Expanding Fiscal Space for Immunization

FISCAL SPACE FOR IMMUNIZATION

1. EXTERNAL SUPPORT

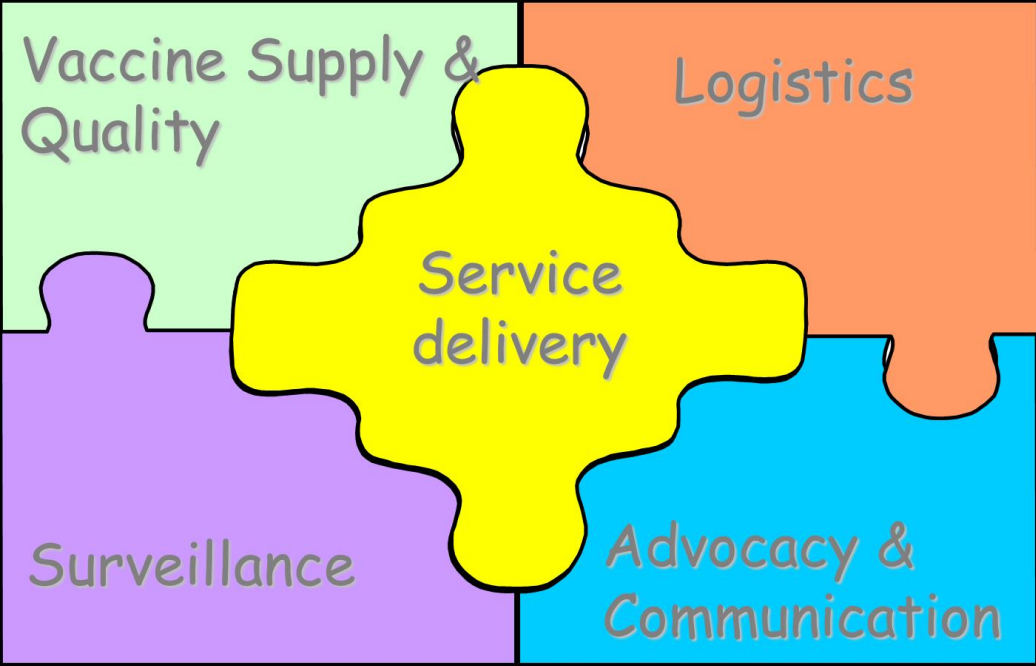


4. REPRIORITIZATION/
EFFICIENCY

2. DOMESTIC
REVENUES

3. DEFICIT FINANCING

IMMUNIZATION PROGRAM



- 1. Maintaining & expanding EPI
- 2. New vaccine adoption

Financing Option 1: Tax-Based

TAXES

- personal, income, excise, property, inheritance, import



GENERAL FUND

LINE MINISTRIES



LOCAL AUTHORITIES



RM126mil annually for
NIP excl HR, edu,
consumable

Financing Option 1: Tax-Based

- Predictability:
 - Revenues predictable for planning due to government procedures, but (historical budget) not receipt of funds.
- Equitability:
 - Regressive (-) or Progressive (+);
 - Financial transfer from central to sub-national based on poverty (+)
- Efficient:
 - Budget to cost-effective services (+)
- Feasibility:
 - Existing government mechanism & machinery
- Sustainability:
 - Increasing govt responsibility for immunization increase overall growth & productivity (+)
- Promotes self-sufficiency
- Foster greater accountability

Financing Option 2: Risk Pooling

	NI	SHI	CHI	PHI
SOURCE	General revenues	Mandatory, earmarked payroll. (+) external assistance or tax	Prepayment, govt, donor	Individuals
POPULATION	Entire	Contributors	Community members	Contributors
BENEFIT PACKAGE	Fixed set	Defined	Community preferences	Defined
DELIVERY	Public and/or NGO	Public or/and private	NGO or public	Private

- RP provide protection against high cost, low probability event **vs** immunization low cost and predictable.
- Immunization usually vertical service e.g. Ghana National Health Insurance Scheme.

