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### **Abbreviations**

ABS Asset Backed Securities

CDO Collateralised Debt Obligations

CMFB Committee on Monetary, Financial and Balance of Payments Statistics

DFID Department for International Development

EIB European Investment Bank

FFA Finance Framework Agreement

FPS Financial Policies and Strategies

GRL Gearing Ratio Limit

GFA GAVI Fund Affiliate

HLFC High Level Financing Condition

HSS Health System Strengthening

IADB Inter-American Development Bank

IFF International Finance Facility

IFFIm International Finance Facility for Immunisation

LiST Lives Saved Model

LRC&I Long Range Cost and Impact model

MDBs Multilateral Development Banks

MDGs Millennium Development Goals

ONS Office of National Statistics

ROW Rest of the World

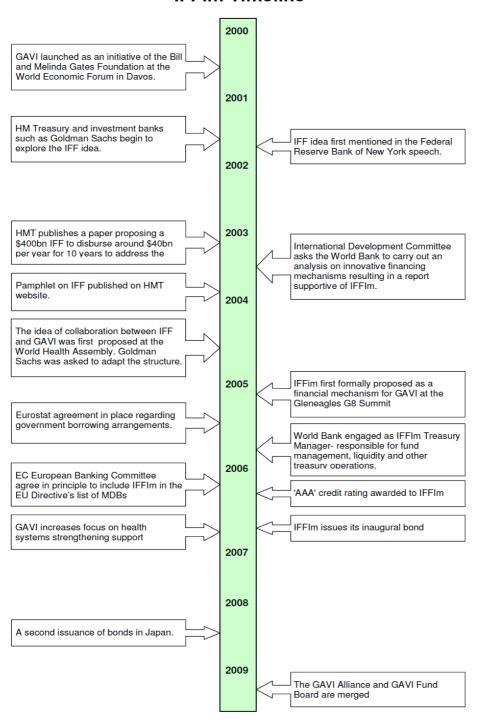
SPV Special Purpose Vehicle

TMA Treasury Management Agreement

#### Annex 1: IFFIm Timeline

#### only includes selected bond issues

#### **IFFIm Timeline**





### Annex 2: Key Evaluation Questions

Is IFFIm funding used to "buy the right things" (and will it help GAVI to continue to do so in the long term?) Key questions here relate to whether IFFIm has enabled GAVI to scale up access to immunisation. Have such investments been equitable and cost effective in comparison to other potential (health) investments? Are IFFIm funds being used to promote access to the most equitable and efficient forms of immunisation?). Is IFFIm funding part of a sound long term strategy to scale up access to immunisation or has it allowed GAVI to operate too far beyond its means? What would have happened without IFFIm (given that some support for IFFIm might otherwise been used as core support for GAVI)?

**Is IFFIm funding being used to "buy things better"?** Have GAVI's "market shaping" objectives been achieved? Has IFFIm funding been *associated* with a positive market response (i.e. reduced prices/more choice/better quality). To what extent can any such changes be *attributed* to GAVI funding? How has this happened? Has, for example, IFFIm funding been used to reduce vaccine costs (through encouraging new producers to the market?

**Does the IFFIm mechanism represent good value for money?** Essentially, this focuses on three broad areas which, in turn, raise a further series of questions (which are developed further when we set out our approach:

<u>Capital market operations:</u> Are funds raised efficiently? Are costs (set up costs, operational costs and financing costs) reasonable? Would other, alternative institutional mechanisms have provided resources at lower cost? Could this have been foreseen?

- Did the Treasury Manager offer value for money? Were fees charged by issuers reasonable given market conditions at the time and given the amount of time the agents needed to spend on the deal to get the right price? Was the bond yield reasonable in relation to comparable issues at the time? Was any premium warranted?
- What alternative approaches might have been adopted at the time? Would they have achieved better results? Alternative to be explored, as noted above, include: adopting an alternative route to market using the infrastructure established and alternative approaches to implementing IFFIm e.g. delegated full responsibility to the World Bank. Other alternatives to be considered include the individual funders issuing bonds separately and subsequently pooling funds in IFFIm and (although an extreme alternative) donors reassigning aid allocations to provide increased funding for GAVI upfront.
- Was the timing and size of bond issues appropriate based on information available at the time? (Should there have been fewer, larger issues or more frequent smaller ones?)
- Has IFFIm targeted the right markets (i.e. the balance between institutional and retail investors and the balance between larger, broader placements and smaller



- more targeted issues, location and currency, choice of investors targeted? What effects did the range of participating donors have?
- Has IFFIm brought in money from additional investors who would not have otherwise have participated in funding immunisation? (e.g. through analysis of who bought the bonds versus against who buys World Bank bonds)
- To what extent has the financial crisis impacted IFFIm's capacity to make resources available at reasonable cost? To what extent have relative yields changed – what are the long term implications? Has IFFIm responded appropriately to changing market conditions?
- What challenges does IFFIm face in the light of current and possible future market scenarios in relation to retaining creditworthiness and continued ability to access funds in a timely manner at reasonable cost?
- Has GAVI's Financial Framework or other rules affected IFFIm's ability to conduct its activities in a cost effective manner?
- What are the key risks to the model and what measures are necessary to mitigate such risks?

### <u>Corporate governance</u>: Are institutional/governance arrangements consistent with the fulfilment of GAVI's mandate?

- Does the IFFIm structure provide adequate checks and balances and adopt good practice in terms of the standard governance functions:
  - auditing
  - board and management structure and processes
  - corporate responsibility and compliance
  - financial transparency and information disclosure
  - ownership structure
- Is there a clear specification of the Board's roles, responsibilities and required skills?
- Do the relevant Boards possess, a mix of appropriate skills, knowledge and experience in areas such as finance, policy development and executive leadership? Given their seniority and competing demands for Board members' time were they able to devote sufficient time to fulfil their obligations?
- Are structures, processes and procedures sufficient to prevent conflicts of interest? How are decisions made, how freely views were expressed and how were conflicts resolved?
- Are Board meetings held, decisions documented and followed up?
- Does the Board receive adequate support and have access to necessary professional advice to fulfil their obligations?
- Are strategic planning approaches effective in terms of a clear plan with performance indicators? Are they regularly reviewed?
- Is Board performance adequately monitored?
- How effective are communications between IFFIm Board, Treasury Manager and GAVI Affiliate Fund and GAVI Secretariat?
- To what extent have outstanding issues been resolved by existing governance studies?



Audit/Financial Management: Does IFFIm (through its Treasury Manager) employ sound financial practices in relation to cash flow, efficient flow of funds and risk management (given that it receives money in a range of denominations over different timescales and disburses funds in dollars)

- Has GAVI adopted sound liquidity and investment policies?
- Have these policies as well as annual limits on programme approvals affected GAVI's ability to fulfil its mandate. Are any changes to such policies required?
- What impact has grant payment conditionality had on performance? Are any changes needed?
- Have bond issues balanced the need to ensure funds are available to support operational needs in a timely fashion with a wish not to secure funds in advance of need?
- Have reserves been invested appropriately such that they earn an adequate return yet are sufficiently liquid to meet ongoing funding requirements?
- Have IFFIm funds been raised in ways which help ensure funds are made available to grantees in a timely fashion
- Have interest rate and exchange risks been appropriately managed? Could such risks have been reduced? Which options were considered? Could donor countries have made funds available in US\$? What were the obstacles to issuing bonds in the same currencies as donations? Do all grants need to be made in US\$?

Questions Related to Key Hyp	ootheses	
Hypotheses or Proposition(s) to test	Method (and counterfactual and benchmark	Key Questions
Funding		
IFFIm 'filled a void' in terms of providing aid flows which bridged the funding gap for	Interviews (focus on IFFIm key donors)	<ul> <li>In making resource allocation decisions do senior policy makers consider ongoing binding commitments to repay bond holders into account. In other words was the aid directed at IFFIm additional aid or did it come out of future aid budgets</li> </ul>
immunisation in a way in which traditional aid flows	Analysis of DAC data on aid spending	- Does your contribution to IFFIm come from the same budget as your core contribution to GAVI/other development expenditure?
could not have done		- Was the funding raised via IFFIm additional to what you would have had available to spend for aid / for health /for immunisation?
Donor funding for IFFIm has been additional to existing	Analysis of IFFIm and GAVI expenditure data by source and use	- Setting aside the technical difficulties which prevent you investing in IFFIm would you do so if you could? (e.g. Gates/US)
GAVI core funding	and use	- Does IFFIm add to GAVI's strength or is it an unwarranted distraction (Gates and US)?
IEEL	Counterfactual: base case –	- What is your current view on committing to future dated aid flows?
IFFIm was a significant achievement in terms of getting multiple donors to coordinate their aid and focus it on vaccination	IFFIm was not additional	What actions would have been needed for donors to reallocate existing funds and provided the additional amounts provided up front? Was this realistic?
		- How predictable/reliable is IFFIm funding? How legally enforceable are the aid commitments to IFFIm and what would be the legal process to enforce a default
		- Was the option for individual donors raising money separately and pooling it a viable option?
		- Would it have raised significant resources?
IFFIm has been able to attract the diversity of funding initially anticipated	Assessment of GAVI/IFFIm funding sources  Interviews with key architects of IFFIm	- What were the initial expectations in terms of funding partners (donors esp. DFID and the French)
		- For those who didn't contribute – the biggest disappointments (Japan and Germany?) – what were your objections? Was it the overall concept/model or the proposed use of funds? Having seen it from the outside – what are your views now?
		- To what extent has lack of diversity been an issue? (effect of DFID dominance on AAA rating –
		addressed particularly to IFFIm Board and DFID?)
	Document review	
Sound Allocation of Resources	and Health Impact	
IFFIm funds have been allocated in line with GAVI's mandate, on cost effective interventions which have, or	Interviews	- Did IFFIm provide aid which was used solely on immunisation/in line with GAVI's mandate?
	Literature on cost effectiveness of IFFIm supported interventions	- To what extent are IFFIm funds seen as different (higher risk/more expensive) and therefore requiring greater returns?
		- Has there been any friction or divergence of views relating to how/where money should be spent?



are likely to, deliver		- Have IFFIm funds been invested in an allocative and technically efficient manner. (i.e. was the	
substantial health impact	Counterfactual: funds would have been held by the Treasury Manager – funds could have been used for other purposes	balance between programmes right/were programmes delivered efficiently?	
Vaccine Market Impact			
IFFIm funds have provided GAVI to the critical funding mass needed to attract new vaccine producers, resulting in increased supply security and reduced pricing.	Industry and UNICEF interviews  Document review  Theoretical modelling1	- What effect did the aggregate level of financing provided by IFFIm have on industry production decisions? What is the minimum efficient scale a producer needs to start producing the pentavalent vaccine at economic levels?	
	Counterfactual: Without IFFIm funding, speed at which new producers entered the market would have been slower.	Illustrative questions: (BMGF): Can you share preliminary findings of the work commissioned on vaccine cost structures? Can we discuss the work specifically related to pentavalent? (Industry): ca we discuss how the prospects for entering the pentavalent market looked to you over time? What s of conditions would need to be present for you to enter a market such as pentavalent? Has UNICE procurement and contracting strategy changed over time with pentavalant? What other options for procurement/contracting could have been considered and what effect do you think each would have	
IFFIm funding has allowed GAVI, UNICEF supplie interviews, document re AMC commitment and can claim some credit for the		Is it correct that IFFIm money is being used to purchase the pneumococcal vaccine candidate, whose TPP was defined by the AMC Independent Advisory Committee? How did it evolve that IFFIm money would be used to purchase this vaccine rather than the money donors pledged in legally binding commitments as part of the AMC?	
AMC's market impact on the pneumococcal vaccine.	Counterfactual: Money would have come from	What would have happened to the AMC if the IFFIm money would not have been available?	
(note also catalytic effect)	elsewhere but would not have been as predictable	What is the evidence that the AMC offers value for money?	
The nature of IFFIm funding (predictable, frontloaded	UNICEF, supplier, and GAVI interviews, document review	What were the original expectations in terms of market impact? Were they realistic?  (UNICEF and Pentavalent Procurement Reference Group) Did the intervals at which finance is received.	

<sup>&</sup>lt;sup>1</sup> using assumptions about minimum efficient scale, number of producers and demand/finance levels to determine the likely "tipping point" at which new producers would enter the pentavalent market.



#### **Questions Related to Key Hypotheses**

to work in new ways with industry e.g. new methods of procurement management and/or contracting such as change in duration or degree of volume commitments

This has resulted in quantifiable benefits (e.g. supply security or price

Counterfactual: The options available to UNICEF for contracting remained the same as they had been pre-IFFIm, i.e. status quo.

from GAVI and change over time? Did the nature (e.g. duration) of the contract with GAVI change over time?

Which contracting options a) has UNICEF used b) available to UNICEF but not used c) not possible for UNICEF due to some constraint. How has the presence of IFFIm finance changed any of the above?

What were the various market shaping interventions considered during the past few years for having optimal impact on vaccine markets? In retrospect, what are some other ways you could have approached this market (i.e. counterfactuals).

Broader developmental impact	of IFFIm (and GAVI with sup	port of IFFIm)	
GAVI has been catalytic in	Interviews	- What do you understand by "catalytic"? How is GAVI catalytic?	
terms of influencing the actions of other stakeholders		<ul> <li>Would there be an airline tax without IFFIm and vice versa? (specifically addressed to the DFID the and French)</li> </ul>	
in international health (for the better)		- Has IFFIm given GAVI the critical mass to help push forward the aid effectiveness agenda (e.g. in relation to the Joint Funding Platform)	
		<ul> <li>What does being a contributor to IFFIm mean to you? (South Africa) and vice versa (to GAVI)? Why did you invest in IFFIm? Have your expectations been fulfilled?</li> </ul>	
Choice of Model (and its future	relevance)		
Under the circumstances, IFFIm was the only workable	Interview	- Why was the current structure (GAVI, GFA and IFFIm) chosen; was there any legal requirement to have separate entities	
model available	Review of documents	<ul> <li>To what extent did the Eurostat ruling "impose" the existing structure on IFFIm? Or was there scope for negotiation?</li> </ul>	
The complex IFFIm structure		- What alternative approaches might have been adopted?	
s a product of the		- Where they fully considered before rejection?	
negotiation/compromise necessary to get all sides to		- Would they have worked?	
commit and works well		- Could they have achieved better results?	
		- What were there workable alternatives to the World Bank as Treasury Manager and how workable would they have been?	
		- What would have happened if the World Bank had not agreed to act as TM?	
		- What additional costs did this arrangement bring?	
		- What are the future options?	



IFFIm could be replicated in	Interviews (especially with	To what extent is off budget financing still a concern for donors?
its current form for a different purpose e.g. broader development	Eurostat)	Would IFFIm, as it stands, now receive a positive Eurostat ruling?
		What are the key challenges it would face?
The outsourced model is	Review of what the World	- Was there any alternative to using the World Bank as the Treasury Manager
sound. An open and	Bank has charged in fees	- Did the Treasury Manager offer value for money
transparent process was used to contract the Treasury		- Were the contractual arrangements managed efficiently
Manager. Its subsequent	Compare the World Bank's	- were they on an arm's length basis
performance has been good.	investment performance to their LIBID benchmark	- did these arrangements evolve over time to respond to the needs of key stakeholders?
Without the World Bank taking on the Treasury Management	Interview	- To what extent are the Treasury Manager's services to IFFIm subsidised; are any such subsidies quantified and monitored over time?
role in the way it did IFFIm could not have achieved what it did and may not even have	What would have happened if IFFIm's funds had been invested in longer dated/higher risk assets	Is this arrangement sustainable? Knowing what you know now would you have entered into the same agreements? How would you have changed it (to IFFIm and Treasury Manager)?
been possible at all		- Would the TM provide the same level of support in the future or to a different vehicle
		- Has the World Bank's recommended treasury management policy been effective in preventing losses and maximising gains?
	Counterfactual: direct negotiation with EIB/slower implementation?	- is the IFFIm operational model scaleable?
		- is the IFFIm financing base (e.g. Uridashi) scaleable?
		- Has IFFIm targeted the right markets i.e. the balance between institutional and retail investors and the balance between larger, broader placements and smaller more targeted issues, location and currency, choice of investors targeted?
The IFFIm Governance	Interview with Linklaters/ Crown Agents	- What was the rationale for IFFIm being incorporated as a UK charity?
framework was based largely		- Why was IFFIm both incorporated as a company and registered as a charity?
on a UK legal and institutional framework which has limitations	Review of foundation agreement documents etc	- Do the articles and other foundation documents provide an internationally acceptable Governance framework for IFFIm? What other options were considered at the time?
Fit between IFF concept and GA	AVI – ability of GAVI to benefit for	ully from IFFIm
Immunisation is an ideal	Interviews	- What is the "fit" between IFFIm and immunisation?
testing ground for the IFFIm	Literature Review	- Which characteristics of immunisation lend themselves to IFFIm?



concept. Other uses are		- Are there more suitable uses?
possible but are less well suited		- Are there more suitable uses?
IFFIm is "overpowered" for issues such as immunisation (and probably for other purposes	Interviews  Assessment of initial modelling	<ul> <li>Did GAVI make full use of the available frontloading capacity? Did GAVI really need so much up fron funding?</li> <li>Was it spending money for the sake of it?</li> <li>Did the investments made offer good value for money?</li> </ul>
GAVI did not make full use of the IFFIm model	modeling	- Were they within GAVI's mandate? - Does it matter? - Should GAVI have been allowed to stockpile \$?
GAVI made too little use of the potential benefits from predictability.(see vaccine market section)		
Operation of the IFFIm model		
Governance arrangements appear complex but work effectively.	Interviews	<ul><li>Did the arrangements work well? (covered in detail elsewhere)</li><li>What are the costs of the model?</li><li>To what extent was the choice of model dictated by the Eurostat ruling?</li></ul>
This is down largely to the personalities involved -GAVI is vulnerable to the turnover of Board members.		- Are succession plans for Board members in place?
GFA provides effective oversight of IFFIm but other approaches might be possible.	Interviews : GAVI Legal Counsel, World Bank legal staff	<ul> <li>- Why was a separate IFFIm Board required? Has there been any consideration of options for streamlining structures?</li> <li>- What obstacles exist to integrating GFA &amp; IFFIm?</li> <li>- How were potential risks of communication and fragmentation addressed?</li> </ul>
Combining the IFFIm/GFA Boards could improve efficiency	Linklaters	
Accountability of IFFIm Board could be clearer	Interview Chair of IFFIm and Finance Director of GAVI Secretariat	<ul> <li>How do funding agencies hold IFFIm accountable for carrying out its functions and for the costs of Treasury management by the Bank?</li> <li>Are there any performance indicators?</li> </ul>



	D / (04)//D /	- How do they satisfy themselves that resource mobilization and disbursement targets have been reached?
	Review of GAVI Board discussions of IFFIm	- What role does GAVI Board have in assessing IFFIm (e.g. reports by IFFIM Chair to Board)) - What about accountability to the public?
	Donor interviews and reports on IFFIm	- what about accountability to the public?
The IFFIm Board has	Interview Chair and Board	- Has the IFFIm Board remained truly independent?
operated effectively benefiting from institutional	members , review documents and IFFIm Board	- Are the roles and functions clearly defined and understood?
independence and has relied	minutes	- How well designed are Board terms of reference and procedures and have they been followed?
on the quality, skills and		- How independently has the Board acted?
personal commitment of Board members	Comparison of GFA and	- How effectively has the Board carried out its role and functions?
soard members	IFFIm Board arrangements	- Is the Board have sufficient breadth and depth to fulfil its obligations
		- How (effectively) do the Committees work?
		- Does the Bank do too much on investment policy and should the Board have its own capacity/more input? Or should the Bank have greater freedom to make decisions in relation to financial management and revenue mobilisation?
The linkages between IFFIm	Review agreements and	- What were the agreements between the various stakeholders designed to achieve?
and GFA/GAVI are sound	interviews with firms and stakeholders (GAVI/GFA/IFFIm)	- Are the agreements well understood and have they been fully operationalised in practice?
		- Are there any areas of duplication or overlap or other inefficiencies which need to be addressed?
	See core documents including Master definitions; finance framework agreement; Deed of novation amendment etc	
Trustee reports and financial statements accord with	Interviews with firms and with IFFIm Board	- How much discussion takes place prior to the Trustees report and financial statements being released?
requirements but could be		- What key issues and problems have been identified in the reports and what action has been taken?
more transparent		- Have stakeholders raised any concerns about the coverage/quality of reporting?



A sharing industrial and a state of	late a decre	What are the many of functions being powing as to p IEE m/s behalf	
Administration and other support provided to IFFIm by the GAVI Alliance and its	Interviews	- What are the range of functions being carried out on IFFIm's behalf?	
		- Is there any formal or contractual arrangement for GAVI Sec staff working in support of IFFIm?	
partners are provided in a		- How many staff and how much resources are involved? What is the cost?	
transparent manner		- How is the GAVI Secretariat held accountable for delivery of services to IFFIm?	
The high risk nature of	Interviews	- Was this true?	
nvesting in IFFIm (including ts long term legally binding		- Which conditions most affected day to day decisions?	
nature) meant that donors		- Given the performance of IFFIm were these conditions necessary?	
introduced greater restrictions		- Should they be relaxed? Could they be relaxed given external constraints?	
on IFFIm's operations than were strictly necessary.		- Did they affect IFFIm's room for manoeuvre/efficiency of operation?	
The bond issuing process created positive externalities.	Interviews and review of any evidence for giving	- Did an investment in IFFIm bonds lead to greater awareness of GAVI's mandate and activities? Can this be measured? - How, if at all did this goodwill translated into any further giving to GAVI/IFFIm?	
		- What, if anything, needs to be done to make this happen	
IFFIm identified the risks it	Interviews and review of hedging/investment policy	- Did the IFFIm Board have adequate relevant experience to establish the right policy	
was exposed to, had the		- in practice, did the policies protect IFFIm from risks?	
correct policies in place and took the correct steps to minimise those risks		- were there unforeseen risks which arose – should they have been foreseen – how were they dealt with?	
The bond issuing process was	Interviews and review of analyses provided by the underwriting banks	- Was the process of issuing bonds managed by the right people	
conducted professionally by relevant experts and took		- Who handles the bond issuing process: IFFIm board, investment bank or the World Bank. Should the balance change at all? If so, how?	
advantage of all the advice/information available at		- How much competition was there to win the underwriting mandate	
the time	Review communications between board members concerning the choice of route to market and bond underwriters	- Were decisions based on price or quality, Did the prospects of pro bono support have any influence on such decisions	
		- Was advice on the best route to market sought other than from GS/World Bank	
		- Was the advice received from the underwriters challenged / was the advice followed?	
		- What objectives were communicated to GS/DB by IFFIm	
	Compare the cost of the inaugural bond to what the cost of issuing a 10/20yr bond would have been	- Was the timing and size of bond issues appropriate based on information available at the time?	
		- Why was a shorter dated issue chosen over a longer dated issue (matching the income streams) for the inaugural bond	
		- Should there have been fewer, larger issues or more frequent smaller ones?	
		- With the benefit of hindsight, would the bond issuance strategy be different?	