Financing Option 2: Risk Pooling

- Predictability:
 - If immunization is included in the BP (+)
- Additional to govt financing:
 - SHI, CHI, PHI provide additional sources of financing
- Equitability:
 - NI most equitable; SHI not cover informal worker; CHI target lowest level but very poorest may be excluded.
- Efficient:
 - Admin stc exist for NI & SHI. Risk pooling mechanism can be costly.
- Feasibility:
 - Complex to develop, implement and manage.
- Sustainability:
 - Depends on size of risk pool, health condition managed, revenues collection
- Promotes self-sufficiency
- Foster greater accountability

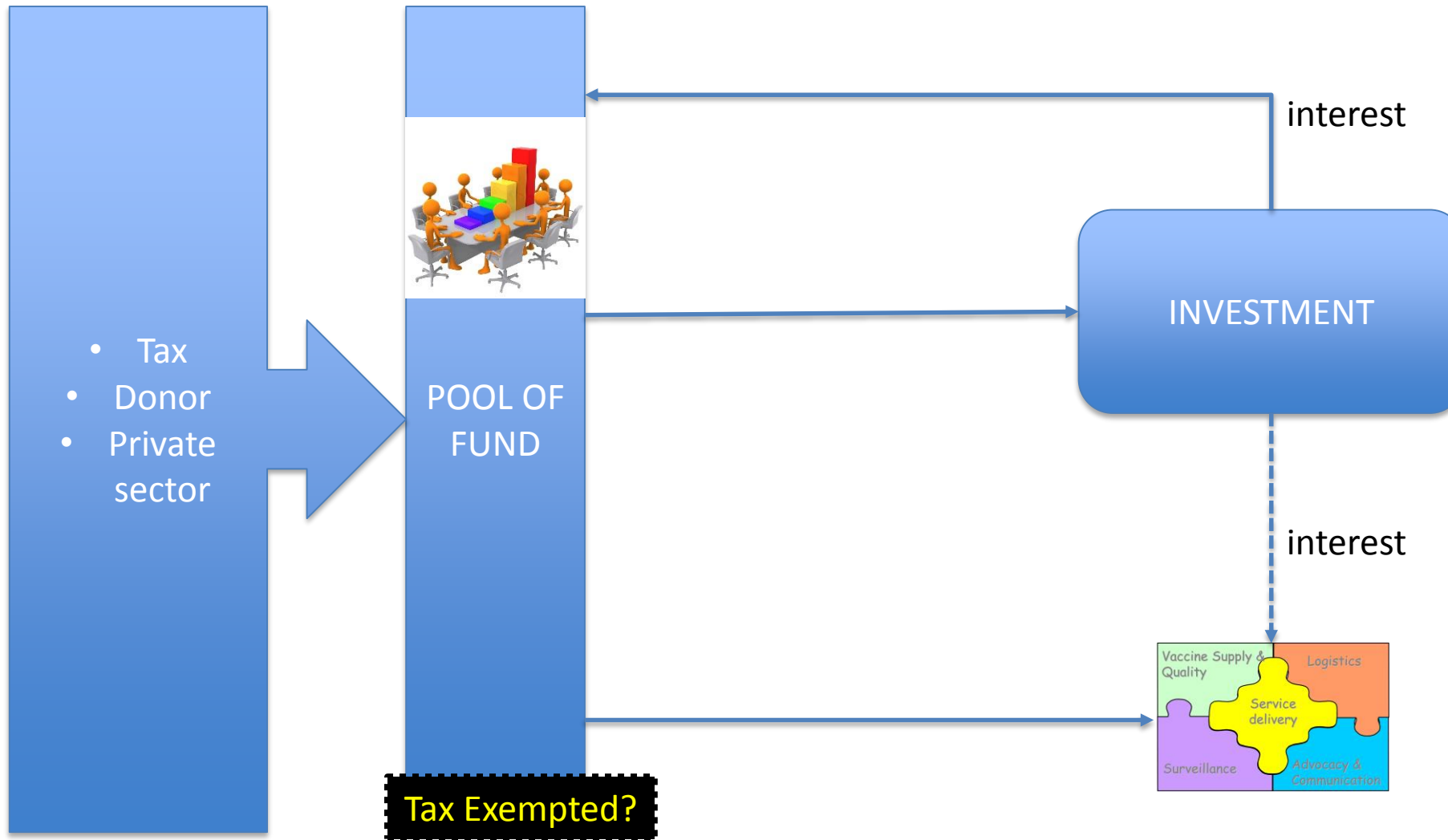
Financing Option 3: User Fees

- Charges faced by users of health care services.
- Applied at point-of-service.

Financing Option 3: User Fees

- Predictability:
 - Small revenues (<15%); depends on fees level and population relative ability to pay.
- Additional to govt financing
- Equitability:
 - Burden on poorest (USD652/per child in US. Molinari et al (2007)) & negative effect on utilization (63.7%).
- Efficient:
 - Collection, management, waiver system require additional admin.
- Feasibility:
 - Require info mgmt. Should be removed.
- Sustainability:
 - Depends on level of fees and ability to pay.
- Promotes self-sufficiency:
 - reduce dependence on external donor
- Foster greater accountability
 - Population likely demand appropriate provision

Financing Option 4: National Trust Funds



- Fund is tied:
 - No alternative uses
 - Sudden availability of new resources
- E.g. Bhutan Health Trust Fund

Financing Option 4: National Trust Funds

- **Predictability:**
 - clear, long--term stream of resources
 - Based on interest instead of principal (+)
- **Equitability:**
 - Depends on expenditure policy
- **Efficient:**
 - ↑ admin cost
- **Feasibility:**
 - Require fund raising, mechanism, governing bodies
- **Sustainability:**
 - If set up to use interest earning (+)
- **Promotes self-sufficiency (+)**
- **Foster greater accountability (+)**

- Set of resources (money, technical assistance, and/or goods in-kind) that are usually transferred from higher-income countries (donor countries through development agencies or multilateral channels e.g. UN, EU) to low- and middle-income countries (recipient countries).
- Unlike a loan, there is **no expectation** that the value of project assistance will be repaid.
- The amount and type of project assistance offered are based on donor aid policies and the needs within developing countries.

Advantages

- Consistent ROI for specific program/activity – preferred mechanism post-conflict or fragile country
- Vaccine donations
 - short term saving
 - short term supply relief
 - Support efficacy evaluation

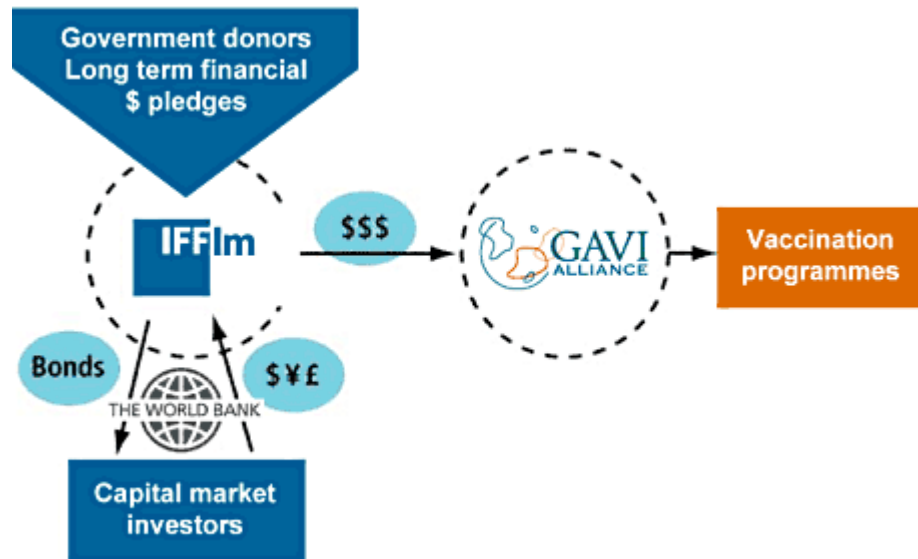
Disadvantages

- Off-national budget
 - Limit effective govt planning
- Specific report requirement for donor
 - Increase admin cost
- Donor priorities instead of national.
- Vaccine donations
 - Distort market share
 - Less sustainable
 - GAVI does not accept

Financing Option 7: Innovative Financing

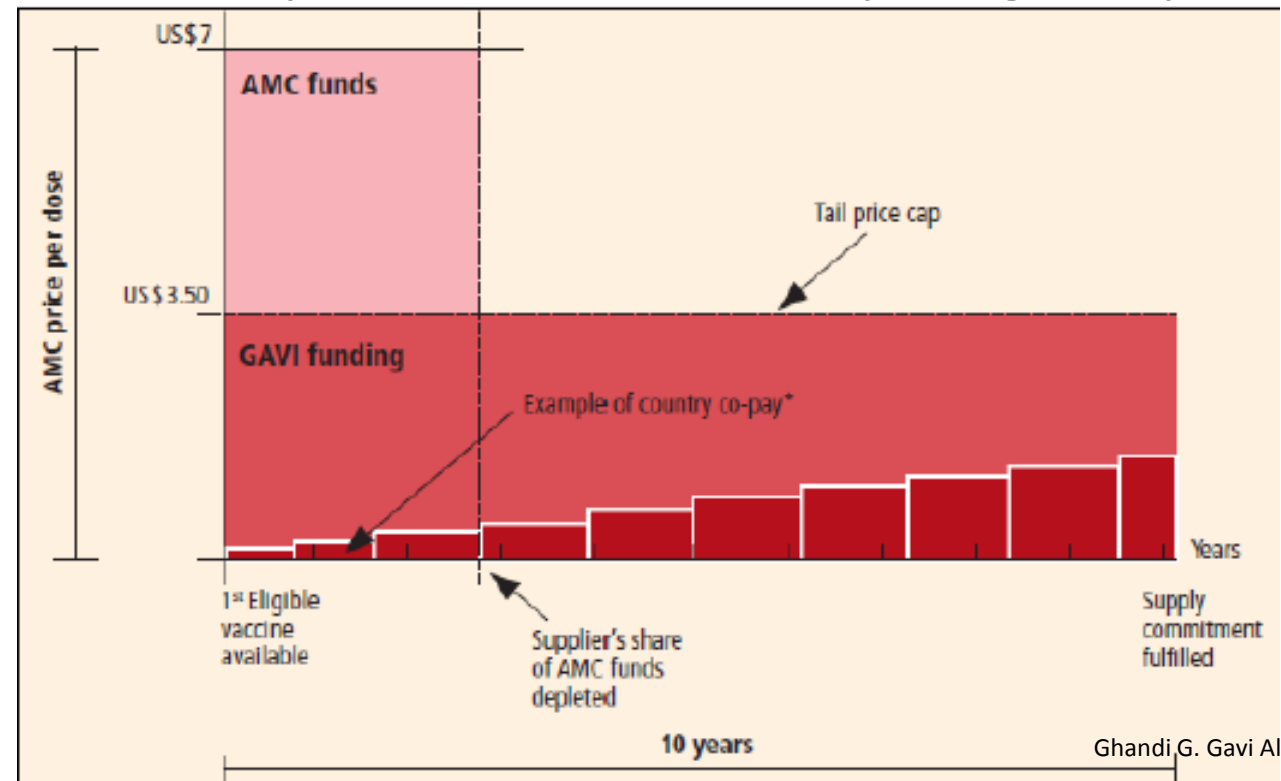
IFFIm (Int Financ Fac Immunization)