#### **Questions Related to Key Hypotheses**

There was (and is) a tension between the aim of raising money efficiently using the capital markets and satisfying GAVI/IFFIm's other non-financial objectives.

IFFIm got this balance about right

Funds were raised in a cost effective manner

Interviews, review of the FFA and expenditure plans

Quantify the likely 'cost leak' due to non-financial objectives

What would the cost of running IFFIm have been if it had solely the aim of minimising costs

Interviews and review of related contracts and analyses prepared by the banks

Comparison of spread between IFFIm and World Bank, between IFFIm and a comparable supranational and between IFFIm and the weighted average of its contributors - What constraints did IFFIm have on how and when to raise money- Was pricing impacted by GAVI/IFFIm's mission?

- How did the underwriters go about achieving IFFIm's objectives?
- Did the multiple objectives cause confusion/tensions?
- Were there conflicts? Did those objectives/constraints conflict with the optimal price, size, maturity etc? Was any premium warranted?
- Where trade offs took place/hard decisions were made which objective took precedence? Can you share some examples?
- What would the issuance strategy have been if IFFIm had been solely focussed on the best pricing/lowest costs
- Given the constraints, were the bonds sold in the right place, at right time, to the right investors and at the right price
- Has IFFIm brought in money from new/different investors who would not have otherwise participated in funding immunisation?
- Was there any 'feel good' factor on investors' part and did it make any difference to the bond spread? How could this be quantified?
- What effects did the range of participating donors have
- How did the investor base change post-issue i.e. did any 'new' investors stay invested in the bonds
- Has the GAVI Alliance's Financial Framework or other rules affected IFFIm's ability to conduct its activities in a cost effective manner? How did the spread compare to those of the underlying donor countries
- Was there a pre-planned timetable for financing and use of proceeds
- How/why did the actual expenditure differ from what was planned
- Was the financing driven by GAVI programmes or was it the other way round
- How did IFFIm manage/prioritise their different objectives
- was accounting presentation a factor in how bonds were issued
- Could the non-financial objectives have been met another way and was this considered
- How can the non financial benefits (or those where the financial benefit is extremely indirect) be quantified

The IFFIm model is robust (having survived the financial

Interviews, review of pricing analysis provided by

- To what extent has the financial crisis impacted IFFIm's capacity to make resources available at reasonable cost



Questions Related to Key Hyp		
crisis intact)	underwriting banks	- Were there any times when IFFIm wanted/needed to raise money but was unable to
		- Have market conditions/access to finance ever prevented IFFIm from funding a GAVI programme
	Compare IFFIm's traded spread with that of other AAA entities vs. the World Bank	- To what extent did the World Bank's association provide protection for IFFIm during the financial crisis
		-Has IFFIm responded appropriately to changing market conditions
		<ul> <li>What challenges does IFFIm face in the light of current and possible future market scenarios in relation to retaining creditworthiness and continued ability to access funds in a timely manner at reasonable cost?</li> </ul>
		- What are the key risks (tipping points) to the model and what measures are necessary to mitigate such risks?
		- how do you view the risk surrounding the enforceability of the sovereign contractual commitments?
		- how do you view the donor concentration risk / at what percentage of the total would you view the UK as being too high?
		<ul> <li>Have the rating agencies changed their view of the stability of IFFIm and have they changed the way in which they rate IFFIm?</li> </ul>
		- How strong is IFFIm within the AAA category and what would cause IFFIm to be downgraded?
		- What are the key strengths/weaknesses of IFFIm; have they changed since first rating IFFIm?
IFFIm has benefited from considerable support from third party service providers in the form of subsidised services or pro-bono work	Interviews	- Are the services provided to IFFIm subsidised
		- Do you monitor the value of pro-bono work done for IFFIm
		- Is there a cap on the value of pro-bono work you will do for IFFIm
		- Does the value of pro-bono work done for IFFIm impact the amount of pro-bono work you will do for other charities
IFFIm was a product of its time which could not be recreated now due to a changed regulatory landscape	Interviews	- Would Eurostat still take the same view on accounting for donor contributions as it did for the original IFFIm donations?
		- Would Eurostat have allowed the same treatment for directly issued government debt if it also had the High Level Financing Condition?
		- How did Eurostat conclude that HLFC should allow governments to avoid accounting for donations to IFFIm as debt?
		- Has Eurostat approved any other mechanisms for allowing future aid payments not to be treated as debt?
		- what characteristics would a new IFFIm have to have in order to achieve a AAA rating e.g. World Bank involvement



#### **Questions Related to Key Hypotheses**

IFFIm has been used successfully as a vehicle to improve awareness about GAVI

communication strategy has

targeted the right people

The advocacy and

External Relations (GAVI and World Bank), IFFIm Board, NGOs

Interviews IFFIm manager.

To what extent have communication and advocacy activities enabled IFFIm to meet its goals of raising predictable, frontloaded finance for immunisation

What were the main objectives of communication and advocacy interventions on behalf of IFFIm? (What were they designed to achieve?)

- a) Raise/maintain awareness among decision makers of the need for a predictable, frontloaded financing mechanism for immunisation
- b) Cultivate advocates and supporters to ensure donor funding/high level support for IFFIm
- c) Build a broader constituency to create the environment in which support for IFFIm can increase
- d) Raise awareness among investors of the existence, mechanisms and feasibility of IFFIm
- e) Communicate value and impact of IFFIm, both in financial and developmental terms
- f) Communicate the availability of investment opportunities

How successful has IFFIm been in achieving its communication and advocacy objectives, and why?

In communication and advocacy terms, what challenges and obstacles had to be overcome at the outset to build support and build positive perceptions of IFFIm?

Which audiences have been critical for IFFIm in order for it to meet its objectives, and why?

Has IFFIm built the right alliances to achieve its objectives? How might this change/have been different?

What messages has IFFIm needed to communicate different audience and stakeholder groups?

- a) Financial community
- b) Donors
- c) Alliance members.

Has IFFIm got the content and messages towards different audience and stakeholder groups right? How might this change/have been different

In communication and advocacy terms, what approaches, methods and tactics have worked/not worked?

Overall, if you were setting up IFFIm again how would communication and advocacy be done differently?

### Annex 3: List of Interviewees

AGENCY/	WHO	STATUS
GROUP		
GAVI	Julian Lob Levyt (ex CEO)	Spoke by Phone
Secretariat	Helen Evans (interim CEO) + Dan Thornton	Met in Geneva
	Barry Greene (CFO), Tony Dutson, Kees Klumper, Joe Martin	Met in Geneva
	Carol Presern (Special Projects)	Met in Geneva
	Nina Schwalbe (Policy and Performance) Peter Hansen, Abdallah Bchir	Met in Geneva
	Debbie Adams + Anthony Brown	Met in Geneva
	David Ferreira (Innovative Financing) Paolo Sison + Quinton Ng + Kimberly Halpin + Louis Mkanganwi	Met in Washington
	Joelle Tanguy, Geoff Adlide, Jeffrey Rowland, Dan Thomas	Met in Geneva
	Alice Albright (ex CFO)	By phone
GAVI Board	Gustavo Gonzalez-Canali (France)	By phone
	Cristian Baeza + Armin Fidler (World Bank)	Met in Washington
IFFIm/GFA	Alan Gillespie	Spoke by phone
Boards	Sean Carney	Spoke by phone
	John Cummins	Spoke by phone
	Didier Cherpital (Paris)	Spoke by phone
	Wayne Berson (GFA) (also chair Finance and Audit Cttee)	Spoke by phone
	Dayanath Jayasuriya (IFFIm)	Spoke by phone
_	Arunma Oteh (IFFIm)	Spoke by phone
Donors	DFID (Rachel Turner, Gavin McGillivray,	Met Turner, Sunman
	Hillary Sunman, Sally Waples, Abigail	Spoke to Waples
	Robinson) Treasury (Geoff Golland, Nick Vaughan. Tim Yapp Crown Agents Legal	Met Vaughan and Golland
		Met Yapp
	France Gustavo Gonzalez-Canali /Clarisse Paolini/	Spoke to Paolini and Canali
	Italy (Gianturco Leone)	Spoke on phone
	Netherlands (Annie Vestjens)	Spoke on phone
	( /	<u> </u>



	Sweden (Anders Molin, Anders Nordstrom, Oskar Ekeus)	Spoke on phone
	Norway (Paul Fife – also GAVI Board)	Spoke on phone
Health Impact	Marta Gacic Dobo (WHO)	Spoke by phone
	Linda Mueller, Bruce Aylward, Oliver Rosenbro (Polio), (+ Kim Thompson (Kidrisk)	Spoke by phone
	Rosamund Lewis, William Perea Caro (YF),	Spoke by phone/Met in Geneva
	Rownak Khan (MNT)	Spoke by phone
	Carole Tevi-Benissan (Meningitis)	Met in Geneva
	Peter Strebel (WHO) (measles) Christie Athalia (American Red Cross	Spoke by phone
	Logan Brenzel (World Bank)	Spoke by phone
	Tessa Tan Torres (WHO)	Met in Geneva
	Neff Walker, Yvonne Tam, Ingrid Friberg (Johns Hopkins – LiST model)	Spoke by phone
World Bank	Susan McAdams	Met in Washington
(Treasury Manager)	David Crush (GAVI Finance and Audit Committee)	Met in Washington
	Shirmila Ramasamy (IFFIm lawyer),	Met in Washington
	George Richardson (capital markets)	Met in Washington
	Cliff Frazier, (legal counsel)	Met in Washington
	Myles Brennan + team (investment management)	Met in Washington
	Merle Baroudi (gearing ratio model)	Met in Washington
_	Chris Patch (audit)	Met in Washington
	Michael Bennett (rating agencies)	Met in Washington
_	Heike Reichelt (investor relations)	Met in Washington
	Natalia Antsilevich, (analytics/cashflow)	Met in Washington
Vaccine Market	Olga Popova, Crucell Yves Leurquin, Crucell Logan Rae, Crucell Stephano Malvolti, PATH Sai Prasad, Bharat Francisco Blanco, UNICEF Ann Ottosen, UNICEF Hans Christiansen, UNICEF Meredith Shirey, UNICEF Phlippe Duclos, WHO	Spoke by phone



	Nora Dellepiana, WHO Roland Sutter, WHO Sandy Wrobel, Applied Strategies Daniel Hulls, CEPA Jacqueline Fournier-Caruana, WHO Bruce Aylward, WHO Owen Barder, CGD Julie Milstien, Independent consultant Equity analysts (anonymous) Rob Lin, BMGF Apoorva Mallya, BMGF Sebastian Ku, CHAI M. Neeraj, CHAI Edward Hoekstra, UNICEF Patrick Zuber, WHO Jean-Marion Aitken, DFID and former PRG Chair 2007-2009 tender Dr Dhere, Serum Institute India Dr Dodwakar, Serum Institute India Dr Sravanthi, Shantha	
	Yalda Momeni, UNICEF	
Ex Goldman/GA VI	Chris Egerton-Warburton	Met in London
Slaughter and May	Marc Hutchinson	Met in London
Linklaters	Jim Rice	Met in London
Reed Smith	Boucher	Spoke by phone
Eurostat	Luca Ascoli	Spoke by phone
Ex Office of National Statistics UK	Martin Kellaway	Spoke by phone
Rating Agencies	Fitch, S&P, Moody	Spoke by phone Met in New York



#### Annex 4: The Governance Structure of IFFIm

The formal corporate, financial and legal structure for IFFIm is set out in the Founding documents: Master Definitions Agreement, Finance Framework Agreement (FFA), Procedures Memorandum (PM), Treasury Managers Agreement and administrative support documents. These provide a legal agreement setting out the mutual obligations and commitments of the parties and entities involved.

The intention was to ensure the efficient facilitation of IFFIm financing transactions (i.e. securitisation of assets) consistent with the resultant debt achieving the highest credit rating whilst being kept off the public sector balance sheet of the grantors.

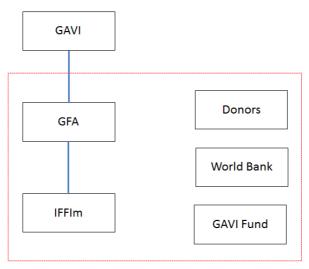
The initial plans envisaged establishing two dedicated transaction vehicles and defined the obligations and commitments between them and the other parties as follows:

- The International Finance Facility for Immunisation Company (IFFIm): to be established as a fully independent registered charity and incorporated as a limited company in the UK. It would be the securitisation vehicle having a Board of Directors initially appointed by GAVI and then by the Directors. IFFIm was incorporated in June 2006
- Vaccine Fund Affiliate (later became GAVI Fund Affiliate): to be established as an independent charitable company in the UK that would receive donor grant funding commitments or pledges and would also assign the right to receive the aid payments to IFFIm. The Board would be independent from the Board of the Vaccine Fund.
- Donors: would enter into binding legal commitments to provide defined sums of development assistance in support of immunisation. These pledges would be made to the Vaccine Fund Affiliate and thereby keep IFFIm independent from the donors.
- Treasury Manager: IFFIm would have no staff of its own and it was envisaged that bond issuance, payments, investment and liquidity management would all be contracted to a third party. The arrangement would be set out in a Treasury Management Agreement with IFFIm setting policy and the TM executing the services.

In 2008 GAVI centralised its governance within one entity, the GAVI Alliance, and registered as a Swiss not for profit foundation using the legal platform of the GAVI foundation. The Governing documents were "novated" to reflect this development and the Vaccine Fund Affiliate became known as the GAVI Alliance Fund Affiliate (GFA). The Vaccine Fund also became the GAVI Fund. The GAVI Alliance received tax exempt status under section 501(c)(3) and 509(a) of the US Internal Revenue code and. GAVI also became the sole member of IFFIm and GFA.



The number of entities and transactions makes the structure appear complex but the underlying decision making process and the primary relationship between the principals within the Governance structures are relatively straightforward and can be depicted in simple terms. The figure shows the core relationships at the heart of the structure. There are four independent entities plus the various grantor governments all operating within the Finance Framework Agreement to deliver additional funds to the GAVI Alliance for immunisation purposes.



**Finance Framework Agreement** 

The structure that has been developed for IFFIm emerged as a bespoke solution designed to achieve the defined purpose whilst simultaneously meeting a number of essential design features and grantor requirements. These have been described earlier but the way in which these requirements determined the design of the structure are set out in more detail below

#### (i) Frontloading of future aid commitments

In order to front load aid commitments, a 'clean' entity from which to issue bonds is required so that bond investors have clear and exclusive recourse to the donor pledges. Clearly, GAVI would not have been able to satisfy this requirement. This meant that the designers needed a separate, independent entity (IFFIm) to receive the donor grants and raise money against them in the capital markets

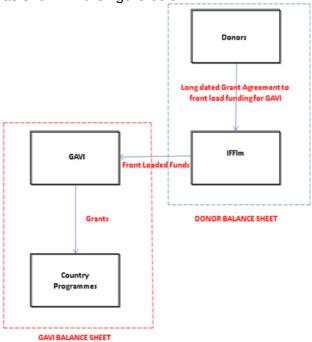
(ii) Donor pledges not to be accounted for as debt in the national accounts. This is one of the most complex and difficult requirements of the structure; both the UK's Office for National Statistics (ONS) and the European statistical and accountancy body (Eurostat) needed to be satisfied that the donations should not be treated as debt i.e. that they be 'off balance sheet'. There were two key requirements for both bodies; (i) an element of



conditionality in the donor pledges and (ii) the entity issuing the bonds to be independent of the donors.

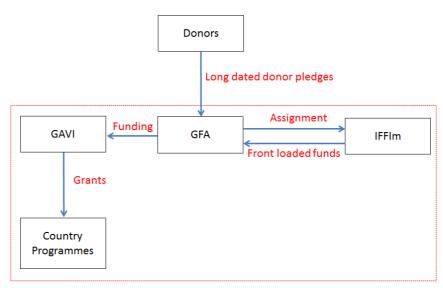
The first requirement was met through the <a href="High Level Financing"><u>High Level Financing</u></a>
<a href="Condition"><u>Condition (HLFC)</u></a> whereby future pledges are reduced to the extent that a defined group of recipient countries are in arrears with the IMF. The second condition required the donors to have a contractual relationship with an entity other than IFFIm and since GAVI did not exist as a corporate entity (it was an alliance not bound by contract); a third entity was needed. That is why the designers of IFFIm decided that the GAVI Fund Affiliate (GFA) was needed.

If pledges had been directed to IFFIm they would have been treated as Government debt as shown in the figure below:



But donations provided indirectly via a separate entity (the GAVI Fund Affiliate) <u>did</u> meet this requirement and moreover would not be treated as national debt as shown in the figure below





ACCOUNTED FOR AND CONSOLIDATED AS GAVI

#### (iii) GAVI charitable / tax perspective

In the absence of the GFA the only entity within the structure that could, in theory, have performed the necessary contractual agreement with donors at the time of the establishment of IFFIm, was the GAVI Fund (GF). This had been established as the charitable organisation through which GAVI managed the majority (but not all) of its financial affairs.

It was very important that GF retained its charitable status in the US. If the GF been the counterpart for the donor grants, this arrangement may not have met the relevant threshold of "public support" to maintain public charity status under US tax law (Sections 501(c)(3) and 509(a)). Among other issues, this relates to the relative percentages of grant amounts from US and non-US donors.

It was also necessary to structure the GFA as a charity such that it would not result in any tax leakage for the donor grants either upfront or on their return from IFFIm. This was a point of great sensitivity for the non-UK donors.

### (iv) Governance concerns; ability of governments to commit to long dated funding

The donors were extremely concerned about the overall governance, and took comfort from (a) their presence on The GAVI Fund (GF) board and (b) the controls put in place in the memorandum and articles of IFFIm. Having the GFA as not only a separate company, but as a registered charity, subject to the obligations, laws and guidelines of The Charity Commission added a further layer of accountability. The regulatory requirements of GFA/IFFIm's charitable status were helpful in demonstrating the substance of the structure to the capital markets when issuing bond. GFA was



therefore needed to satisfy donors and the markets of adequate controls and level of governance

(v) Achieve and maintain a AAA rating from the three major rating agencies. The rating agencies were concerned to ensure that the structure (primarily in the case of IFFIm) was as close as possible to their criteria for an independent, bankruptcy remote, contractually constrained special purpose vehicle. This required at least one separate entity independent entity (i.e. IFFIm was essential) and the FFA could ensure that the functions were tightly defined and constrained with a demonstrable link to a very safe institution (i.e. the World Bank).

## (vi) Perceived as a supranational entity with perhaps some minor structured elements

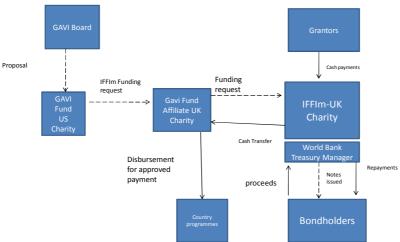
An 'AAA' rating is a necessary, but not sufficient, condition to achieve the lowest cost of funds; the difference between the funding cost for a supranational issuer and a structured SPV can be 100bp (1%) or more. (The implications of different structures for borrowing costs is covered in more detail in **section 5**). A simple, straightforward set of payment flows and operational procedures was needed to allow investors to focus on the value of underlying sovereign credits rather than the structuring. Achieving this was a considerable challenge to overcome with the donors due to the lack of control it implied for them. A bespoke control environment was required for the donations and the disbursement of funds so that, once again, there was a need for an independent IFFIm entity backed by World Bank treasury management.

It is a significant achievement that most of the tax, accounting, regulatory, credit rating, legal and market requirements that were required could be built around these four entities and their relationships with the grantor donors and the GAVI Fund. The decision to use existing structures already put in place by GAVI was a significant advantage in that respect.

A fuller version of the current IFFIm structure showing the cash flows, programme request and approval; and bond issuance process is set out in the figure below. For ease of exposition, it does not include the deed of grants from donors. The key decision process involves three stages: first GAVI uses established procedures to satisfy itself that there is a need for immunisation and approves a country programme; second the GFA reviews the request and makes a decision to allocate IFFIm funds to the GAVI programme; third IFFIm decides to raise funds through bond issuance on advice of the treasury manager.



#### IFFIm Structure



Source: derived from World Bank

The IFFIm Board are required to make an independent assessment that programmes submitted by the GFA are consistent with IFFIm's principles. The Board then decides to raise funds through a bond issue after taking advice from the Treasury Manager about the financing needs of IFFIm and the requirement to maintain a financial cushion through the Gearing Ratio Limit (GRL) (see **section 5**). Once bonds are issued the proceeds can be transferred to the GFA.

This structure, and the FFA that underpins it, ensures that all the entities can operate independently whilst carrying out a set of linked functions that can be effectively managed and coordinated within a well defined legal and operational frame work. It meant that GAVI-GFA-IFFIm-World Bank all have a common goal through aligned principles; well defined roles and responsibilities; and that the mutual obligations were set out from the outset.

The FFA described the relationships between the entities and the legal obligations that underpinned them in some detail. The Founding documents also provided an operational framework including templates for the completion of programme and funding requests that would be received by IFFIm and for cash disbursements to GFA by IFFIm. Arrangements for monitoring, reporting and evaluation were also included.

Alternative structures and arrangements for IFFIm were not considered in any detail as they did not meet the requirements to ensure that a new innovative financing mechanism could be fully road tested. The option of using the World Bank to issue the bonds and absorb the transactions directly on to its balance sheet had been quickly ruled out for this reason



even though it may well have obviated the need for at least one of the dedicated transaction vehicles.

English law is the preferred jurisdiction for bond issues. The form of the entity for the GFA and IFFIm was chosen partly for political reasons (the UK Government was a major founding member) and for convenience. Using a charitable company established under English law was also convenient as it was a well understood jurisdiction that would give added confidence to potential investors.



### Annex 5: IFFIm Running Costs

IFFIm: Cost	s and Exp	penditure	es	
Total Resources Expended in \$000's	2006	2007	2008	2009
Cost of generating funds				
Treasury Manager's fees				
Financial operations management	1,018	1,143	1,779	1,965
Investment management	75			
Donor pledges and IFFIm project	811	155		
Finance charges				
Bond issuance costs	1,613	245	3,877	8,091
Bond interest expense		50,000	65,344	112,760
SUB-TOTAL	3,517	51,543	71,000	122,816
Charitable activities				
Country-specific programmes				
New and under-used vaccines	167,802	78,969	242,918	445,788
Health systems strengthening and immunisation services	61,693	105,980	82,280	57,611
Injection safety supplies	1,235	1,104	- 78	5,486
Non-country specific grants to GFA				
Yellow fever stockpile	57,140			
Measles mortality reduction	139,000			
Polio stockpile	191,280			
Maternal and neonatal tetanus elimination	61,620			
2007-2010 procurement contract	181,050			
Investment cases				
Yellow fever continuation			-	43,881
Meningitis eradication			-	67,719
SUB-TOTAL	860,820	186,053	325,120	620,485
Governance costs				
Governance costs	35	77	88	234
Governance costs Professional services	35 4	77 21	88 75	234 842



IFFIm: Costs and Expenditures						
Total Resources Expended in \$000's	2006	2007	2008	2009		
Auditors remuneration						
Statutory audit	80	220	200	174		
Taxation services and group reporting			154	158		
Overseas audit	210	150				
Other governance costs						
Publicity expenses		87	151	-		
Trustee's indemnity insurance premiums	125	504	584	488		
Trustees meeting and travel expenses	19	130	153	195		
Other trustees expenses			-	17		
SUB-TOTAL	1,595	2,160	2,786	2,985		
	865,932	239,756	398,906	746,286		
TOTAL						

Source: IFFIm accounts

Note: table presents overview of all income and expenditure including programmatic and other expenditures. **IFFIm running costs are in bold** 



Detailed Breakdown of Treasury Management Costs

Detailed Breakdown of Treasury Manageme	ni Cosis				
	2008	2009	2010		
Financial Service Cost					
Bond Issuance- market research, design, execution	419,512	407,689	280,000		
Investment management fee (3 b.p.s on average liquidity)	70,616	68,655	425,000		
Treasury Manager Administra	tion and Suppo	ort Costs			
Donor relations, management, of Donor Pledges and Payments	300,793	292,316	87,300		
Fund Management (commitments, disbursements, programme tracking)	-	-	141,500		
Financial Risk Management (staff time and swaps fees)	187,826	182,532	201,200		
Ratings maintenance (including gearing ratio analysis, liquidity)	193,451	189,408	208,000		
Accounting and reporting	461,348	466,892	382,000		
IT (IFFIm systems development and maintenance)	239,071	162,153	67,000		
Legal	15,417	9,605	58,000		
Third Party Costs					
Ratings Maintenance Consultants	-	-	50,000		
IT Software Development	125,000	-	125,000		
Total	1,888,034	1,779,250	2,025,000		
O	, -,	, -,	, -,		

Source: World Bank



**GAVI Fund Affiliate Governance Expenditures** 

G/ (1) T Gird / (Illinate Geverification Experience)				
2006	2007	2008	2009	
80	130	130	136	
4	21	175	231	
574	44			
891	993	692	571	
154	175	290	211	
			1100*	
			110	
4	22	1	20	
	13			
1707	1398	1288	1179**	
	2006 80 4 574 891 154	2006     2007       80     130       4     21       574     44       891     993       154     175	2006     2007     2008       80     130     130       4     21     175       574     44       891     993     692       154     175     290       4     22     1       13	

Source: GFA Accounts

#### Economic v Financial Costs

		2006	2007	2008	2009
Financial Costs:	IFFIm Board	3499	3458	4565	4108
	GFA Board	1707	1398	1288	938
Additional Economic	IFFIm Board	930	974	806	942
Costs:	GFA Board	797			341
	Overall Total	6,136	5,830	6,659	6,329

The table above summarises the total costs of the governance structure over the last few years. It distinguishes between financial costs (what IFFIm actually pays for) and economic (the true costs of its operation .i.e including pro bono support) – the latter giving an idea of what a more commercial approach might cost and may be relevant for any replicated IFFIm. It includes, for example, an estimated full cost of GAVI Secretariat services. We allow an imputed cost for Board members time. We also allow for subsidised legal costs<sup>2</sup>.

<sup>\*</sup>also a revenue

<sup>\*\*</sup> excludes Procurement Service Fee

<sup>&</sup>lt;sup>2</sup> As such figures are commercially sensitive we do not present the economic costs is disaggregated form



### Annex 6: Accounting, Performance and Risk Management

In the following section we briefly review the financial management , accounting systems , internal controls and external audit arrangements currently in place.

#### **Accounting Arrangements**

All UK companies are required to prepare and submit annual financial statements compliant with UK GAAP. The World Bank as Treasury Manager is required to produce an annual reporting package for IFFIm however, since the World Bank operates on US GAAP, the reporting package supplied by the World Bank is prepared according to US GAAP and it must be translated to UK GAAP. The TMA explicitly references that the reporting package be prepared under US GAAP because the Bank did not feel it had in-house skills to report under UK GAAP.

In the first few years this caused some problems as the arrangements were established. The Bank only has a responsibility to report in US GAAP and cannot take on the responsibility for reporting for IFFIm under UK GAAP. This task therefore fell to the GAVI Secretariat but there were important differences to be overcome. For example donor pledges were recorded on a "amortised cost basis" under US GAAP prior to the adoption of the FAS 157 fair value option in 2008. This gave rise to a difference in net assets between the US and UK GAAP statements prior to 2008.

The GAVI Secretariat has its own accounting policies and procedures and provides instructions to the World Bank on preparation of financial statements. IFFIm has ultimate responsibility for the preparation of the UK statutory financial statements and for preparing the Annual Report for the UK Charities Commission. In 2009 the timetable was planned as follows and the report was filed within the timeframe indicated:

•	US GAAP reporting	package given to GAVI	March	
•	Conversion US to U	K GAAP by GAVI Sec	April	
•	Preparation of UK G	AAP by GAVI Sec	May	
•	Audit of US GAAP	by KPMG	May	
•	Audit of UK GAAP	by KPMG	May	
•	Review and comme	June		
•	Filing of trustees rep	June		
•	Filing of Annual Cha	September		
•	Preparation of consolidated GAVI Statement			

Source: Slaughter and May

These procedures are cumbersome but are a result of a structure which involves entities that exist in different jurisdictions. As with all UK incorporated companies IFFIm is bound by UK law to report under UK



GAAP and in addition it must produce an annual report in the form required by the Charity Commission. This meant that the World Bank and IFFIm had to find a way to align the accounting records as efficiently as possible.

Establishing these accounting arrangements required careful planning and additional resources to ensure that the records collected by the World Bank were formatted in a way that could be easily transferred and understood by the GAVI Secretariat who had responsibility for the translation of the records into the UK GAAP format. These challenges were compounded by the limited staffing resources available to the Finance Division of the Secretariat. Staff turnover was also a problem.

In order to produce a comprehensive picture of the mobilisation of resources and their utilisation, the GAVI Secretariat produces an annual Consolidated financial statement for the GAVI Alliance which incorporates the financial statements from GFA and IFFIm. The IFFIm Board signs off its own financial statements but this process adds an additional layer of accountability as the IFFIm financial statements are reviewed as part of the consolidated statement by the GAVI Audit Committee and the GAVI Board. There is scope to further strengthen the extent of the review carried out by the GAVI Audit Committee and to enhance the links between the GAVI and IFFIm Audit Committees. This should be explored by both the IFFIm and GAVI Boards

#### **Accounting presentation**

The Board have faced an ongoing challenge to improve the accounts to ensure they accurately reflect the nature of the transactions being conducted. One of the communication challenges for IFFIm is how to present its financial position in a fair, technically accurate and transparent way to the various stakeholders. The conditionality in the donor pledges and the need to hedge them with derivatives means that IFFIm's accounts will inevitably be extremely complex and very difficult for non specialists to understand.

The requirement to produce accounts which are compliant with UK GAAP is unavoidable, however it is possible to include extra disclosure and analysis both in the Annual Report of the Trustees and in the form of extra Notes to the accounts or in the trustees report itself. IFFIm does this at some length and more disclosure and Notes have been included in recent years. The Italian Government reported that they found the IFFIm information note particularly helpful.

Accounting treatment does not necessarily need to reflect economic reality; the conditionality built in to IFFIm's structure will often lead to extremely large accounting movements without IFFIm having a realised economic gain or loss (see next section). Considerable effort has been made to improve the disclosure in IFFIm's accounts but there is a limit to what can be achieved.



## **Accounting Complexity**

All derivative financial instruments must be carried at fair value through the income statement under both US and UK GAAP. Hedge accounting is allowed as an exception, provided that a very strict set of requirements are maintained throughout the life of the hedge.

IFFIm's policy is not to use hedge accounting because (i) the World Bank does not use hedge accounting and (ii) there is no significant benefit for IFFIm in adopting it. The different approaches lead to a similar outcome; hedge accounting results in one net figure for any hedge inefficiency whereas fair value accounting results in opposing values on two separate lines which offset each other so the effect on the income statement is the same.

Understanding IFFIm's financial statements is challenging not just because of the inherent complexity of IFFIm's finances but also because of mismatches in accounting treatment. One of the biggest mismatches is between the donor pledges and the currency swaps used to hedge them to 3m US\$ Libor; net gains of \$141m, \$80m and \$72m were recorded in 2007, 2008 and 2009 respectively as 'net fair value gains (losses) on pledges, bonds and swaps' (note 5 to the 31 December 2009 accounts or note 6 in prior years).



#### Illustrations of Accounting Complexity

#### Accounting for donor pledges

The donor pledges are first discounted to account for possible reductions due to the HLFC and are then discounted to a PV using the relevant risk free rate. The level of reduction due to the HLFC is calculated using a 'loan loss' type model (similar, but not the same as the GRL model). For 2006 the donor pledges were accounted for as follows:

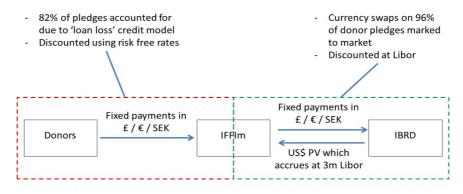
the gross donations of US\$3,976m, minus US\$708m which is a 17.8% reduction to account for the HLFC, minus US\$1,161m to get to the PV using risk free rates

The result is that the initial donor pledges were recorded at \$2,110m in the 2006 accounts. The difference between the discounted value of pledges and actual receipts (4% actual reduction vs 17.8% accrued) is recorded as a realised gain as the donor payments are received.

#### Accounting for currency swaps

The economic hedge for the donor pledges is the currency swaps which cover 96% of donor pledge receipts (to account for the 4% HLFC reduction at the time the swaps were executed). These swaps are marked to market using Libor rates.

The result of the mismatch between the value of the pledges and the swaps hedging them (discussed above) is that (i) the currency swap hedges have a significantly bigger notional value (96%) than the expected cash flows from the donor pledges (82%) for calculating the effect of changes in interest rates and (ii) the donor pledges are discounted using a different yield curve to the currency swap hedges.





## **Integrity of Financial and Reporting Systems**

The integrity of the securitisation process overseen by IFFIm and executed by the IBRD depends on:

- internal financial controls and internal audit within the World Bank
- IFFIm monitoring of the Banks performance and decisions
- timely and accurate financial statements from IFFIm
- rigorous external audit of IFFIm financial statements

IFFIm relies on internal financial controls operated by the World Bank and GAVI. Errors identified and corrected by internal controls are usually not communicated unless they result from issues that the Secretariat consider material to the Board. The World Bank has internal controls on all its transactions with compliance systems and internal audit to ensure that the standards are adhered to; procedures are followed such that financial systems are robust and operate as expected. Unauthorised transactions or potential misuse of funds should be picked up by these controls. In the unlikely event that this should happen, compliance controls and internal audit would operate to prevent abuse and to investigate the cause. No major problems were brought to the attention of the evaluators during our discussions with the World Bank and the GAVI Secretariat Finance Division.

The IFFIm Board monitors the activities of the World Bank through a regular flow of financial information provided to them in Quarterly reports. In the start up phase these reports were considered inadequate by the IFFIm Board. In order to fulfil their monitoring role more effectively and to discharge their fiduciary responsibility, the IFFIm Board asked the World Bank for a more comprehensive report with a wider range of financial information, for example, on the costs of bond issuance.

The integrity of the IFFIm Board itself is secured through the Board continuing to display high standards of Corporate Governance including meeting external audit and reporting requirements to the Charity Commission and IFFIm donors. In the unlikely event that the Board exceeded its authority or made decisions that placed IFFIm's operations in contradiction to the Founding documents, this would be identified at an early stage by third parties including the World Bank or GAVI and communicated directly to the donors.

IFFIm financial statements are being produced according to the timetable planned by the GAVI Secretariat Finance team. The GAVI Secretariat would prefer to complete the financial statements earlier in the year as the integrated GAVI financial statements are delayed until IFFIm and GFA report. The Board have been alert to the need to carefully reflect the "fair value" of hedging transactions. In the 2009 financial statement they challenged the GAVI Secretariat over the presentation of interest payments



for bond and hedging transactions. They have also ensured that a more accurate charge is made for the costs of GAVI support.

The IFFIm Board established a Standing Audit Committee in November 2009 to assist the Board in fulfilling its corporate accounting and financial obligations. The TORs are wide ranging and involve reviewing both financial and accounting systems and statements as well as the conduct of external audit. The Committee's main tasks <sup>3</sup>are to review:

- the terms of the engagement of the external auditor and scope of the annual audit
- the annual financial statements and any disagreements between GAVI, the Treasury Manager and the external Auditor
- financial and operational risk exposures and the steps taken to monitor and control those risks
- the adequacy of financial reporting and accounting policies, practices and judgements

The establishment of an IFFIm Audit Committee is a welcome development because of the ongoing challenge of ensuring the consistency and transparency of the financial statements covering the complex capital market transactions dealt with by IFFIm. The Committee reviews the quarterly and annual IFFIm financial statements concurrently with the preparation of the consolidated GAVI accounts. However there are capacity constraints. At present the GAVI Audit Committee and the Secretariat have provided some support and advice but it would be advisable to examine whether additional resources can be found to ensure the IFFIm Audit Committee is able to cover its wide ranging remit.

IFFIm have selected KPMG as external auditors in order to align themselves with the World Bank (who also use KPMG) and to make the process work more smoothly. There are advantages in this arrangement as it makes it easier to liaise and communicate over substantive issues around presentation of financial information in the different jurisdictions. However there is potential for criticism on the grounds of conflict of interest. UK, Geneva and US based teams from the same company are effectively auditing the Bank in its own right both as a development finance institution and as a supplier of services to IFFIm.

The Charity Commission also plays a role by providing checks and balances on IFFIm operations. As part of its duties the Commission seeks to assess that IFFIM is discharging its duties as required under Charity law. They also assess whether the IFFIm Board has identified the risks facing their activities (i.e. the securitisation process) and that the Board have taken steps to address them. However they do not scrutinise the IFFIm accounts

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<sup>&</sup>lt;sup>3</sup> See IFFIm: Audit Committee Charter Approved 16 November 2009



and focus solely on whether they are produced and audited as required under Company law. The Auditors are able to contact the Charity Commission directly about any points of concern.

### **Transparency**

Virtually all the donors interviewed felt it was inevitably difficult to ensure that the financial statements of IFFIm were transparent because the underlying capital market transactions could not be easily understood by non specialists.

There have been ongoing discussions within the IFFIm Board about how best to present the financial position to ensure clarity and transparency. The GAVI Secretariat under the direction of the IFFIm Board have added information to the Trustees reports and financial statements so that the concepts and capital market terminology are more accessible to non specialist readers. They have also asked their auditor to ensure that the report conforms to the expectations of the Charity Commissioners. The GAVI Secretariat are also planning to add some explanatory detail to the consolidated accounts to help ensure that IFFIm activities are fully comprehensible.

The UK Charity Commission are broadly satisfied with the reporting provided and both IFFIm and GFA legal teams have briefed them periodically to ensure that their staff fully understand the way in which these entities operate. However they face problems with budget cuts and staff continuity which make it harder for the Commission to sustain its institutional knowledge and experience in future.

#### Question: How effectively does IFFIm assess its performance?

When IFFIm was originally designed little attention was given to establishing performance benchmarks or indicators. There were implicit targets to "front load" donor pledges by raising up to US\$ 4bn through bond issues and to do so at a cost close to that which would be achieved if the donors had borrowed themselves and pooled the funds. Performance was therefore to be largely measured by how much money was raised and disbursed and how much it cost to do so. But there were no targets or indicators agreed specifically for IFFIm at the outset.

Some grantor nations also devised performance indicators and targets linked to their financial commitments and pledges to IFFIm. However these were often broad and included the role played by GAVI and the use of funds by developing countries as well as the specific performance of IFFIm. For example, DFID had a project framework that included outputs related to the following areas with associated indicators in brackets:



- immunisation coverage (indicators were immunisation coverage and countries taking up new vaccines)
- sustainable immunisation programmes (GAVI funding integrated into national plans and cost effectiveness of new vaccines)
- IFFIm is a feasible and efficient mechanism (issue and uptake of bonds; value of pledges and disbursements)
- GAVI is a robust and efficient vehicle (time from approval to disbursement)
- Global market for new vaccines (reduction in price of new vaccines and purchases from emerging markets have increased)

The TMA requires the World Bank to report regularly to IFFIm against a number of parameters that cover the duties they are being expected to carry out. However it does not specify any explicit indicators of performance. The Bank was to report:

- monthly on the performance of the investment assets under their management
- quarterly on (i) the status of the IFFIm account (ii) the amount of funds disbursed during the previous quarter

And a reporting package that covered:

- all funding activities carried out; a performance assessment relating to investment activities
- the implementation of the risk management strategy
- confirmation that all procedures have been followed in relation to: any bonds issued, loans borrowed or in relation to any permanent suspension of operation under the FFA.

In 2006 the IFFIm Board discussed the reporting arrangements with the Bank and sought to ensure there was a more comprehensive report which provided more background and more explicit analysis of performance. The Quarterly Treasury Managers report now covers:

- the costs of IFFIm bond issuance benchmarked against Supranational/Non-US Agency Benchmark Issuance
- the returns on investment activities against agreed benchmarks
- hedging transactions
- disbursements and available funding balance for approved GAVI programmes
- debt service payments and administrative expenses
- forward looking fee estimate and variance analysis of past estimates vs actual fees invoiced

The IFFIm Board have therefore encouraged the evolution of a more robust framework and indicators to ensure they can carry out monitoring more effectively and provide adequate feedback to the donor community at the bi



annual IFFIm donor meeting. At a recent meeting<sup>4</sup> performance was set out since the inception of IFFIm and covered total disbursements, cumulative investment performance and the liquidity balance. The presentation also provided a more comprehensive picture of donor pledges and bond issues from 2006 and projected over their life until 2026. They have also set out the potential for IFFIm to extend its programming capacity until 2015.

An effective performance measurement system should have:

- explicit targets agreed with stakeholders covering both the inputs to be provided (in this case under the TMA) and the outputs to be achieved (funding spread and funds disbursed to GAVI)
- performance targets need to have well defined or SMART (i.e. specific, measurable, appropriate, relevant and timely) indicators
- there needs to be a clear link between the outputs to be achieved and the ultimate goal (i.e. immunisation in developing countries)
- there should be incentives at the organisational and personal level to deliver results

Judged against these criteria the existing arrangements offer a reasonably good framework against which judgements about the performance of IFFIm can be readily made. Our interviews suggested that the Treasury Manager's Quarterly report to donors and the annual IFFIm donor meetings cover the areas of performance that donors expect and no major concerns were raised during the evaluation. It would nevertheless be desirable for the donors to agree more explicitly than in the past, the targets and indicators against which they will collectively assess IFFIm performance and for the Board to consider whether they need to review the reporting from the Bank in the light of this.

The grantor nations, GAVI, IFFIm Board and the World Bank could also consider developing a single report that would bring together and link the costs of IFFIm (i.e. the inputs) to the funds raised (outputs) and to the additional immunisation spending and coverage achieved. The recent explanatory notes are an initial attempt to fill this gap but this could be developed further<sup>5</sup>. Providing a single report in one place on a website would assist feedback to the general public and would make it easier to provide an overall assessment of value for money by linking the costs of IFFIm to the benefits that were achieved.

The IFFIm Board and the TMA ensures accountability through regular scrutiny and reporting of performance and the costs of Treasury Management activities. This incentivises efficiency and improved

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<sup>&</sup>lt;sup>4</sup> See papers from IFFIm donors meeting June 2010 especially "IFFIMs Financial Landscape Inception to May 31<sup>st</sup> 2010

<sup>&</sup>lt;sup>5</sup> Explanatory Information Notes on IFFIm June 2010



performance. It may be possible to make these arrangements even tighter by further refining benchmarks or indicators for example, by adopting some specific target or benchmark relating IFFIm borrowing costs more directly to the cost of sovereign borrowing by grantor nations (one of the original objectives).