- Borrowed against donor funds in the capital market
- Front loading, predictable

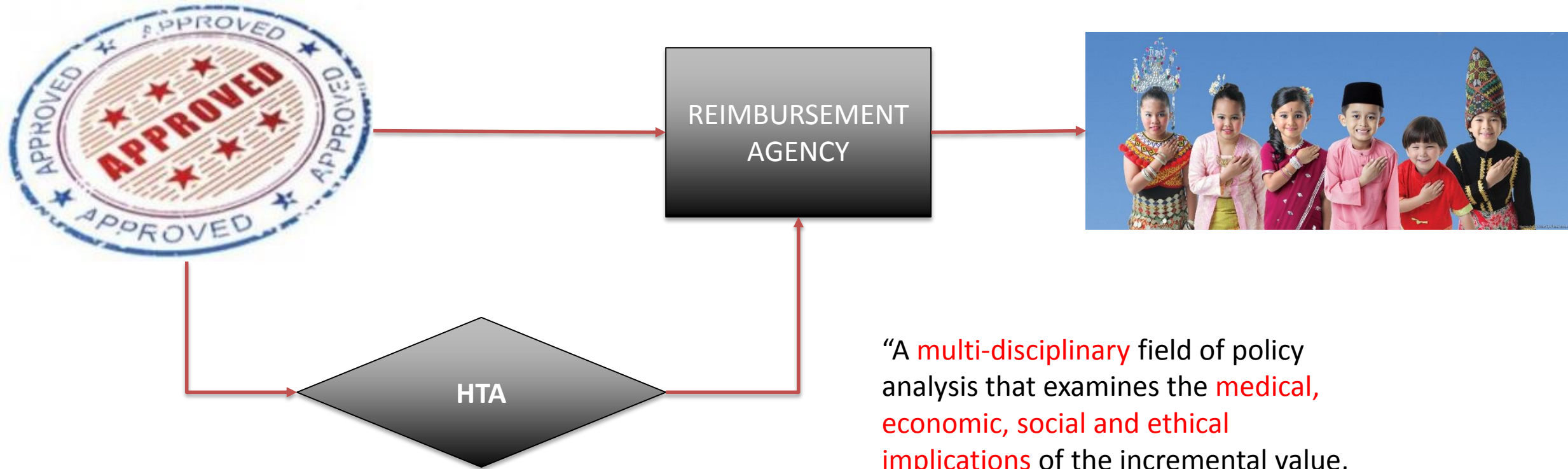


AMCs (Advanced Market Commitment)

- Accelerate development of new vaccines for developing countries
- Financial commitment to subsidize future purchase of currently unavailable vaccine (pre-agreed price)



Financing Tool: Health Technology Assessment



“A **multi-disciplinary** field of policy analysis that examines the **medical, economic, social and ethical implications** of the incremental value, diffusion and use of a **medical technology** in health care.”

Financing Tool: Health Technology Assessment

Perspective	Benefit categories	Definition
Narrow	Health gains	Reduction in morbidity and mortality through vaccination
	Healthcare cost savings	Savings of medical expenditures because vaccination prevents illness episodes
	Care-related productivity gains	Savings of patient's and caretaker's productive time because vaccination avoids the need for care
Broad	Outcome-related productivity gains	Increased productivity because vaccination improves physical or mental health
	Behaviour-related productivity gains	Vaccination improves health and survival, and thereby changes individual behaviour, for example by lowering fertility or increasing investment in education
	Externalities	Improved outcomes in unvaccinated community members, e.g. through herd effects and reduction in the pace at which resistance to antibiotics develops

Advantages

- Use of HTA allow efficient allocation of resources, improving fiscal space for health care in the country.

Challenges

- Limited benefit considered
- Did not reflect full dynamic of direct and indirect effect.

Thank You