Possible benchmarks could include the weighted average donor spread +20bps, weighted average for France and UK +30bps and/or World Bank +10bps for borrowing costs and negative cost of carry for investment management.

### Risk Management

### Is the risk management strategy adequate

Grantor donors identified a number of critical risks that would need to be managed and mitigated (prevented) to ensure that IFFIm could successfully achieve its objectives and avoid any major threats that could potentially undermine it. These fell into the following major categories:

- *Programme related:* this concerns any reputational risk to IFFIm that may arise if money raised by IFFIm is not used for the purposes intended (i.e. immunisation in poor countries).
- Sovereign risk related: The risk of grantors failing to deliver on aid commitments and pledges or of recipient countries going into long term arrears with the IMF
- Capital Market related: Bond issuance faces uncertainty due to fluctuations in exchange rates and interest rates that need to be managed
- Treasury Management related: the need to stay below a predetermined gearing ratio between liabilities (bond issues plus any other debt) and the present value of aid pledged by grantors to ensure that debt repayments were assured.
- Financial Management: the need to maintain effective financial management and control over grantor funds.

Under the Founding documents the GFA and IFFIm have to independently assess any new proposals coming forward from GAVI. The first risk is therefore addressed through the appraisal, monitoring and review arrangements already put in place by GAVI. There are well established procedures to assess developing country needs that aim to ensure the quality of programme proposals and to develop a pipeline of programmes.



Partner countries prepare annual reports on funds used and the impact in terms of coverage. Any new proposals considered by GAVI are first reviewed by the Independent Review Committee (IRC) and this includes assessing the past utilisation of GAVI funds prior to any new support.

Although IFFIm is not directly responsible for the utilisation of the funds that it generates, there is a risk that if programme funds are misused that this will have a reputational impact on its operation. Donors are generally happy with GAVI procedures that are in place and have confidence that the uses of the funds generated by IFFIm can be identified. Recent evaluations have also been positive. There are remaining challenges of attributing specific vaccination outcomes to IFFIm as opposed to regular GAVI funding because the funds cannot easily be separated.

In discussion with the GAVI Secretariat it was also clear that there have been concerns about possible misuse of health system strengthening funds in a few developing countries. However GAVI has recently increased its investigative capacity (the Transparency and Accountability team) <sup>6</sup> and actively identifies areas of fiduciary risk and insists on improved controls before funding is made available. Partner countries are required to report their remedial action prior to the approval of any new funding. Continued vigilance will be needed and this area of work needs to continue to be given priority. Additional resources may well be required in future. The IFFIm Board should ensure it is kept informed and sees relevant reports from GAVI.

Programme risks on the provision of physical goods (i.e. drugs and vaccines) are likely to be less as these are procured, shipped and managed in country by the UN Agencies concerned. GFA relies on their monitoring and reporting systems to assess the programmes that it funds. However there may be a case for additional monitoring by the GFA to supplement existing efforts on a more selective basis. The IFFIm Board should keep abreast of any such development and coordinate with GFA and GAVI as required.

All the other risks areas fall directly under the responsibility of IFFIm or the World Bank as their appointed Treasury Manager or the IFFIm support team from the GAVI Secretariat. The IFFIm Board has addressed capital market risks by agreeing a risk management strategy with the World Bank and has improved the response to financial management risks by establishing an Audit Committee and improving the presentation of the accounts and trustees reports (see previous section).

Good Corporate Governance requires a comprehensive risk management register and strategy that highlights the main threats to the IFFIm; assesses

<sup>&</sup>lt;sup>6</sup> The TAP team works with GAVI partners and recipient countries to investigate and address potential cases of misappropriation, misuse or waste of GAVI resources. They work closely with internal audit in GAVI and aim to keep IFFIm informed of their work.



the extent of the potential threats; and outlines the action take to manage or mitigate the threats. The GAVI Secretariat has been working with the IFFIm Board to develop a risk register and one was drawn up and discussed in October 2010 by the Board. This needs to be further developed to ensure a fully coherent and effective strategic response. The register has been prepared by the GAVI Secretariat and the World Bank and aims to highlight identified risks and mitigation activities (key controls).

It is planned that the risk register be presented in summary form to the IFFIm Board and be reviewed at least annually by them to ensure that these risks are actively managed. It will be important for the IFFIm Board to review and check that the major risks are being adequately addressed and if necessary to demand changes in the response. The strategy identified five major categories and nineteen individual risks. The activities being taken to address these risks and the party responsible were identified including the specific teams within the Secretariat and the World Bank. Risk categories included:

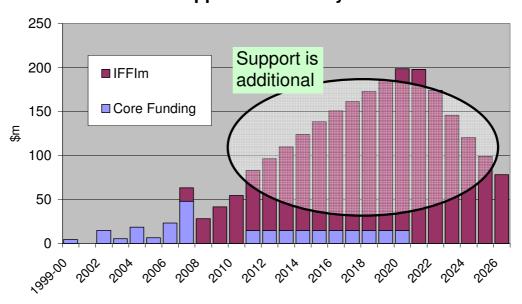
- (i) sourcing of funds (risks to continued donor and investor support)
- (ii) delivery of programmes to developing countries
- (iii) financial management record keeping and reporting
- (iv) compliance with laws and regulations by IFFIm
- (v) maintaining effective Governance and oversight of IFFIm

The risk register is a useful innovation which provides a comprehensive statement of the main risks faced by IFFIm. It could benefit from prioritisation according to the potential impact of the risk on IFFIm and an assessment of the probability of its occurrence. The effectiveness of the register very much depends on the responsible parties developing a coherent strategy and adequately resourced response to manage or mitigate the individual risks.

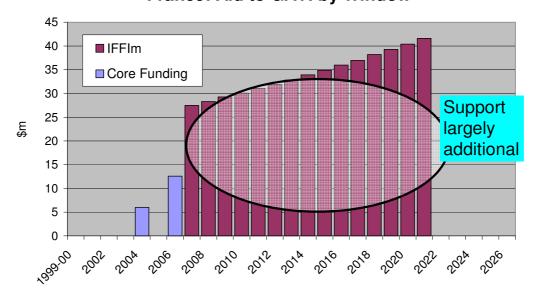


# Annex 7: Additionality of IFFIm Donor Funding

# **UK Support for GAVI by Window**

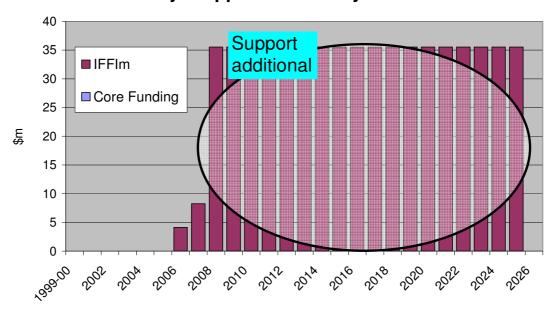


# France: Aid to GAVI by Window

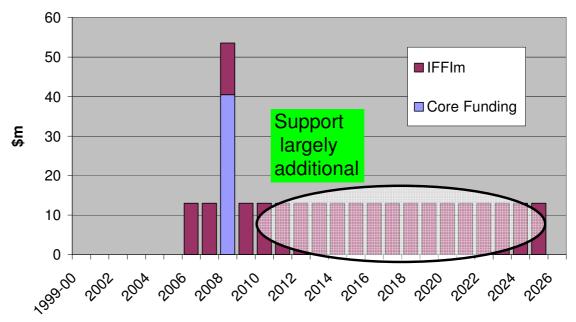




Italy: Support to GAVI by Window

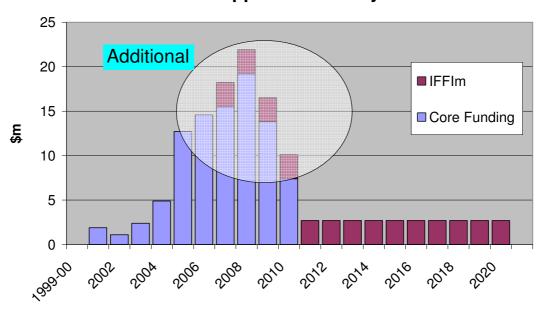


**Spain: Support to GAVI by Window** 

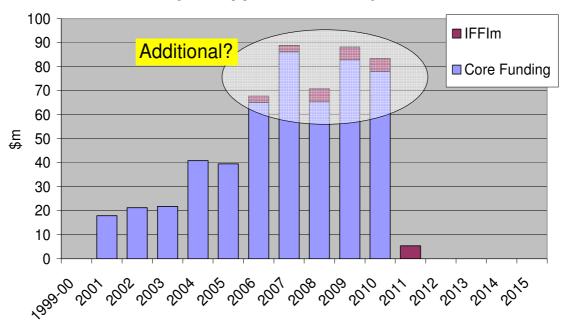




# Sweden's Support to GAVI by Window

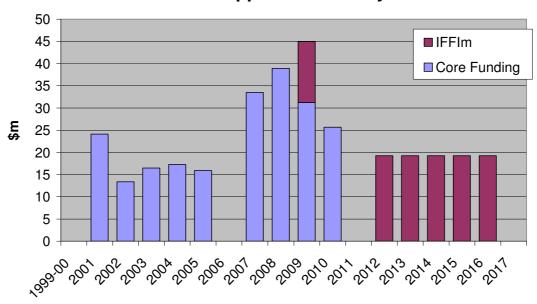


# Norway's Support to GAVI by Window





# **Netherlands Support to IFFIm by Window**





# Annex 8: Assessment of Individual Issues in relation to Funding Objectives

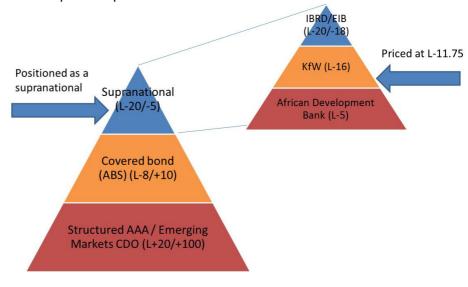
### The inaugural bond

Following the World Bank's structuring input, the successful application for MDB status and 0% risk weighting IFFIm was successfully positioned as a supranational and priced at the better end of expectations, only slightly wide of KfW. Whilst IFFIm did not originally have immediate uses for the \$1bn proceeds of the inaugural bond (indeed the restrictions on disbursements prevented IFFIm from immediately spending the money raised), as a new issuer it was important that IFFIm create a reference point for future bond issues.

The depth and experience of the US\$ benchmark market means that all other supranational funding markets look to it for guidance on what the appropriate spread level is. Without having issued a benchmark bond, IFFIm would have had to work far harder in other markets to justify the desired spread level. Because the US\$ benchmark market is so big, the minimum issue size is generally about \$1bn; the minimum size constraint can be viewed as a form of 'Entry Fee' for access to other markets.

In advance of the launch, the hope was that IFFIm would price within the supranational space (somewhere between the African Development Bank (AfDB) and KfW) but if investors had not accepted IFFIm as a supranational the pricing outcome estimate was up to 24bp wider<sup>7</sup>.

The marketing process leading up to the execution of the inaugural bond involved considerable work by the underwriters and World Bank and started well in advance of pricing. Considerable investor education was required (the bond underwriters and World Bank took IFFIm on two road shows) firstly to get IFFIm included within



World Bank estimated pricing could have been L+0.05 to L+0.125% in 'IFFIm – Funding Strategy and Implementation' dated 20 April 2006



investors' lists of investable issuers and secondly to position the credit as a supranational equivalent. Factors which influenced the pricing were:

- World Bank presence on the marketing road shows helped position IFFIm as a 'World Bank surrogate'
- AAA ratings, 0% risk weighting and MDB status allowed central bank buyers to participate
- The bond underwriters had very strong relationships with key central bank buyers
- IFFIm, as a new issuer provided sought after diversity in investor portfolios
- Any new issuer must pay a small premium
- IFFIm's mission was helpful in raising its profile with investors
- As an infrequent issuer IFFIm presented a less compelling reason to understand the credit and invest

### Subsequent bond issues

The inaugural bond provided a reference point for all future bond issues - including the Uridashi bonds - in terms of IFFIm's credentials as a supranational and the spread level they could command. After having raised \$1bn in the inaugural bond, IFFIm did not need to return to the bond markets until early 2008 by which time some credit spreads (e.g. high yield and asset backed) had started to widen in advance of the financial crisis. Below are summaries of bond issues and spreads to date:



		Size	Tenor	Coupon	All in spread	US swap	
Description	Date	(US\$m)	(yrs)	(%)	to 3m L (bp)	spread (bp)*	Underwriter
Inaugural bond	Nov '06	1,000	5	5.00	-11.75	-45.20	GS / DB
Uridashi 1	Mar '08	223	2	9.90	-40.25	-75.80	Daiwa
Uridashi 2	Feb '09	29	3	2.60	-35.50	-60.00	Daiwa
	Feb '09	91	3	2.65	-35.50	-60.00	Daiwa
	Feb '09	310	3	6.26	-35.50	-60.00	Daiwa
UK ISA / Institutional	May '09	24	5	0.00	32.50	-45.75	HSBC
	May '09	376	5	3.38	86.00	-45.75	HSBC
Uridashi 3	May '09	105	3	1.00	-27.50	-51.81	Mitsubishi
Uridashi 4	Jun '09	38	3	3.51	-26.50	-50.00	Mitsubishi
	Jun '09	29	4	6.85	-28.20	-53.13	HSBC
	Jun '09	57	4	4.36	-29.00	-53.13	HSBC
	Jun '09	45	15	0.50	2.00	-32.06	HSBC
Uridashi 5	Mar '10	321	3	7.15	-34.75	-18.50	Daiwa
Uridashi 6	Jun '10	56	4	8.30	-26.70	-30.88	HSBC
	Jun '10	15	4	4.77	-26.70	-30.90	HSBC
	Jun '10	30	10	0.50	-8.00	-5.50	HSBC
Private Placement	Oct '10	34	5	5.50	-1.50	-25.25	TD Securities
Kangaroo Bond	Nov '10	395	5	5.75	-1.50	-23.69	CBA / RBC

<sup>\*</sup> the spread to Libor at which US government bonds trade

Total issuance (\$m) 3,175
Weighted avg maturity (yrs) 4.4
Weighted avg spread to 3m Libor (bp) -7.2

#### Comparable Cost of Borrowing (US\$L bp)

	Nov '06	Mar '08	Feb '09	May '09	May '09	Jun '09	Jun '09	Jun '09	Mar '10	Jun '10	Jun '10	Oct '10	Nov '10
Tenor (yrs)	5	2	3	5	3	3	4	15	3	4	10	5	5
UK	-24	-77	18	-20	21	3	-19	30	14	-3	40	3	-11
France	-22	-39	22	45	28	16	24	56	6	-2	35	24	18
Italy	-10	-15	117	90	71	67	78	117	48	150	155	125	153
Spain	-20	-24	85	63	47	43	54	72	47	190	180	156	224
Sweden	-30	-61	4	-3	1	-20	-21	15	-9	-17	-46	-49	-56
Norway	-34	-87	8	-10	-17	-33	-37	-40	-52	-116	-100	-62	-55
Netherlands									2	-4	20	12	2
RSA		-40	70	50	20	-40	-30	59	-34	15	40	18	30
Weighted averaged donor	-21.3	-52.8	35.5	21.0	30.7	17.0	11.6	51.4	15.9	25.1	57.3	24.8	22.9
IBRD	-20	-41	-36	76	-29	-29	-29.0	-14	-35.0	-27	-19	-7.5	-7.5
EIB	-18	-36	0	81	0	0	1	30	-15	-12	5	13.5	13.5
KfW	-16	-36	0	90	0	0	1	30	-15	-12	5	9.5	9.5
AfDB	-5	-36	0	95	0	0	1	30	-15	-12	5	0	0
IFFIm actual	-11.8	-40.3	-35.5	82.8	-27.5	-28.7	-28.7	2.0	-34.8	-26.7	-8.0	-1.5	-1.5
IFFIm US\$ benchmark	NA	-10	50	60	35	24	37	116	6	13	32	5	5



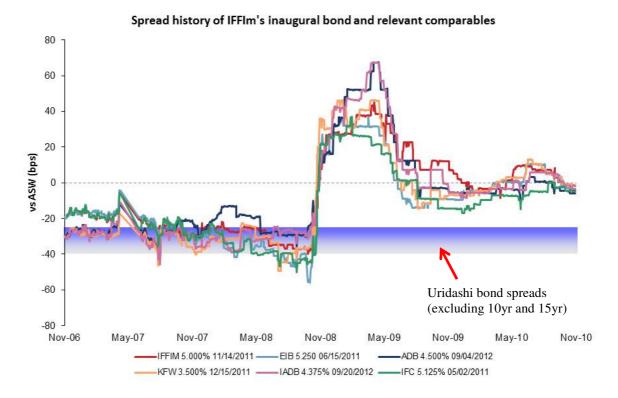
### The Uridashi bonds

The World Bank received a 'reverse enquiry' (bond investors seeking investment opportunities) through the Uridashi market and proposed IFFIm as the issuing entity. There were four advantages of the Uridashi market for IFFIm:

- i. most importantly, the spreads available in the Uridashi market are extremely low
- ii. introduction by the World Bank (one of the most highly respected issuers in the market) helped to reinforce the connection with IFFIm
- iii. the 'vaccine bond' story had particular appeal to the retail investor base
- iv. Uridashi bond issues are generally small which suited IFFIm's funding requirement

With hindsight, taking IFFIm to the Uridashi market was a critical factor in IFFIm's financial efficiency; Uridashi investors have offered funding at a lower level than any other market and shielded IFFIm from the spread widening observed in other markets as a result of the financial crisis. Had IFFIm not accessed the Uridashi market, the alternative of the US\$ benchmark market would have almost certainly been considerably more expensive (see section on analysis of alternative funding); the chart below shows illustrates the shielding effect of the Uridashi market from late '08 onwards.





#### UK ISA/Institutional bonds

Following two highly successful Uridashi bond issues which raised \$653m, IFFIm targeted the UK market for a dual tranche retail (ISA) and institutional bond offering which was notable for the following reasons:

- legislation was passed through the British parliament in order to allow IFFIm's bonds to be included within an ISA (tax free retail savings product)
- HSBC (the bond underwriter) made extensive use of its branch network and mail shots to market the issue
- although the ISA tranche was never intended to be large compared to the institutional tranche, demand was lower than hoped for because of the low interest rate environment in May '09
- to compensate for the lower ISA demand, the institutional tranche was upsized so that IFFIm was able to raise \$400m in total
- although the pricing looks expensive (weighted average spread of L-82.8) in comparison to the Uridashi issues, given the size, it was competitive with other funding markets (the US\$ benchmark market is only accessible in sizes of at least \$1bn)
- meaningful comparison of funding spreads is very difficult for these bond issues because of the volatility in funding spreads at the time
- IFFIm diversified its funding sources, lengthened the maturity profile of its funding and made use of a donor capital market for the first time



on the assumption that, if IFFIm had not needed to diversify, it would have used the Uridashi market at a spread of L-30bp, the 'cost of funding diversity' can be estimated at 112.8bp x 5yrs x \$400m = \$22.6m. This number reflects the fact that spreads in the Uridashi market stayed stable while spreads in other markets moved significantly wider; the 'cost of diversity' decreased later in IFFIm's life (see Kangaroo bond section below)

## Kangaroo bonds

In November 2010 IFFIm priced an A\$400m (\$395m) Kangaroo bond issue at US\$ 3m Libor -1.5bp after all fees. Not only was this bond issue compelling from a funding cost perspective but it also effectively satisfied the objective of using donor capital markets (Australia has signalled its intention to contribute to IFFIm in the near future). The bond pricing placed IFFIm at a better relative position within the supranational market than the inaugural \$1bn bond:

- 6bp over the World Bank (vs +8.25bp for the inaugural bond)
- 15bp under the EIB's and 11bp under KfW's comparable trading level; a relative improvement of 21.25bp and 15.25bp respectively
- 24.4bp under the weighted average donor spread
- using the same assumptions as for the UK bonds, the 'cost of diversity' was 28.5bp x 5yrs x 395m = \$5.6m

Feedback from investors and underwriters highlighted IFFIm's core strengths and explains why IFFIm is able to achieve such tight funding spreads<sup>8</sup>:

"if you all [World Bank and underwriters] had not come to see me and explained the IFFIm story, there is no way I would have fought internally to get IFFIm on the approved 'buy' list"

"you have to believe that IFFIm is part of the World Bank in order to justify the spread on the Kangaroo bonds"

"one of the key outcomes for us was the level of interest from the A\$ investors base to engage more on socially and environmentally responsible investments"

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The first quote is from a fund manager who accounted for 10% of the demand, the other two are anonymous and were gained through interviews and a survey of underwriters



# Annex 9: Measuring IFFIm's financial efficiency: DFID Objectives

Although it was a clear design phase expectation that IFFIm would issue bonds at spreads not much wider than the donors themselves, there were very few explicit performance targets. The UK's Department for International Development (DFID) did set some specific performance expectations:

- IFFIm would use a combination of bank and bond debt; bank debt would be built up until it was a sufficient size to be 'dropped' into a bond issue
- 2. 5-7 bond issues over a 10 year period
- 3. a spread over UK government bonds of 35bp (other measures such as US\$ L+10bp and US\$ Libor flat were also mentioned)
- 4. arrangement fees for each bond issue of 35-50bp
- 5. NPV of pledges not more than 10% above the PV of disbursements

The success in positioning IFFIm as a supranational issuer resulted in such a low cost of funds that using bank debt — which might have been a competitive option had IFFIm not performed so well - was more expensive than issuing bonds and managing the liquidity so the first two expectations became redundant.

In practice, IFFIm has managed to exceed the third expectation and to date has priced at an average spread (including underwriters fees and the World Bank's swap intermediation fee) of [4.7bp] to the UK despite significant spread widening of some donor spreads and a diminishing proportion of UK pledges. The table below illustrates how the spread IFFIm achieved compares with various benchmarks (red cells show where IFFIm's spread was higher than the relevant comparator):

IFFIm funding spread	vs selected	comparators
----------------------	-------------	-------------

	Size (US\$m) Tenor (yrs)	<b>Nov '06</b> 1,000 5	Mar '08 223 2	<b>Feb '09</b> 429 3	<b>May '09</b> 400 5	May '09 105 3	Jun '09 38 3	Jun '09 85 4	<b>Jun '09</b> 45 15	Mar '10 321 3	Jun'10 71 4	Jun '10 30 10	Oct '10 34 5	<b>Nov '10</b> 395 5	Weighted Average (bp)
	IFFIm vs Libor	-11.8	-40.3	-35.5	82.8	-27.5	-28.7	-28.7	2.0	-34.8	-26.7	-8.0	-1.5	-1.5	-7.2
	Donors	9.5	12.5	-71.0	61.8	-58.2	-45.8	-40.3	-49.4	-50.7	-51.8	-65.3	-26.3	-24.4	-12.4
۸S	UK	12.3	36.3	-53.5	102.8	-48.5	-31.7	-9.7	-27.8	-48.8	-23.7	-48.0	-4.4	9.3	4.7
bb)															
funding (bp)	IBRD	8.3	0.8	0.5	6.8	1.5	0.3	0.3	16.0	0.3	0.3	11.0	6.0	6.0	4.8
į	EIB	6.3	-4.3	-35.5	1.8	-27.5	-28.7	-29.7	-28.0	-19.8	-14.7	-13.0	-15.0	-15.0	-9.8
-	KfW	4.3	-4.3	-35.5	-7.2	-27.5	-28.7	-29.7	-28.0	-19.8	-14.7	-13.0	-11.0	-11.0	-11.0
FFIm	AfDB	-6.8	-4.3	-35.5	-12.2	-27.5	-28.7	-29.7	-28.0	-19.8	-14.7	-13.0	-1.5	-1.5	-13.9
	US\$ benchmark*	NA	-30.3	-85.5	22.8	-62.5	-52.7	-65.7	-114.0	-40.8	-39.7	-40.0	-6.5	-6.5	-23.1

 $<sup>{\</sup>bf *World\,Bank\,estimate\,of\,spread\,IFFIm\,could\,have\,achieved\,in\,the\,US\$\,benchmark\,market\,(min\,\$1bn\,issue)}$ 



The last two measures are harder to evaluate objectively. In the Uridashi market, the burden of fees for bond issues falls on different parties depending upon the selling structure (underwriter sells direct to investors vs underwriter sells to a distribution agent). In some cases the end investor pays a fee and in other cases the fee is incorporated into the spread of the currency swap used to hedge the bond issue. Uridashi underwriters negotiate bond issues with IFFIm on the basis of a net funding spread after all fees and on the basis that IFFIm receives the full US\$ equivalent bond notional (normally, the underwriter's fees are deducted from issue proceeds). Hence the above analysis would be even more favourable to IFFIm if performed excluding fees.

There are several impediments to an assessment of the final measure:

- The range of donor spreads to US\$ Libor at inception was 24bp (Norway at L-34 to Italy at L-10) vs 280bp currently (Sweden at L-56 to Spain at L+224)
- The UK accounted for 60% of the pledges at inception vs 46.2% currently
- Separating HSS specific disbursements from the original funding is difficult
- The NPV of the donor pledges depends on the future level of recipient country IMF arrears
- Predictions of future bond issue timing and GRL are imprecise

In order to provide an indication of IFFIm's performance against this measure, a few simplifying assumptions are needed:

- 1. IFFIm borrows 'for free' i.e. over the life of IFFIm, on average, it will be able to borrow at the weighted average donor spread. Currently IFFIm borrows at less than the weighted average cost and also generates returns on liquid assets but in the longer term donor credit spreads should tighten
- 2. Running costs of \$5m p.a. for IFFIm and \$1.5m p.a. for the GFA until 2026
- 3. A flat rate of 4% reduction of donor pledges due to the HLFC
- 4. There is no other 'leakage' in the system e.g. future donor pledges are discounted at the same rate as they are compounded under the hedging swap (in practice, the donor pledges are discounted at a lower rate (risk free rate) than the swap compounds at (Libor))

Using the above assumptions simplifies the calculations needed to (i) the PV of donor grants at inception and (ii) the PV of the \$6.5m annual running costs. On this basis, using the pledge values and discount factors from the 2006 accounts, the PV of donor pledges at inception was \$2.56bn and the



PV of the \$6.5m annual running costs comes to \$81m<sup>9</sup>. The \$81m represents 3.2% of the PV of the donor pledges and hence IFFIm can be considered to comfortably satisfy the final measure. Indeed, this measure would look more favourable when calculated over the increased donor pledges received post inception.

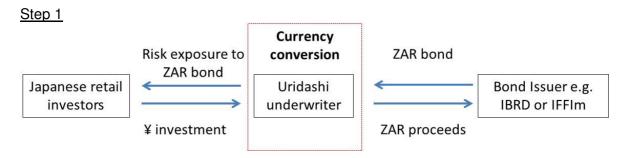
<sup>&</sup>lt;sup>9</sup> Calculated at a flat rate of 5%



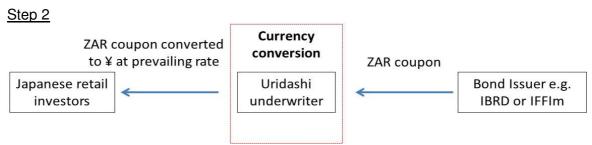
# Annex 10: What is a Uridashi bond?

A Uridashi bond is a structured product sold to Japanese retail investors in which the investor buys a foreign currency bond which is converted into Yen (¥) by the underwriter. Uridashi bonds are normally issued in high-yielding currencies of commodity producing nations such as South African Rand or Australian Dollars in order to give investors a higher coupon and currency exposure.

#### Illustration:



- The bond issuer sells normal bonds denominated in e.g. Rand to the Uridashi underwriter and receives Rand proceeds
- The Uridashi underwriter sells the ¥ equivalent value of the Rand bonds to Japanese retail investors (the Rand proceeds are converted at prevailing spot fx rates)
- Uridashi investors pay for the bonds in ¥ but have invested in a Rand denominated underlying bond



 During the life of the bond the bond issuer makes coupon payments in Rand which are then converted by the bond underwriter into ¥ at the prevailing spot fx rate

### Step 3





 At maturity the bond issuer repays the bonds in Rand and the redemption is converted to ¥ at the prevailing spot fx rate

### Why do Japanese retail investors buy Uridashi bonds?

The extremely low interest rate environment in Japan has led investors to look for returns outside ¥ denominated products. Foreign currency bonds provide access to higher coupons (due to higher interest rates in foreign currencies) and the potential for currency gains on the principal invested; using the above example, if the Rand appreciates during the life of the bond, investors will have made a capital gain.

Japanese investors have shown particular interest in currencies of commodity producing nations such as Australia, Brazil and South Africa because of their potential for appreciation vs ¥. The Uridashi market is predominantly a short dated market because the investor base wants to take relatively short term views on currency movements. Equally, the market is almost exclusively for AAA issuers since credit risk is not the primary source of returns sought by the investors.

#### Why is IFFIm able to issue at such low spreads into the Uridashi market?

There are three reasons the Uridashi market provides lower cost funding than any other market: (i) Japanese retail investors are less focussed on the funding spread than the ability to gain exposure to foreign currencies, (ii) IFFIm is perceived to be part of the World Bank and (iii) the 'vaccine bond' story has particular appeal to the investor base.

#### Could IFFIm fund itself exclusively in the Uridashi market?

The Uridashi market is certainly big enough to accommodate all IFFIm's funding requirement but relying solely on the Uridashi market would expose IFFIm to the risk that this market ceases to be able to support them in the future. Since the driver of demand is the Japanese low interest rate environment and relative value of foreign currencies, this is a very real risk.



# Annex 11: Liquidity Measures Used by Other Multilateral Institutions and World Bank

Source: Annual Reports

Oddrec. / trindar ricports			
INSTITUTIONS	MEASURE	POLICY LEVEL (MINIMUM)	TIME PERIOD
AfDB	Projected net cash requirements10	100% (Assumed)	Rolling one year. Update/reset quarterly
ADB	Proxy NCR (net cash requirements)11	40%	3 years
Council of Europe Development Bank	Net liquidity requirements12	50%	3 years. Updated quarterly.
European Investment Bank	Net cash flows13	25%	12 months
EBRD	Net cash requirements14	45%	3 years. reviewed annually
Inter-American Development Bank	Projected year-end outstanding loan balance15	20%	Yearly
IFC	Net cash requirements16	65%	3 years
World Bank	Highest consecutive 6 months of expected debt service obligations plus one-half of net approved loan disbursements.17		Highest consecutive 6 months for FY reset annually

<sup>&</sup>quot;African Development Bank Annual Report 2005" (Chapter 007). Projected net cash requirements include all potential debt service payments due to early redemption of swaps and borrowings with embedded options.

<sup>&</sup>quot;Asian Development Bank Annual Report 2005" (Volume 2, Financial Report, page 15-16). The proxy annual net cash requirements are the sum of loan disbursements net of repayments and debt redemption for the year.

<sup>12 &</sup>quot;Council of Europe Development Bank Annual Report 2005" (page 42-46). The net liquidity requirements include the additional liquidity requirement equal to the risk of default of counterparties rated "below investment grade" for the same period.

<sup>&</sup>lt;sup>13</sup> "European Investment Bank Annual Report 2005" (page 90)

<sup>&</sup>lt;sup>14</sup> "European Bank for Reconstruction and Development Annual Report 2005" (page 25-35, Risk Management Policies) The net cash requirements have a full coverage of all committed but undisbursed project financing plus one year's debt service. In addition, 30% of the Bank's net Treasury investments must mature within one year.

<sup>&</sup>lt;sup>15</sup> "Inter-American Development Bank, 2005 Annual Report" (page 94-103)

<sup>&</sup>lt;sup>16</sup> "IFC 2005 Annual Report" (page 16-18). Net cash requirements include projected disbursement and debt service requirements.

<sup>&</sup>quot;World Bank 2004 Annual Report" (page 15-28) The minimum is equal to the highest consecutive 6 months of expected debt service obligations for the fiscal year plus one-half of net approved loan disbursements as projected for the fiscal year.





# Annex 12: Liquid Asset Portfolio Characteristics

IFFIm could potentially earn greater returns by taking extra risk. The table below illustrates the increased level of volatility associated with longer maturities under both an asset and liability based approach. Over the last 20 years, investing in longer dated instruments would have resulted in higher returns but mark-to-market losses would have been recorded periodically over the life of the investments. For example, under a liability based framework, longer dated sectors underperformed the liability proxy about 30% of the time (about once every three years). In particular when 1-3yr Govts underperformed the liability proxy, the return shortfall was 1.07% on average and the underperformance lasted up to 2.67 annual accounting periods.

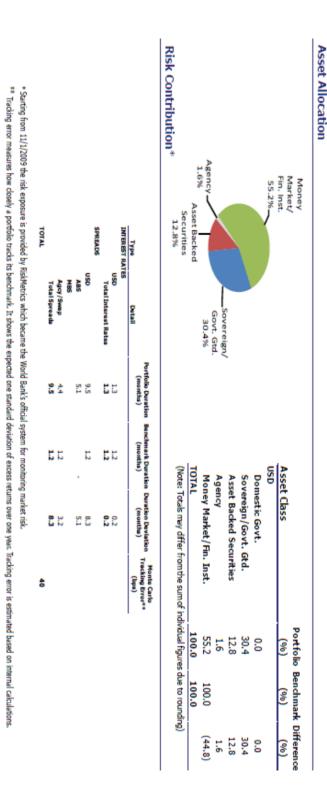
Table 1 - Risk/Return Characteristics for Selected USD Sectors
(1990 - 2010)

		3 Months Libor constant Maturity	1-3 year Govts	3-5 year Govts	5-7 year Govts
Asset Only					
Framework	Average Return	4.30%	5.46%	6.88%	7.53%
	Frequency of Negative returns	0.00%	0.83%	6.64%	9.13%
Α	Worst Return	0.21%	-0.35%	-2.74%	-4.32%
Liability Based					
Framework	Excesss Return over Liability Proxy	NA	1.16%	2.58%	3.23%
	Frequency of underperforming liability proxy	NA	31.54%	27.80%	25.31%
	Average underperformance of liability proxy	NA	-1.07%	-2.44%	-3.31%
	Longest Annual underperformance of liability proxy, accounting	3			
w	cycles (years)	NA	2.67	1.58	1.42

Source data: BofA Merrill Lynch Indices, Bloomberg

In order to maintain an interest rate neutral position, IFFIm's liquid investments are swapped to 3m Libor which matches the interest rate duration of the hedged donor pledges and bond issues. This doesn't mean that IFFIm is restricted to three month investments, but simply that the interest rate exposure of liquid asset investments is swapped to 3m Libor.





Source: November 2010 MIR produced by the World Bank



# Graph of the performance of IFFIm's liquid asset portfolio (PF (%) in blue) against the LIBID benchmark (BMK (%) in red) from inception to November 2010



# Summary of the data relating to the graph

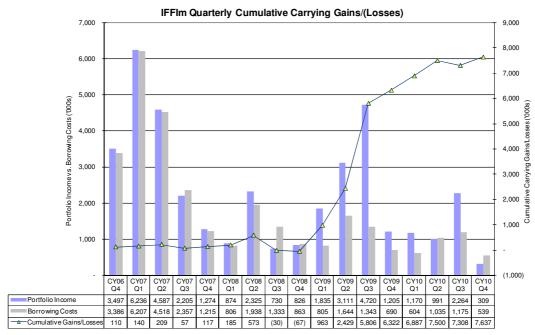
#### Portfolio Returns and Excess Returns Before Fees

	Benchmark Description	Current Benchmark Effective Date			Client FY10 to date		Rolling One-Year		Inception to Date <sup>1/</sup>		
			Size (USD)	Non-ann Return (%)	ualized Excess <u>Return</u> (bps)	Non-anno Return (%)	alized Excess <u>Return</u> (bps)	Return (%)	Excess Return (bps)	Annu <u>Return</u> (%)	alized Excess <u>Return</u> (bps)
IFFIm			1,233,156,496	(0.05)	(7)	0.43	22	0.47	25	2.65	20
Operational Cash	DB Fed Funds Effective Rate Index	9/1/08	94,592,672	0.02	1	0.28	12	0.30	13	2.37	31
Stable Cash	US LIBID 3-Mos Average	11/14/06	1,138,563,825	(0.06)	(8)	0.44	24	0.48	27	2.69	16

1/ Inception November 6, 2006

# Graph of the absolute outperformance (carrying gain) against the cost of funding





Source: the World Bank



# Annex 13: Investment losses suffered by IADB during the financial crisis

Headline and excerpts from an article covering the investment losses at IADB.

### IDB record \$2bn losses force replenishment request

Until now, the only public hint of the bank's losses was a brief mention in a September 2008 report posted on the bank's Web site showing a loss of slightly more than \$1 billion during the first eight months of 2008.

But on Feb. 5, Sen. Richard Lugar, R-Ind., sent a letter to the head of the IDB, Luis Alberto Moreno, putting the losses at \$1.9 billion.

Lugar, the Republican leader on the Senate Foreign Relations Committee, called the losses "grave" and questioned how the IDB fell prey to the risky securities when other development banks, including the World Bank, International Monetary Fund and regional banks in Asia and Africa, avoided significant losses.

"Given the global financial crisis, one would expect most investors and banks to have lost money," Lugar wrote to Moreno. "However, the reported scale of the IDB's investment portfolio losses of \$1.9 billion -- 10 to 100 times higher than the losses of the other development banks -- is of grave concern."

The IDB's investment in what now are commonly referred to as toxic assets topped out at 60 percent of the bank's portfolio in 2005 and remained above 50 percent as recently as 2007, according to a November 2008 study commissioned by the bank's Office of Review and Evaluation.

Lugar summoned IDB officials to Capitol Hill this week to explain how the losses will affect the bank's ability to make loans, who will be held accountable for them, and what reforms the bank is making to ensure against future risky investing.

Source: Marcus Stern Pro Publica, February 12, 2009 http://www.bicusa.org/en/Article.11042.aspx

### Quotes from IADB investment policy review 26 November '08

"For example, after Management's presentation of the investment program in 2006, a few months before the crisis began, "several Executive Directors



suggested that the Bank assume more risk, to increase the return on its investments"."

".... clear guidelines should be established defining the liquidity characteristics of permitted investments. Instruments .... should have a high probability of being liquid in the most adverse market conditions. This form of market insurance may have a premium associated with an increased cost of carry, as highly liquid instruments may yield less than the costs of Bank funding. Such a premium is vastly preferable to the risk of carrying illiquid liquidity."



# Annex 14: The Swap overlay

On 22 December 2010, the IFFIm Board (the Board) instructed the World Bank to execute a \$1bn interest swap transaction (the Swap) in order to convert the rate of interest earned on \$1bn (the cash balance held against the inaugural bond maturing in November 2011) from three month Libor (3m Libor) to a fixed rate.

## **Events leading up to executing the Swap**

IFFIm's liquidity policy requires pre-funding bond maturities 12 months in advance; with this in mind, during the first half of 2010 the Board requested the World Bank to provide alternatives to the policy of investing liquid assets in the Trust Fund Libor Pool (the Pool) for the \$1bn required to be held against the maturity of the inaugural bond. A discussion ensued between GAVI, an external consultant<sup>18</sup> and the World Bank through which the idea of an interest rate 'overlay' swap was conceived. By December 2010, no formal response had been received and so the Board presented the World Bank with two alternatives to the status quo for review:

- 1. Deposit US\$1bn with commercial banks for ~11 months
- 2. Use an interest rate 'overlay' swap to lock in an 11 month fixed rate

On 16 December 2010, the World Bank responded to the Board, advising that the status quo was their recommended approach.

### Hedging prior to execution of the Swap

IFFIm had a balance sheet which was hedged to three month US\$ Libor (3m Libor), in other words IFFIm's assets earned 3m Libor and IFFIm's liabilities paid 3m Libor. This means that IFFIm was protected from gains or losses resulting from changes in interest rates.

### What is the Swap?

An interest rate swap is a contract where two parties agree to exchange (or swap) floating interest rate for fixed interest rate payments over a set time period based on a notional amount. In this case, IFFIm contracted to pay 3m Libor (which it receives from the Pool) and receive 0.45375% on a notional amount of \$1bn until November 2011 (about 11 months). That means IFFIm will receive \$4.1m in interest and will pay whatever the 3m Libor rate is (every 3 months the rate is reset to the prevailing market level).

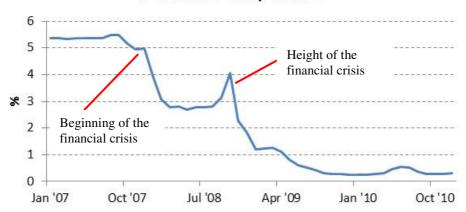
What is the pote	ential for p	profit or	loss?
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<sup>&</sup>lt;sup>18</sup> Chris Egerton-Warburton



The final profit or loss on the contract can only be known at expiry because it depends on the evolution of 3m Libor until November 2011. Looking at the Swap in isolation, if the average 3m Libor rate to expiry is less than 0.45375% IFFIm will have made a profit; otherwise IFFIm will make a loss.

# 3 month US\$ Libor



## Scenario Illustrations

The table below shows the resulting profit or loss from different 3m Libor scenarios.

				Scenario		
		1	2	3	4	5
		gradually	rates rise less	rates rise more	maximum profit:	rates rise
		increasing rates	than expected	than expected	rates fall to zero	significantly more than expected
8	22 December	0.30	0.30	0.30	0.30	0.30
bor	22 March	0.45	0.32	0.50	0.00	1.00
3m Libor (%)	22 June	0.50	0.34	0.70	0.00	2.00
Ē	22 September	0.65	0.36	0.90	0.00	3.00
Profit	/ Loss (US\$'000)	-9	1,145	-1,004	3,328	-8,611

The calculations are performed as follows, using scenario 1 (gradually increasing rates) as an example:

#### IFFIm receives:

0.45375% on \$1bn for 328 days =  $328/365 \times 1bn \times 0.45375\% = $4.1m$ 

### IFFIm pays 3m Libor:

0.3% until 22 March '11 = 3/12 x 1bn x 0.3% = \$0.75m 0.45% from 22 March until 22 June '11 = 3/12 x 1bn x 0.45% = \$1.125m 0.5% from 22 June until 22 September '11 = 3/12 x 1bn x 0.5% = \$1.25m



0.65% from 22 September until 15 November '11 =  $54/365 \times 1bn \times 0.65\% = $0.96m$ 

Total = US\$4.1m

So, in this scenario, IFFIm nearly breaks even.

Scenario 2 - 3m Libor rises more slowly than the market predicted and as a result IFFIm makes a \$1.1m profit

Scenario 3 - 3m Libor rises faster than the market predicted and as a result IFFIm makes a \$1m loss

Scenario 4 - 3m Libor drops to zero at the first reset date in March 2011 and stays at that level for the remainder of the contract. \$3.3m is the maximum profit IFFIm can make from the swap contract.

Scenario 5 – 3m Libor rises much faster and further than the market predicted and IFFIm makes a substantial loss of \$8.6m. Whilst this is an extreme illustration of how 3m Libor could move it does not represent the most IFFIm could lose; interest rates could rise even faster and/or to a greater extent, in which case the loss would be bigger.

These scenarios show that the Swap is unlikely to generate a gain or loss of much more than \$1m. This is minor in the context of IFFIm's finances and needs to be seen in the context of a current positive carry of ~ \$7.5m. In extreme circumstances the maximum gain is US\$3.3m whereas the maximum loss is uncapped.

	Gains	Losses
Likely	~US\$1m if interest rates rise less and/or more slowly than expected	~US\$1m if interest rates rise more and/or faster than expected
Unlikely	US\$1.5m to US\$3m if interest rates stay static or fall e.g. economic growth is less than forecast	US\$1.5m to US\$3m if interest rates rise very rapidly e.g. inflation picks up sharply
Extremely unlikely	\$3.3m if 3m Libor immediately falls to zero and stays there	>\$5m if rates rise very significantly and very rapidly e.g. a European sovereign credit crisis

### How does this fit within IFFIm's risk management?

Since prior to the Swap being executed IFFIm had a hedged balance sheet, any change would make the balance sheet partially unhedged i.e. subject to gains and losses from interest rate moves (as demonstrated above). In



other words, IFFIm is now taking a view that interest rates will not rise as fast as the market predicts; if IFFIm is correct it will make a profit.

### What was the World Bank's response?

The World Bank's view of the three possible courses of action was:

- 1. Status quo: the World Bank believed that returns of 30-40bp over 3m Libor (~\$3m) were possible.
- 2. Deposit US\$1bn with commercial banks for ~11 months: this option would allow IFFIm to lock in a fixed return but would entail taking on a substantially greater bank credit exposure than allowed under the World Bank's policies. The World Bank would have needed to inform the rating agencies and regulators had this approach been taken.
- 3. Use an interest rate 'overlay' swap to lock in an 11 month fixed rate: this option could be implemented by the World Bank within the prevailing authorisation and was estimated to provide ~20bp incremental return over the prior 12 months return on the liquidity portfolio<sup>19</sup>.

The World Bank advised that (i) options 2 and 3 involve IFFIm taking an outright interest rate view and hence having a partially unhedged balance sheet and (ii) taking an interest rate view is not something covered under the existing policy or something which they would recommend with any conviction because of the potential loss and the relatively limited upside even with a more adventurous policy.

### How does the Swap fit within IFFIm's policies and the TMA?

The process of challenging World Bank advice, requiring more work to be done on scenarios and making a decision that all parties accept is how IFFIm has been set up to work and is legitimate and consistent with TMA.

In risk management terms, the World Bank's advice was that the Swap presented a less good risk-return profile than keeping the status quo. However, it was not a substantial enough risk for them to inform the rating agencies.

This series of events highlights tensions between the commercial instincts of the Board and the requirement for IFFIm to be a supranational. The extremely conservative policies of the World Bank are key to IFFIm being able to fund itself at sub-Libor levels; investors perceive IFFIm as being a

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<sup>&</sup>lt;sup>19</sup> Note that under this option IFFIm does not remove the \$1bn from the Pool so it will still receive the outperformance in addition to the gain or loss on the Swap.



better credit than commercial banks. Inevitably, if the World Bank's policies are to be followed, some opportunities for investing in potentially higher returns from riskier assets will need to be foregone. The swap was a divergence from the prevailing IFFIm policy but was well within the IFFIm Board's authority.

The point of this case study is to highlight the complexity of decision making and to allow stakeholders an insight into the policy and decision making process. It also raises the broader question of which decisions would represent the significant change of policy direction which donors feel they would expect to be consulted on (though we do not imply that this should necessarily have been the case here)

Boundary of World Bank execution						
ULTRA LOW	LOW TO MODEST	MODEST TO HIGH	VERY HIGH e.g. emerging markets equity			
Strategies to date	with exception of swap overlay	e.g. commercial bank deposit				
	LEVEL OF RISK					
Based on Treasury Manager advice	Against Treasury Manager advice but within prudential guidelines	Against Treasury Manager advice and outside prudential guidelines	Against Treasury Manager advice and outside prudential guidelines			
Executed by Treasury Manager	Executed by Treasury Manager	Treasury Manager will not execute	Treasury Manager resignation?			

### Conclusion

The IFFIm Board were chosen specifically for their expertise in derivatives and capital markets. There is a trade-off between following the World Bank's policies and pursuing higher yielding, riskier investments, which needs to be considered in light of IFFIm's standing as a supranational 'World Bank surrogate'.





### Annex 15: IFFIm Approach to Hedging Risk

There are a number of capital market risks faced by IFFIm and the World Bank that are addressed under the IFFIm risk management strategy. The current policy requires all donor grants and bond issuance to be fully hedged into US\$ on a floating rate note basis. The Treasury Manager is also required to use a range of measures to reduce or minimise the risks of adverse effects on IFFIm arising from unforeseen movements in foreign exchange rates or interest rates. The measures to be carried out on IFFIm's behalf include: interest rate and foreign exchange swaps, structured transactions and spot and forward foreign exchange transactions.

The evaluators have reviewed the policy and practices available to IFFIm and the World Bank and have concluded that the approach being taken is consistent with good international capital market practice. The risks faced and the possible responses are outlined below:

#### Interest rate risk

IFFIm's hedging programme was aimed at removing as much exposure to interest rate and currency moves as possible and is a key requirement for attaining AAA credit ratings. IFFIm hedged its interest rate and currency exposure by converting the fixed donor pledges and bond issues into US\$ amounts with a floating interest rate. The hedged pledges are referred to as 'dollar zero-coupon floating rate receivables' and the hedged bonds are referred to as 'dollar floating rate payables' in IFFIm's accounts and World Bank documents.

#### How do the risks arise?

#### **Donor pledges**

Initially, IFFIm was exposed to interest rate risk because the present value (PV) of the future dated donor pledges changes with interest rates. There are various ways to hedge interest rate risk but the most straightforward and efficient is to enter into an interest rate swap with an equal but opposite interest rate exposure.

An interest rate swap is a contract where two parties agree to exchange (or swap) floating interest rate for fixed interest rate payments over a set time period based on a notional amount. In IFFIm's case there are further complications such as converting the donor pledges into US\$ (dealt with below) and the uncertainty about the eventual size of each donor pledge due to the high level financing condition (HLFC).

### **Bond issues**

Each time IFFIm issues a bond with a fixed coupon, it acquires interest rate risk because IFFIm is borrowing at a fixed rate against its (swapped)



floating rate future income. For example, if interest rates go down the sizes of the future pledge payments go down (so the PV remains constant) but the liability to pay bond interest remains constant i.e. IFFIm has lost money.

#### **Currency risk**

Since IFFIm receives donor payments in a variety of currencies but all its expenses and disbursements are in US\$, it is exposed to the risk that donation currencies depreciate against the US\$ and so IFFIm's future income declines.

#### How does IFFIm hedge these risks?

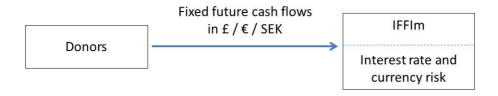
#### Pledges

The way IFFIm hedged its interest rate and currency risk on the donor pledges was to enter into a combined interest rate swap and currency hedge (a currency swap) which converted the pledges into a fixed US\$ PV which then accretes at three month Libor. In this way, if interest rates increase, the sizes of the future payments increase (because the accretion will be at the higher interest rate) such that the PV remains constant and vice versa if interest rates fall.

Normally, this would be an easy hedge to implement but in IFFIm's case, the HLFC makes the hedge more complex because the future foreign currency amounts to be sold are unknown. After consideration of the pros and cons of various approaches, the World Bank (WB) advised IFFIm to hedge its interest rate and currency exposure based on the prevailing level of recipient country default. When the donor pledges were signed, 4% of recipient countries had protracted arrears with the IMF so IFFIm hedged 96% of the donor payments, and when the level of arrears dropped to 3% the hedge was changed to 97% of donor payments.

#### Illustration

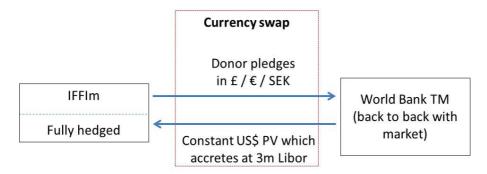
**Step 1:** IFFIm receives fixed future income from the donor governments in a variety of currencies. The PV of this income is subject to changes in interest rates and currency moves



**Step 2:** IFFIm enters into a currency swap with the World Bank (which hedges with the market on a back to back basis) which converts the donor



pledges into a fixed US\$ PV which accretes at three month Libor; IFFIm has now hedged its currency and interest rate exposure.



### **Bond issues**

Each time IFFIm issued a bond, the risks were hedged in a similar way i.e. IFFIm entered into a currency swap to convert the fixed coupon bond into a floating rate US\$ bond. Once the fixed coupon bond has been swapped into a floating rate US\$ bond, IFFIm's pledge income and bond expense are on a matched basis and IFFIm no longer has interest rate risk<sup>20</sup>.

#### Illustration

**Step 1:** IFFIm issues bonds in various currencies against the fixed US\$ PV of donor pledges. IFFIm now has interest rate and currency risk. As an example, I will use the ZAR1.7bn 9.9% Uridashi bond issued in March '08.

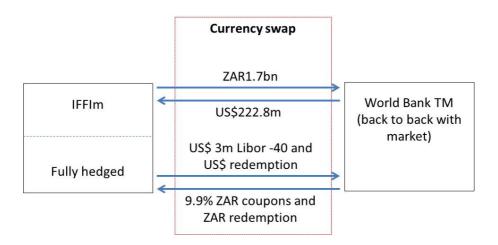


**Step 2:** IFFIm enters into a currency swap with the World Bank which converts the ZAR1.7bn 9.9% coupon bond into a US\$222.8m bond paying three month Libor -40.

-

<sup>&</sup>lt;sup>20</sup> In IFFIm's accounts and elsewhere the interest rate hedging is referred to as '.....swapped sovereign pledges into dollar zero-coupon floating rate receivables....' which simply refers to the variable sized payments.





**Step 3:** Effectively, the World Bank has stepped in between IFFIm and the bond investors to convert the foreign currency fixed coupon bond issue into a floating rate US\$ bond issue.



It is worth noting that (for normal market size):

- an interest rate swap executed at market rates has zero value at execution since the future path of interest rates is unknown
- a currency swap equally has zero value at execution because future fx moves are unknown
- a currency swap does not change the timing of when IFFIm receives the pledges, only the currency and the final amount

So normally there would be no cost or premium to hedge (other than the World Bank intermediation charges) but in IFFIm's case, there was a cost to executing the currency swap transaction because of its size; the executing bank gave a guaranteed price but charged a fee for taking the risk of hedging themselves in the market over a number of days.

### **Hedge execution**

Three options to deal with the uncertainty in hedging were proposed by the World Bank:



### 1. Fully hedge current donor pledges

Under this option, IFFIm would fully hedge all donor receipts subject to the prevailing level of IMF arrears i.e. 96% of donor pledges at inception (there was a 4% level of arrears). The advantages of this option are that it comprehensively hedges IFFIm's exposure at minimal cost and protects the GRL from interest rate and currency movements. The principal disadvantage is that if the level of IMF arrears were to materially increase IFFIm could be exposed to gains or losses on the over-hedge.

2. Hedge expected pledge receipts using swaps and the balance with swaptions

This option addresses the over-hedging risk in option 1 by hedging expected pledge receipts, say 85% (this level can be calculated according to a desired confidence level), with swaps and the balance with swaptions (an option to enter into a swap). While this option provides for perfect hedging, the cost of the swaptions on 15% of donor pledges was estimated by the World Bank at ~\$35m in September 2006.

### 3. Hedge expected pledge receipts

Only expected pledge receipts are hedged i.e. 85% as in option 2 with the remainder being left unhedged. This option addresses the overhedging risk in option 1 and the cost issue in option 2 but leaves 15% of IFFIm's assets subject to interest rate and currency movements. As a result, if IFFIm borrowed up to the maximum GRL, the limit could be breached simply through currency and/or interest rate moves and so an extra cushion (estimated at \$100m) would have been needed to manage this risk. The World Bank recommended (and the IFFIm board accepted) that option 1 be chosen because it provided the best match between assets and liabilities. The GRL would be almost fully protected from interest rate and currency moves, it is the least costly approach and is operationally the least complex to implement.

In addition to the hedging strategy, IFFIm also needed to decide on the execution timing for the hedge; because the donor pledge amounts were large compared to the normal market size (especially for longer maturities) IFFIm needed to choose between taking currency risk (if hedges were executed over a number of days according to market capacity) or execution risk (if the hedges were fully executed on the Effective Date). The execution risk was magnified by the potential for front-running by other market participants who would have known both the size and the timing of IFFIm's need to hedge from statements made by Gordon Brown. In essence, the decision on when to execute the hedge was a choice of providing immediate certainty on the value of IFFIm's assets or potentially achieving better pricing. There were a number of reasons why IFFIm chose to execute their entire hedge on the Effective Date:



- Losses could have been significant if the hedges had been executed over a number of days; statistically, one day's move was predicted by the World Bank to be 0.83% but a major unforeseen event could have had a much bigger effect. Although there is cost associated with pricing certainty (the banks executing the hedge need to be paid to assume the market risk) it is a known cost and guarantees that IFFIm is not exposed to significant losses due to unforeseen market volatility.
- Hedging on the Effective Date would ensure that the value of IFFIm's assets is consistent with the donor voting share, which was calculated using rates on the Effective Date.

Donor pledge receivables are recognised on IFFIm's balance sheet using spot foreign exchange rates on the Effective Date and the discount factor is calculated using interest rates from that date. All derivatives are recognised on the trade date; if the hedges had been executed over a number of days, any gains or losses during the hedging period would have had to be recognised in the income statement.

#### Summary

Whilst a hedging strategy involving swaptions for part of the hedge would have made money, at the time the hedges were executed this could not have been known. Equally, with the benefit of hindsight, under-hedging IFFIm's interest rate exposure would have made money, however (i) taking a view on interest rates with IFFIm's assets is not consistent with supranational status and (ii) at the time the hedges were executed, under-hedging interest rate exposure had the same probability of a loss or a gain.

# Note on the basics of Interest rate risk – The Time Value Of Money

In order to understand interest rate risk, one must first understand the time value of money. The value of money in the future is less than the value of money today; you would clearly rather have  $\mathfrak{L}100$  today than in 10 years time because you could invest  $\mathfrak{L}100$  received today so that in 10 years time it would be worth more.

Example: £100 received today could be invested in government bonds and your £100 would grow by the value of the interest paid each year. Let's assume that we have £100 to invest for 10 years, government bonds pay an interest rate of 5% and the interest income is re-invested each year:

#### Year 1

Value of £100 after 1 year invested at  $5\% = £100 \times (1 + 5\%) = £105$ 



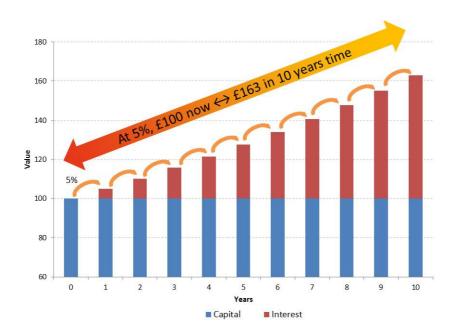
Year 2

Value of £100 after 2 years invested at  $5\% = £105 \times (1 + 5\%) = £110.25$ 

Year 3

Value of £100 after 3 years invested at  $5\% = £110.25 \times (1 + 5\%) = £115.76$ 

and so on until after ten years, the value is £162.89.



From the above it is clear that if interest rates are 5% then £100 today is exactly the same as £162.89 received in 10 years time. This process can be extended by as many years as necessary and can incorporate different interest rates for different time horizons. The terminology used to describe the different values is:

Present Value (PV) = value today of future cash flows

Future Value (FV) = value of cash invested today at a date in the future

Discount Factor (DF) = the scaling factor which accounts for the change in value between different times

In IFFIm's case, this means that the donor pledges which are to be received over 20 years are worth less today than their nominal cash value i.e. the



\$5.2bn of original donor commitments over 20 years were worth \$3.2bn in September '06. The \$2bn difference in value is not a cost; it is simply the difference between expressing the value of donor commitments in two different ways.



### Annex 16: IFFIm's Exposure to Credit Risk

IFFIm has two significant sources of credit risk exposure; the level of recipient countries protracted arrears with the IMF and donor countries - either if they are downgraded by the rating agencies or if their political commitment changes. From the market's perspective, the credit risk of IFFIm's bonds is a product of both high grade sovereign risk and emerging markets risk. Most of this risk is unhedgable by IFFIm either because of political sensitivities or cost so it must therefore be borne by IFFIm and IFFIm's bond investors. There are however reasons to believe that these risks are quite small and unlikely to be a problem for IFFIm or IFFIm's investors.

It is important to understand that from the markets perspective, an investment in IFFIm bonds involves taking on the product of high grade sovereign risk and emerging markets risk; IFFIm's income has high grade sources but it is nonetheless subject to the credit risk of a basket of emerging markets recipient countries. The GRL is necessary to overcome the risk of recipient country default; without it IFFIm would not be rated AAA.

#### Donor risk

Donor credit risk manifests itself in two ways; firstly the risk that the political commitment to continue contributions to IFFIm diminishes due to increasing pressure on financial resources and secondly that donor countries credit ratings are downgraded further.

The risk that political commitment to IFFIm diminishes is real but unlikely to impact existing pledges; more likely is that increased commitments would not be forthcoming. It should be noted however that, as pointed out by the rating agencies, a donor could default to IFFIm without precipitating a wider sovereign default.

A bigger risk to IFFIm is that donor countries, especially France and the UK, are downgraded by the credit rating agencies. All the rating agencies have specifically said that their rating of IFFIm is linked to the ratings of France and the UK since they are the majority contributors. Should IFFIm not be rated AAA or the equivalent by two of the three major agencies, it would no longer be able to fund GAVI programmes. Equally, the cost of IFFIm issuing debt would materially increase.

The way for IFFIm to hedge the risk of donor rating downgrades is to buy credit protection in the form of CDS (credit default swap – basically insurance against default). The problems with this approach are (i) it is costly, (ii) it is imprecise (the correlation between a ratings downgrade and CDS price is not perfect) and (iii) it would likely be unpopular with donor countries.



### Recipient countries

Due to the HLFC, it is clear that IFFIm is subject to the credit risk that recipient countries enter protracted arrears with the IMF and hence IFFIm's income diminishes. There is no effective way to hedge this risk within IFFIm's remit in the open market (it would be far too expensive); the only way to obtain a hedge would be for a creditworthy institution or government to guarantee a maximum level of arrears either at a highly subsidised rate or as a form of donation.

There are reasons to argue that IFFIm should not pay to hedge this risk since the incidence of protracted arrears to the IMF is far lower and more visible today than during the past. Historically, the highest number of countries in arrears at any one time was 11, in both 1988 and 1989 (which would have equated to a reduction of 17% in donor grants) however, as S&P points out in their rating of IFFIm:

'Reasons to expect that the payment performance of IFFIm-eligible borrowers from IMF will continue to be better than in the distant past include:

- The debt burdens of many of the IFFIm-eligible countries have been sharply reduced by the Heavily Indebted Poor Countries and the Multilateral Debt Relief initiatives.
- There is greater tendency now to provide the poorest countries with grants instead of concessional debt.'

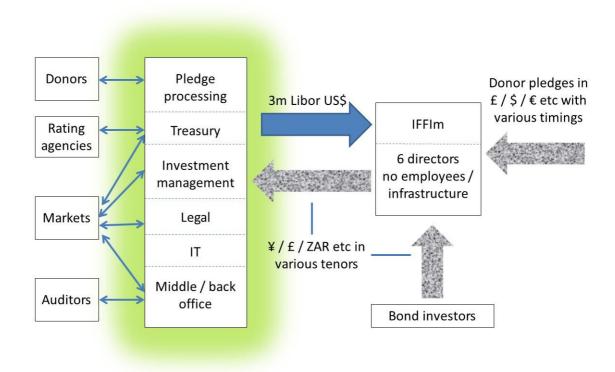
Also, the rating agencies point out that the IMF enjoys 'preferred creditor status' which reflects the IMF's status as the lender of last resort. The order in which countries tend to default on debts is: Eurobonds followed by multilateral development banks and lastly the IMF. Fitch quantifies this effect in their March 2008 research:

"The weighted average sovereign rating of the recipient country pool has risen to 'B' from 'B-'. However ...... including credit uplift to reflect the IMF's "preferred creditor status" remains at 'BB' ......"

It should be noted that both of the above risks become more acute later in the life of IFFIm; once the funds that IFFIm raised have been spent and grants are used predominantly to service debts, IFFIm will have fewer options to refinance / reschedule.



# Annex 17: The World Bank's role as a 'financial filter' and 'protective shield'



 Pledge processing: whilst this role is administrative in nature it is nonetheless an essential function the importance of which is often underestimated. Government departments are unused to financial transactions and the complexity and size of payments to IFFIm add to the level of apprehension. Significant amounts of time are required to 'for donors hand holding' to deal with individual requirements.

For example when the Spanish government overpaid one of their pledge payments (they didn't reduce the payment to take account of the HLFC and then wanted a refund for the excess). IFFIm cannot pay money back to donors, so a lengthy discussion took place to find a resolution. Situations such as this mean that donor payment processing cannot be automated and requires considerable human interaction.

As well as process the pledge payments, the World Bank also needs to monitor the correct receipt of payments (taking into account the HLFC) and pursue any late or missed payments (there has been at least one late payment). Should a donor wish to modify the schedule



of its payments, the World Bank must perform the necessary calculations to ensure the PV is maintained. For calendar years 2008 and 2009 the cost of donor pledge management was \$50k and was estimated to be \$80k for 2010.

This role is a combination of calculation agent and paying agent and could, in theory, be outsourced to a commercial service provider (there are companies that specialise in this type of service) but it would introduce operational risk and credit risk into IFFIm's structure. Pledge processing is a key point of contact between IFFIm and the donors and there are few institutions that have a comparable depth of experience of interacting with donors.

- Sole hedging counterparty: the World Bank's role includes hedge
  execution, monitoring and adjusting hedges, managing IFFIm's
  market counterparty exposure, managing collateral and managing
  bond underwriters. In this capacity the World Bank act as a 'financial
  filter' converting all the cashflows into and out of IFFIm in various
  currencies and tenors into clean US\$ 3m Libor flows. Credit strength
  is very important for this role; having a non-AAA rated Treasury
  Manager would introduce credit risk into IFFIm's structure and could
  jeopardise its AAA ratings.
- Capital markets advisory: develop a funding strategy, manage the
  execution of bond issues, prepare offering documentation, negotiate
  listing requirements, acquire regulatory approvals and full rating
  agency advisory services. This is a role which could certainly be
  outsourced to a commercial bank without introducing operational or
  credit risk, but the cost for this service alone would likely be a in
  excess of the World Bank's annual fee. By way of illustration,
  underwriters of the inaugural bond charged \$1m for the execution.
- Investment management: actively manage IFFIm's liquid assets so that the minimum liquidity requirement is always met, enough liquidity is being carried to ensure disbursement requests from the GFA can be met and the assets generate a return to offset the cost of borrowing. Before a disbursement can be authorised the World Bank must verify that enough funds are available and that IFFIm is still in compliance with the GRL.

There are many benefits to IFFIm participating in the World Bank's Trust Fund Libor Pool but one of the biggest benefits for IFFIm's financial efficiency is the enhanced liquidity. If IFFIm had had a standalone account during the financial crisis, liquidating investments might have incurred losses or not have been possible at all.



- Risk management: the World Bank advises on appropriate hedging strategies, executes the hedges and monitors the ongoing risk exposures including the GRL model. The rating agencies made clear that they viewed the World Bank's stewardship of the GRL as a critical element underpinning IFFIm's AAA ratings. It would be difficult to outsource the risk management function without jeopardising IFFIm's AAA ratings.
- Middle office / compliance: the World Bank manages the settlement process for all transactions, monitors compliance with market rules and prepares a reporting package for UK and US GAAP. Although under the TMA the World Bank was not engaged to provide advice on accounting policy, in practice substantial advice and technical support was given.
- IT systems: the complex nature of IFFIm requires specialist systems to track and report the cash flows and transactions; no other international trust fund at the World Bank issues bonds, especially under two different sets of accounting rules.

At inception of IFFIm it was hoped that further IFFs would be created and so the World Bank heavily subsidised the cost of developing its systems (80% subsidy on treasury systems and 50% on trust account systems). It is beyond the scope of this evaluation to form an opinion on whether the development costs could or should have been lower. However, there was a clear need for some systems development work to handle IFFIm and at the time when the decision was made to invest in systems the clear expectation was that the cost would be spread over additional IFFs.

It would be possible to outsource the systems support and reporting function but (i) the fixed cost of systems development would need to be paid again, (ii) the running cost would likely be higher than the World Bank's charges and (iii) it would introduce operational risks due to system incompatibility between service providers.



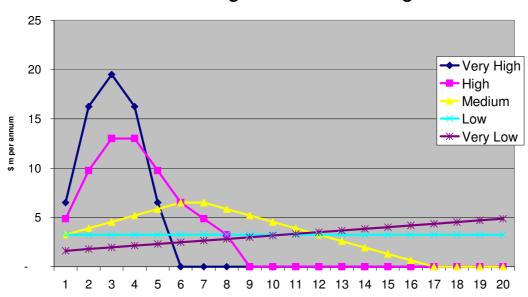
# Annex 18: Modelling the Impact of Frontloading and Herd Immunity using the LiST Model:

### An Illustrative Example – Bangladesh and Rotavirus

Using **Rota Virus** and **Bangladesh** as an illustration – current coverage = 0. Assume fixed budget of \$65m

The \$65m can be frontloaded (or not) in many different ways (see figure)

### **Different Degrees of Frontloading**

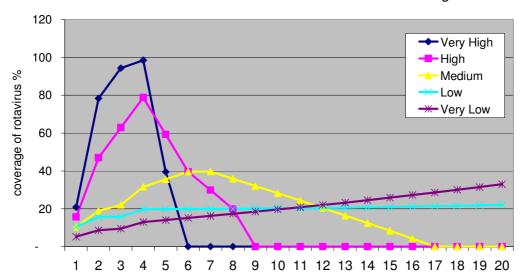


At expected vaccine prices this could "buy" the following coverage (assuming this is the only funding source available)

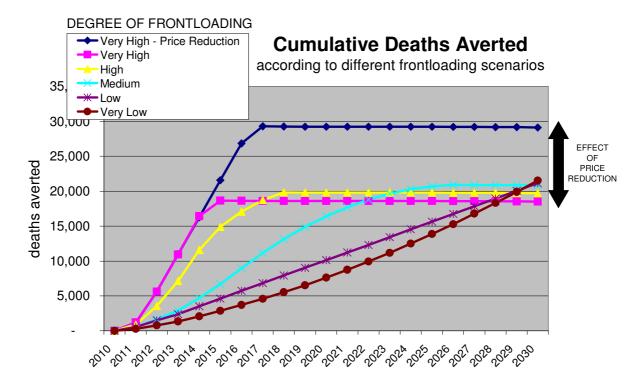


### **Different Levels of Coverage**

associated with different levels of IFFIm frontloading



Using the List model – this would avert the following number of deaths according to the LiST model (compared to the without case – which is zero coverage)





The model suggests that frontloading actually results in less deaths averted in later years and less deaths averted than in the less frontloaded approaches.

This is, in part, due to the fact that vaccine prices are assumed to be the same irrespective of the scenario and, therefore, that a larger share of vaccines are being bought at higher prices under the frontloaded scenario than on the less frontloaded scenarios. This assumption is likely to be unrealistic as one of the aims of frontloading is to send the markets signals needed to actually bring prices down. If prices are reduced considerably the impact of the frontloaded model becomes more favourable (shown in figure above as "very high – price reduction" scenario).

We would conclude from this that the impact on vaccine prices is a crucial element in determining whether frontloading has positive health benefits. This illustration suggests that the price impact may need to be quite substantial and occur quite early.

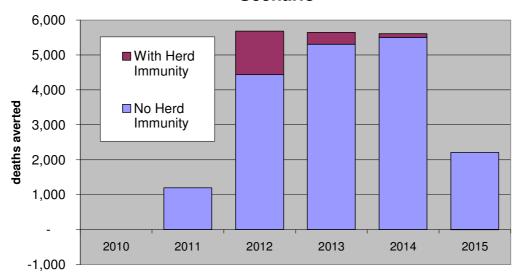
The other issue to consider is **herd immunity**. The evidence base on how strong this is, and the coverage levels at which it begins, is extremely weak. What we have done is take a range of possible coverage rates at which herd immunity kicks in. The table below sets out the assumptions. We look at 5 scenarios from a very high herd immunity effect (beginning at 50% coverage) to a very low effect (where herd immunity does not start until 90% coverage is reached. The table below sets out the effective coverage rates (including herd immunity) in relation to the actual coverage rate. We assume they increase linearly. We then use the LiST model to assess the impact of herd immunity

				Effective Co	overage Rate
Coverage (%)	Very High	High	Medium	Low	Very Low
50	51	50	50	50	50
55	61	55	55	55	55
60	71	61	60	60	60
65	81	71	65	65	65
70	91	81	71	70	70
75	100	91	81	75	75
80	100	100	91	81	80
85	100	100	100	91	85
90	100	100	100	100	100
95	100	100	100	100	100
100	100	100	100	100	100

(same shown in chart form)



# Impact of Herd Immunity in the High Frontloading Scenario



As the chart below shows if the high herd immunity scenario is used herd immunity does have a modest effect on deaths averted – but it is not sustained in this scenario as it only models frontloaded funding which tails off by 2014.

#### **Overall Conclusion**

The impact of frontloading on health outcomes is influenced by the interplay of a number of factors. In short – it should not be assumed that frontloading will automatically improve health outcomes – a strong herd immunity effect and reduced vaccine prices (if resources and scarce/fixed) make a positive impact more likely.



### Annex 19: Advocacy and Communication

#### Introduction

In this section we summarise our evaluation of IFFIm's performance on advocacy and communication.

The evaluation maintains a focus on advocacy and communication that directly relate to IFFIm. Given IFFIm's role in meeting the funding requirements of GAVI, the evaluation considers the wider role of GAVI in communicating and advocating IFFIm's objectives.

The framework for the evaluation of advocacy and communication focuses on the extent to which advocacy and communication supports IFFIm's institutional goal in raising long term, predictable finance for immunisation. It determines the objectives of advocacy and communication interventions and considers the tactical efforts that have been taken to achieve these objectives.

IFFIm's success in raising frontloaded, predictable finance for immunisation is not in itself an indicator of the success of advocacy and communication interventions. It is a proxy indicator, as it cannot necessarily be proven that tactical efforts taken in advocacy and communication were themselves responsible for this success. The most robust method of evaluating advocacy and communication is to conduct a Knowledge, Attitudes and Practices (KAP) survey across all of the target audiences and stakeholder groups IFFIm seeks to influence. This ensures perceptions and awareness can be benchmarked and used as a direct indicator to measure communication inputs.

In the absence of a KAP survey, we evaluate the tactical efforts themselves, using factors such as audience perception, the quality and reach of media coverage, the alignment of messages with desired outcomes, audience focus and the effectiveness of the structures used to manage and delivery advocacy and communication. In this way, we can pinpoint whether there are concerns with the process, production or dissemination of advocacy and communication efforts.

The table below sets out the principal evaluation questions examined. We consider each question in turn before bringing the analysis together to draw conclusions about whether advocacy and communication have achieved added value and to draw lessons for future development. Information for this evaluation was drawn from a range of sources and interviewees from across the evaluation team. These include donors, investors, the IFFIm Board, the GAVI Secretariat, including all key communication and advocacy staff, and partner organisations.



1.	What are the objectives of IFFIm advocacy and communication?
2.	What is the approach to investor-focused advocacy and communication?
3.	What is the approach to donor-focused advocacy and communication?
4.	Have the messages and communication content been developed effectively?
5.	Have audiences been addressed and nurtured effectively?
6.	Have the structures to manage and delivery advocacy and communication been effective?
7.	Have the tactical efforts and tools to deliver advocacy and communication been effective?
8.	To what extent have advocacy and communication enabled IFFIm to realise its goals?

- 1. Objectives of IFFIm advocacy and communication
  This evaluation finds that, whilst IFFIm communication objectives are
  clear and the tools and tactics to achieve these objectives are specific,
  with the exception of media coverage reports, communications efforts
  appear to lack an evidence base for the approaches that have been
  selected. Further, there are no clear indicators against which
  performance of communication and advocacy inputs can be
  measured.
- 1.1 Respondents to this evaluation have noted that an original purpose of IFFIm was the need to "keep a conversation going beyond Gleneagles". From an advocacy perspective, IFFIm itself was a mechanism to present and discuss with donor countries their aid commitments. As the model developed, IFFIm became an innovative financial instrument to leverage long term donor commitments specifically for immunisation using liquidity to attract the investor community. IFFIm therefore, has the dual focus of appealing both to donors and to potential investors. Their behaviour, both in making long term financial commitments to IFFIm (donors) and in being attracted to purchase IFFIm bonds (investors) is critical to IFFIm's success. Seen in this way, advocacy and communication is central to the effective operation of IFFIm.
- 1.2 The objectives of IFFIm's advocacy and communication are seen in the context of meeting GAVI's funding goal. Therefore, advocacy and communication has to generate awareness and support among audiences whose decisions and actions can support this goal. The objectives of IFFIm advocacy and communications are therefore largely behavioural. In the



context of supporting IFFIm's success, advocacy and communication therefore have two main objectives:

- To create visibility among the investor community leading them to purchase IFFIm bonds
- To maintain and gain donor confidence and support in committing funds to IFFIm.

The IFFIm communications plan (2010)<sup>21</sup> list its communication objectives as:

- Raise visibility of IFFIm among investors as a responsible investment opportunity
- Further establish IFFIm's success and give credit to existing IFFIm donors
- Raise awareness among potential donors
- Educate and inform actors in the development, governmental, finance and health arena
- Anticipate and mitigate risks to IFFIm
- Increase visibility of IFFIm and GAVI among the population-at-large as possible investors in IFFIm bonds, supporters of their governments and donors to IFFIm and GAVI and possible donations directly to GAVI
- Promote the IFFIm Board and Board Chair Alan Gillespie in their role as leaders of this innovative financing initiative.
- 1.3 The expected outcomes of communications and media interventions for IFFIm are identified as:
  - Increased visibility of IFFIm in the media
  - Sustained support among IFFIm donors
  - Awareness among potential donors
  - Raised levels of awareness and support among IFFIm investors
  - Donors and other stakeholders providing funding to GAVI either directly or through IFFIm.

What is unclear from the Communications and Media Relations Plan is how these outcomes are to be measured in terms of the communications inputs that have been designed to achieve them.

- 1.4 The communication tactics and materials listed to deliver these objectives and outcomes are:
  - Speakers' bureau opportunities for IFFIm advocates to speak at relevant events
  - Press materials improving materials to reflect progress and results

<sup>&</sup>lt;sup>21</sup> IFFIm Communications and Media Relations Plan 2010

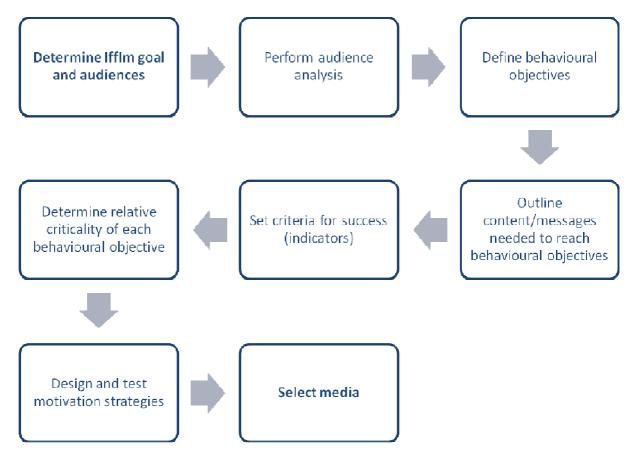


- IFFIm website development and integrating content of GAVI and IFFIm sites
- IFFIm updates approximately annual publications reflecting progress and results
- Special initiatives including film projects and video
- Field visits for key reporters.

In addition to those communication activities identified in the Communications and Media Plan, activities and tactics including those for advocacy also include:

- IFFIm Board advocacy and communication
- GAVI Advocacy Group dedicated to raising finance
- Joint marketing initiatives and materials on issuances with bond dealers
- Peer-to-peer donor advocacy and communication
- Donor meetings and stakeholder briefings
- Exhibitions and presentations created for donors and investors
- GAVI Donor Relations Team activities
- Road shows and launches on donor pledges and issuances
- Investor seminars.

A useful process model to guide advocacy and communication planning and delivery is described in the table below:





Investment in audience analysis will ensure that approaches to advocacy and communication could be pre-tested and benchmarked. Indicators can be developed around the intended outcomes of communication and advocacy activities. Given the scale of the IFFIm fundraising operation and its importance to the operation and reputation of GAVI, a commitment to regular stakeholder analysis would seem to justify the expense.

### **Recommendations:**

- i) Conduct annual audience analysis through a Knowledge Attitudes and Practices (KAP) survey in order to measure perceptions and test the value of IFFIm messages
- ii) Develop indicators against which the performance of advocacy and communication activities can be measured.
- 2. Investor-focused advocacy and communication

This evaluation finds that investor-focused communications have been successful especially in building support for developmental concerns. The role of the World Bank has been a critical factor in communicating issuances into markets. IFFIm has benefited in selling bonds from having a clear, single developmental purpose. This area of advocacy and communication has worked particularly well when GAVI has been able to work in partnership with dealers in communicating and marketing bonds and where face to face presentations and communication has taken place. It has also benefited when there has been clear and prior communication with the World Bank.

- 2.1 IFFIm advocacy and communication is largely focused on the investor market. Its core business is in selling bonds. This is accomplished through investor outreach by the World Bank that is augmented by the IFFIm Board and GAVI Secretariat. The effectiveness of this communication is evidenced through the bond issuing programme. Whilst it cannot be said that communication efforts have led directly to bond sales, there is evidence that investor-focused communication has a positive impact on investor audiences.
- 2.2 A key distinguishing feature of IFFIm is the opportunity it provides for developmental objectives to reach into financial markets. It provides a potentially invaluable opportunity to communicate with a completely new audience. Media analysis shows that significant amounts of media coverage are generated in the business and financial media. This is largely new territory for development communications and illustrates the potential value of IFFIm advocacy and communication.
- 2.3 The clear single purpose of IFFIm is attractive to investors. Feedback from Japan and elsewhere bears this out. It is reported that, in the realm of socially responsible investment, whilst the environment is regarded as the foremost issue in terms of importance, in practice the



effective and specific action that can be achieved through the purchase vaccine bonds attracts investors. In short, investors view the scope of other investments to be broader and less tangible.

- 2.4 IFFIm's socially responsible mission has been an important factor in marketing transactions to the investor community. According to dealers, this has enhanced participation, enabling dealers to mobilise both their investor base and their internal constituents. Dealers cite the clear vaccination mission and the fact that the bonds result in a specific outcome as a key selling point that has provided a point of differentiation in the market place.<sup>22</sup>
- 2.5 Moreover, the association to IFFIm and GAVI that investors gain is also important. There is clear reputational value in the association with a developmental purpose. Dealers have highlighted the importance of the connection to bonds that have a social mission during discussions with other borrowers and they have produced media coverage to raise awareness of both the IFFIm transaction and its mission.
- 2.6 The role of the World Bank has played a key role in the success of bond issuances. The World Bank not only provides confidence to investors, its experience in the market is seen as a critical factor by dealers. In its role as Treasury Manager, the World Bank is responsible for the communications into markets, through intermediaries, via the financial media and investors. The World Bank is seen to excel at communicating volumes, coupon rates into the markets and in receiving information from issuers.
- 2.7 There is strong evidence to suggest that there is significant added communication and advocacy value when partnership working takes place between IFFIm/GAVI and bond issuers. The entry into the sterling market in March 2009 with the issue of the HSBC Vaccine Investment Individual Savings Account (ISA)<sup>23</sup> and the Vaccine Investment Plan gained additional attention in the mainstream British media than would have otherwise been the case. The investment targets were exceeded when the offer was repositioned to attract institutional investors. Some respondents have noted that communication and advocacy value of public-facing ISAs is significant.
- 2.8 IFFIM Board Chair, Alan Gillespie and other Board members are regularly involved in road shows and investor meetings. The Chair's

<sup>&</sup>lt;sup>22</sup> HLSP Questionnaire to Dealers on IFFIm

An Individual Savings Account is a financial product available to residents in the United Kingdom. It is designed for the purpose of investment and savings with a favourable tax status. Money is contributed from after tax income and not subjected to income tax or capital gains tax within a holding or upon withdrawal.



presentation and persuasion skills are widely acknowledged to have a significant bearing on the success of IFFIm in appealing to investors.

- 2.9 The launch of the Kangaroo Bond in Australia demonstrates that the communication and advocacy work done by IFFIm/GAVI may have less effect on the sales of bonds themselves than on building positive relations with investors. A number of activities had been planned for the Australia launch, including road shows, meetings with investors and a media tour. These did not take place to the level at which they had been planned, yet the bonds sold. This has occurred elsewhere where there has been less IFFIm/GAVI activity in country for bond issuances.
- 2.10 The second bond issuance with Daiwa in Japan is an example of successful joint marketing and communication. With the cooperation of the World Bank, IFFIm/GAVI was able to liaise with the Japanese media, Japanese PR consultants, World Bank Tokyo and with the PR Department of Daiwa Securities. GAVI supported IFFIm in conducting a large number media interviews and supported senior representatives during presentations and road shows, attracting over 200 investors and senior figures. The success is all the more noteworthy given that Japan was neither an IFFIm nor a GAVI donor and neither were known in Japan.

#### **Recommendations:**

- iii) Conduct analysis among securities firms on attitudes to Corporate Social Responsibility (CSR)<sup>24</sup> and how helpful they are willing to be working jointly on marketing before entry into the markets
- iv) Ensure, where possible, that advocacy and communication campaigns are conducted around bond issuances and in partnership with bond dealers
- v) Consider whether the added public-facing communication and advocacy value of ISA launches is worth them being a strategic communications investment in their own right
- 3. Donor-focused advocacy and communication
  This evaluation finds that donor-focused communication of IFFIm
  benefits from broad communications around bond issuances. Peerto-peer donor communication is effective. Some donors, however,
  feel not enough focus is given to generating media in their home

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<sup>&</sup>lt;sup>24</sup> Corporate Social Responsibility is a form of corporate self regulation built into a company's business model. Its goal is to embrace responsibility for the company's actions and encourage a positive impact on the public sphere such as on environmental issues. The aims and objectives of IFFIm would be of interest to companies that have CSR policies and practices.



### markets and IFFIm communication to donor audiences is not sufficiently targeted towards segments of those audiences.

- 3.1 There is strong evidence to suggest that, where they are marketed to broad public audiences, bond issuances have a positive impact on donor-focused advocacy. The launch of the HSBC Vaccine Investment ISA and the Vaccine Investment Plan attracted key figures from Parliament, Embassies, the public and private sector. They were widely reported in the mainstream British media. Recognising the value of this advocacy, the then Secretary of State for International Development, Douglas Alexander MP, wrote to IFFIm in March 2009 saving:
- "I am writing to congratulate you on the successful launch of the HSBC Vaccine Investment Bond....I was delighted to read about the further innovation, that the IFFIm bond is available, for the first time, as a tax efficient ISA."
- 3.2 The HSBC ISA launch enabled IFFIm media coverage to reach into broader media markets in the UK. Of the media coverage generated and archived for the launch of the Bond, 78.5% reached into non financial media with the tone of the coverage overwhelmingly positive and emphasising the live-saving feature of the Bond. The GAVI Media and Communications team led on the media for this launch. To assist them in this task they hired a London-based PR firm, Biosector 2, to support marketing and communications around the HSBC launch
- 3.3 It is widely acknowledged that peer-to-peer donor advocacy and communication is important in maintaining and building commitments to IFFIm. It was the initial political will and communication led by the UK Government that persuaded the initial group of governments to back scheme. The UK Government's contact and discussion with the Australian Government helped to bring them into the IFFIm donor group. Initially, they were prepared to contribute to GAVI rather than IFFIm but have now become an IFFIm donor.
- 3.4 IFFIm donors meet during the year in order to ensure the accountability of IFFIm through the GAVI Board. At these meetings, IFFIm raises with donors what can be done in advocating to their own internal audiences. These meetings, led by the IFFIm Chair Alan Gillespie, are an important part of the advocacy and communication process.
- 3.5 It is worth noting that IFFIm communications was praised at the November 2010 IFFIm donors meeting. In the minutes of this meeting, Abigail Robinson of DFID "highlighted the media team's efforts on making IFFIm and its role clearer to a broader community and for presenting an IFFIm exhibit at DFID's offices, which generated considerable interest."
- 3.6 There is a regularly expressed complaint from donors that they do not see enough coverage of IFFIm in their home media markets. Media coverage at home is seen as useful in supporting government financial



commitments. Whilst a number of media activities have been successful, the coverage that is generated comes in peaks and troughs.<sup>25</sup> This is due to the fact that media activity for IFFIm, in the main, is focused on bond issuances. It is clear that generating media on such a complex issue is difficult. It is perhaps unrealistic for donors to expect significantly more coverage. The complaint from donors on not being visible in home media is a complex one. IFFIm is a complex financial instrument and is not a natural vehicle for broad mainstream media coverage, though there are approaches that will help to achieve this such as compiling reports on IFFIm investment and its innovative nature, developing more visits for journalists to see the impact of bond sales, and using IFFIm to spearhead more discursive pieces around innovative finance and ethical investment.

- 3.7 GAVI sees it as a core responsibility to ensure that IFFIm is a key part of the "GAVI story". However, some donor perceptions suggest that the IFFIm component may not be penetrating through GAVI work into donor-focused broader media. This raises the broader communication and advocacy question of whether GAVI support to IFFIm is providing adequate value for donors. This question is particularly important ahead of a new round of pledges culminating in the Pledging Conference in London in June 2011.
- 3.8 The issue of ensuring the appropriate segmentation of audiences within the donor community was noted by respondents in this evaluation. This means ensuring information and communication toolkits are packaged for different donor audiences. The communications and information for Ministries of Finance, for example, is necessarily more complex than those for Parliamentarians.
- 3.9 One important area of donor-focused advocacy designed to meet the challenges of the next phase of the development of IFFIm is through the creation of an advocacy group which aims to raise the \$3.7 billion shortfall in funds. This activity is planned to start in the first quarter of 2011.

#### **Recommendations:**

- vi) IFFIm must commit resources to ensuring a significant and increased focus on donor-focused media to promote continued commitments to IFFIm
- vii) Communications and advocacy should segment audiences for advocacy activities within the donor community
- viii) Develop specific communication materials and tool kits for the segmented donor audiences

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<sup>&</sup>lt;sup>25</sup> IFFIm Media Coverage Analysis



This evaluation finds that there is strong evidence to suggest that IFFIm messages that combine socially responsible investment with secure investment targeted are being absorbed by the investor audience. However, IFFIm must pay close attention to messaging and manage risk as it moves into a new phase of development.

- 4.1 The two strongest messages relating to IFFIm that emerge from this evaluation are that it is innovative and that it concerns developmental finance. A key communication benefit of the IFFIm model has been its innovative approach. IFFIm is seen at the leading edge of finance for development. This is acknowledged by donors, in the media and by partners in the GAVI Alliance.
- 4.2 IFFIm has also demonstrated the value of long term commitments to development. Never before have donors made 20 year legally binding commitments. In this respect, it is breaking new ground in terms of finance for development.
- 4.3 Its single development purpose has made it attractive to investors wanting to see specific impact from their socially responsible investment. This has been an essential message in differentiating IFFIm bonds in the crowded market place. Its supranational triple 'A' rating has communicated confidence and security to the same investors. The IFFIm Board and communications have powerfully made the case that, in supporting IFFIm, investors and donors are saving lives today, meaning that individuals and countries are healthier and more productive. In many respects the financial security of investing in IFFIm allied to the clear development message represents a win-win for the investment community.
- 4.4 For general audiences, respondents note that IFFIm is complex. It is a financial instrument that many do not understand. This factor has arguably hampered IFFIm from achieving broader public awareness. An area of public confusion is, reportedly, the manner in which IFFIm has raised money from the capital markets. Many see the IFFIm vehicle as a loan which has to be repaid, rather than using the markets to effectively liquidify government money.
- 4.5 In terms of messaging, IFFIm has had to manage transitioning though its development. At its inception, IFFIm was an instrument to deliver frontloaded finance. The communication of IFFIm necessarily focused on the potential of the investment vehicle. This message works well during period of growth. However, the IFFIm story potentially becomes harder to sell as money is being paid down and funds are not being used to but new vaccines.
- 4.6 Over the current and imminent period of IFFIm's development towards the Pledging Conference to be held in London in June 2011, it must seek to reposition itself as an ongoing investment instrument. IFFIm has performed better than many expected in terms of raising funds. In this



respect it is a success story. This period must seek to communicate IFFIm as effective in raising funds.

- 4.7 The political environment for IFFIm is challenging. How donors manage their development commitments is an important factor. It has been a perfect instrument for countries financing their budget through borrowing. IFFIm can be seen as an opportunity where large budgetary commitments can be made over a long period of time without immediate direct commitments. In emerging growth economies, such as Asia and the Pacific, the availability of funds may mean that countries do not see the need for IFFIm.
- 4.8 In terms of its image, IFFIm is seen in a more positive light than in the past. It has been noted by respondents that IFFIm has had to manage negative perceptions. Even relatively recently, (Hanoi 2009)<sup>26</sup> there had been concerns among donors and others about the cost of IFFIm. The resultant analysis<sup>27</sup> found costs to be lower than previously thought.

### **Recommendations:**

- ix) Develop a clear, evidence-based, messaging strategy designed to manage negative perceptions and transition for expansion or wind down of IFFIm
- x) Develop coherent, segmented messages that appeal to non technical and expert audiences
- xi) Regularly test messages with sample groups that are representative of target audiences.

#### 5. Audience focus and reach

This evaluation finds that IFFIm has been successful in bringing development messages to new investor audiences and notes that further work in this area can build investor advocates. However, the focus on the public and some donor audiences has been less successful. The evaluation notes and welcomes the planned efforts that are being taken to address this issue.

5.1 IFFIm has enabled an advocacy and communications reach into a new segment of stakeholders for development. It has accessed a number of important interests in the investment community. However, some respondents have questioned whether enough has been done to leverage the powerful voices in finance as advocates of IFFIm. The evaluation notes that this is an area actively being considered by GAVI.

<sup>&</sup>lt;sup>26</sup> GAVI Alliance Partners Forum, November 2009

<sup>&</sup>lt;sup>27</sup> Christopher Egerton Warburton



- 5.2 Feedback from the bond issuance conducted in partnership with Daiwa has suggested that it would be useful to assess the extent to which securities firms are supportive of corporate social responsibility objectives in order to more effective target markets with IFFIm bonds. This is evidenced by the fact that Mitsubishi was less interested in promoting the socially responsible aspect of the IFFIm bonds, focusing primarily on generating successful transactions.
- 5.3 It is important to note that the role and work of the IFFIm Board Chair, Alan Gillespie, in leading presentations and face to face communications has been especially praised. His narrative communicating the value of IFFIm and its ability to save lives has engaged investors and his leadership of IFFIm has generated confidence among donors. He is widely acknowledged to be an excellent communicator and one of the main reasons for IFFIm's success. It is also noted that he has high expectations of others and is ready to be critical of advocacy and communication activities.
- 5.4 Some donors have been critical of IFFIm, in particular with regard to addressing interests in their own national communities. The advocacy and communication requirements towards Parliamentary representatives are clearly different from those parts of government proactively involved in IFFIm. Yet political support at Parliamentary level is potentially critical in managing risk and building the case for continued commitment to IFFIm. This is an area where greater audience focus is likely to be required.
- 5.5 The GAVI Secretariat is aware that it needs to do more to achieve an advocacy and communication focus in donor countries. It aims to step up its media work in donor country media markets. It has also been developing alliances across the NGO community in order to broaden the supporter base around the case to increase funding for immunisation. GAVI is aware that the NGO community has influence with donor country governments and that it is relatively successful in gaining media attention. In January 2011, Save the Children launched its report, No Child Left to Die, which makes a powerful case to meet the £3.7 billion funding gap for immunisation. The launch of the report was the result of close communication between Save the Children and GAVI.
- 5.6 The NGO development community has been traditionally cynical about the markets as an instrument for development. Some NGOs have criticised IFFIm as effectively "mortgaging the future". GAVI has been nurturing civil society alliances in order to build its advocacy approaches to donors in making the case for continued support for immunisation. The IFFIm model, however, does not necessarily work well with the NGO networks.
- 5.7 Even among engaged audiences, perceptions can become problematic. Following the analysis of IFFIm costs carried out by



Chistopher Egerton Warburton, IFFIm now maintains a close focus on the cost data in order to actively support and manage donor perceptions.

#### **Recommendations:**

- xii) Develop alliances and target senior advocates among the financial and investment community for IFFIm
- xiii) IFFIm/GAVI should develop and conduct high profile media campaigns in donor country media markets
- xiv) IFFIm should consider testing support for corporate social responsibility in financial markets in order to improve the targeting of IFFIm bonds.
- 6. Structures to manage and deliver advocacy and communication This evaluation finds that the structures to manage and deliver communication for IFFIm are problematic and need attention to ensure improvement. The evaluation notes that resources spent on communication and advocacy are limited and they appears not to be in a sufficiently central or strategic role in relation to the IFFIm Board. If, as this evaluation recommends, advocacy and communication should become a higher priority IFFIm should consider committing additional resources in this area. It also notes that, despite the overall focus of GAVI on IFFIm messaging and communication, questions remain over the extent of integration that should take place. The evaluation notes that partnership working with the World Bank on communicating bond issuances has caused difficulties.
- 6.1 The IFFIm Communications and Media Plan states: "It is important to reiterate that GAVI considers the promotion of IFFIm as part of its regular media relations work."
- 6.2 IFFIm has no staffing overheads. Communication and advocacy is managed from within the GAVI Secretariat. Whilst there are staff within the Secretariat tasked with providing direct communication support for IFFIm, the operational responsibility for advocacy and communication for IFFIm falls within GAVI's remit. IFFIm, through the GAVI Secretariat, contracts PR companies and other specialist services to deliver agreed communications objectives.
- 6.3 It should be noted that, whilst the GAVI Secretariat provides communication and advocacy services to the IFFIm Board, there are limited resources committed to this area. A number of recommendations in this evaluation concern increasing the priority of communication and advocacy both to investor and donor audiences. This may be especially important as IFFIm moves into a new or expanded phases and with the need for a much more proactive role required in raising funds and gaining donor commitments. If this is to be the case, IFFIm and the Secretariat should consider committing additional time and resources to support these objectives.



- 6.4 It has been noted elsewhere in this evaluation that the IFFIm Board have led very effectively. They have no partisan or political interests, they are committed to the IFFIm mission and have good relations with the GAVI Board. The Board is active and is called upon to present at GAVI events and partner meetings. They are involved in presentations and road shows, working with bond dealers.
- 6.5 An important issue regarding the IFFIm GAVI relationship is that of integration. GAVI states clearly that IFFIm is a cornerstone of its "story". GAVI's approach to advocacy and communication acknowledges the importance of IFFIM as a vehicle that helps to define it as innovative. GAVI incorporates communication of IFFIm into much of its work. However, it is important to note that, despite the size and importance of IFFIm to GAVI and in its own right, the human resources dedicated specifically to IFFIm are relatively small. Respondents to this evaluation state that IFFIm's strategy has been insufficiently integrated with GAVI's strategy. IFFIm has had distinctive communication products, including its web site and publications. Recently, there have been attempts to increase the integration of IFFIm and GAVI. This has developed under the Innovative Finance aegis and has led to new communication materials, including a brochure, exhibition and updated DVD produced in 2010.
- 6.6 Respondents have raised the issue of whether IFFIm would have been better served by a separate structure with its own staffing including for communications and advocacy. Frustrations have been expressed that the IFFIm Board does not, in effect, have its own team which it can direct. Clearly, the creation of a separate IFFIm structure, including a donor relations, marketing and advocacy functions would potentially double parts of the infrastructure and costs. However, for some, the management of the IFFIm-GAVI relationship presents challenges in terms of focus, strategy, roles and responsibilities.
- 6.7 It is questionable whether advocacy and communication is sufficiently central to IFFIm planning and strategy. More than one respondent noted that communication can be seen as an afterthought and that it is not built into IFFIm decision making. This disjointed approach and the perception of distance between the IFFIm Board and communication functions can lead to a lack of communications challenge of IFFIm decisions and strategy in order to manage external risk.
- 6.8 There is an acknowledgment in the Communication and Media Relations Plan that the promotion of IFFIm is seen as part of the World Banks' "regular communication with the financial community and donors and communicates and/or gives updates on the IFFIm story to



intermediaries, investors and the specialised financial media."<sup>28</sup> However, this role does not appear to be clearly defined.

6.9 Concerns have come to light through this evaluation of communication difficulties between the World Bank and the GAVI Secretariat. The Treasury Management Agreement<sup>29</sup> which sets out the terms of operation does not specifically mention communication protocols around the promotion of bond issuances. It does, however, state the reporting requirements of the World Bank to the IFFIm Board. It states:

In addition to providing the Treasury Manager Report, the Treasury Manager shall:

- 17.3.1 at least once each calendar quarter, discuss information with the board of directors of IFFIm or a Committee, as relevant, in relation to the international capital market environment with respect to the immediately preceding Relevant Funding Period
- 17.3.2 at least once each calendar quarter, discuss information with the board of directors of IFFIm or a Committee, as relevant, in relation to liquidity matters;
- 17.3.3 once each 1-2 month period, discuss information with the board of directors of IFFIm in relation to matters of mutual concern that may be relevant to IFFIm over the next 1-2 month period.
- 6.10 In April 2009, the World Bank wrote to IFFIm outlining its concerns, including in the area of communication. Citing the cost to the Bank of communication campaigns promoting GAVI alongside each bond issue, the Bank said:
- "...it would be helpful to draw a clearer line between IFFIm and GAVI. IFFIm's own communications should focus on efficient fundraising for IFFIm. GAVI should focus independently on marketing itself."
- 6.11 A particular issue of concern to both parties is the communication around specific bond issuances. The point has been raised that GAVI often appears to be "shut out" of bond issuances. This, according to respondents, may be because the World Bank is protective of its relationships and that it fears that issuances may be put at risk. The Bank believes that the technical aspects of issuing bonds are such that it can be difficult to plan, as much depends on market conditions and specific instruments. However, the World Bank appears to be applying the terms of the Treasury Management Agreement to the letter.

In its communication of April 2009 to IFFIm, the World Bank states:

<sup>&</sup>lt;sup>28</sup> Communications and Media Relations Plan

<sup>&</sup>lt;sup>29</sup> Treasury Management Agreement



"With respect to communications around IFFIM bond deals, we should return to the original structure under which the Bank exclusively manages the relationship with IFFIm's lead managers, including all marketing activity. GAVI would give its general permission to use certain content from brochures, photos and other materials, including the IFFIM video, to market IFFIM bonds. The Bank would of course keep GAVI informed of upcoming transactions and, in appropriate circumstances (such as the HSBC and Daiwa transactions), arrange for GAVI to have the opportunity to use bond-issue marketing to showcase GAVI achievements.

6.12 It does appear that the Bank sees its primary role and communication focus as arranging the bond deals. It is clear that the World Bank is extremely successful in this task. The GAVI Secretariat, however, sees a broader opportunity to gain media coverage and conduct advocacy both to financial markets and to broader political audiences where bonds are being issued. There is clearly no specific benefit to the Bank in promoting GAVI. It is clear that there have been differing expectation of the roles of the Treasury Manager and the IFFIm Board.

#### **Recommendations:**

- xv) Ensure advocacy and communication is central to IFFIm strategy and planning activities and provide the staffing and resources to support increased efforts
- xvi) Develop clear communication protocols communication around bond issuances between IFFIm and the World Bank
- xvii) Create an IFFIm/GAVI/World Bank/Issuer communication task team ahead of Bond Issuances
- xviii) Consider appointing a Communication Officer to work with the World Bank to support information flows.

### 7. Tactical efforts and tools

This evaluation finds that IFFIm brand logo is not maximising the potential for IFFIm to communicate its value nor its impact and that the brand logo is complex for a general audience. It also finds that creative approaches to communication, especially those that focus on the impact of funds raised for IFFIm reach beyond business and financial media. Moreover, the evaluation notes that media coverage is largely focused around bond issuances and launches. The IFFIm website, currently being redeveloped, should ensure it contains specific and practical information for investors alongside development messages known to appeal to investors and broad audiences.

7.1 A key tool designed to communicate IFFIm is its brand. Donor comments include those suggesting that the IFFIm brand needs to be changed. IFFIm is an acronym and the IFFIm logo which should articulate the brand does nothing to explain the acronym. Currently the brand logo is accompanied by the words "supporting GAVI". This introduces a second acronym which, arguably, further complicates the brand. It is therefore



possible to conclude that, as it currently constituted, the IFFIm brand logo is limited in its communication, most probably appealing only to those audiences that already have an understanding of IFFIm or GAVI. The strap line supporting the brand logo may benefit from emphasising the strong 'selling' points of IFFIm, i.e. innovative finance and developmental impact.

- 7.2 Comments regarding the IFFIm brand include those that it has not sufficiently connected with audiences. One respondent has suggested that the IFFIm and GAVI brands should be further integrated, potentially forming one single brand logo. However, both legally and from a communication perspective, it is important to make the clear distinction that it is IFFIm and not GAVI that raises money on the capital markets.
- 7.3 In July 2009 on IFFIm's behalf, GAVI, in conjunction with an independent TV production company, Rockhopper, proactively produced a film about its role in purchasing life-saving vaccines. The film was screened to air on BBC World six times reaching a potential global audience of 280 million for each screening. The high quality film, entitled Kill or Cure? Aid Traders<sup>30</sup>, was also cut as a short film for use in presentations and web sites. The potential reach of such broadcasts represents the potential of IFFIm, when creatively communicated, to reach public audiences. These tactics show that IFFIm communications does not necessarily need to focus primarily on bond issuances.
- 7.4 In March 2009, to coincide with the launch of the HSBC Vaccine Investment Bonds and ISA, GAVI, on behalf of IFFIm, took personal finance journalists to Sierra Leone to see the vaccinations being made as a result of IFFIm fundraising. These journalists regularly report on ISAs and personal savings. The resulting coverage ensured first-hand development messages gained significant coverage in financial media.<sup>31</sup> The initiative effectively connected the financial instrument with the impact it has, making a powerful case to potential investors who may be considering investing in the HSBC issue. This initiative represents a strong and effective example of how to use bond issuances to deliver imaginative communications.
- 7.5 GAVI has produced five Update publications since April 2007. The Updates provide information on donor pledges, bond issuances, financial and health impacts. They are produced on average once a year, with two Updates produced in 2007. They are produced in several languages and are designed to provide general information in a news-style for the non technical audience. They are produced for donors to distribute to their own audiences, though the opportunity to obtain more copies is rarely taken up. The principal observation of the IFFIm Updates is that it is unclear to whom they are targeted within the donor community. This publication would

<sup>&</sup>lt;sup>30</sup> http://www.rockhopper.tv/gavi/programmes.aspx?ProgrammeID=263

<sup>31</sup> http://www.guardian.co.uk/search?q=IFFIm+Sierra+Leone&section=



appear to be best focused towards general audiences among the financial and donor community.

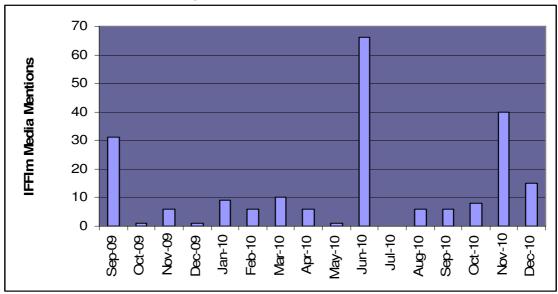
- 7.6 Joint initiatives with bond dealers have demonstrably contributed to improved advocacy and communication outcomes. Though it is not possible to assess their direct contribution to the sales of bonds, work with HSBC and Daiwa has been recognised by investors and donors as valuable. The use of the local expertise provided by dealer marketing teams and PR support is also seen to have improved the targeting of promotional material and media relations. Anecdotally, the power of the public-facing communication generated through the HSBC Vaccine Investment ISA, using promotional materials in banks, is regarded as valuable in reaching new audiences at point of sale.
- 7.7 The IFFIm website is not viewed positively, in particular by donors. Donor comments about the IFFIm website include the view that it is not sufficiently investor focused and concentrates too much on the GAVI story. Other comments criticise its lack of useful information and the fact that it is not updated. Plans to improve and refocus the IFFIm website have been delayed, reportedly due to developments in GAVI's own website and information technology issues. This has caused frustration within the IFFIm Board. The IFFIm website may make more of its key strengths in its innovative use of finance, success in raising funds and developmental purpose.
- 7.8 In November 2009, an external agency reported the results of website user survey<sup>32</sup> which interviewed respondents from DFID, GAVI, IFFIm Board, the World Bank, KPMG and Slaughter and May. The findings showed that the IFFIm website needed to change to focus on IFFIm activities, information for investors, recognition of donor governments and use of raised funds. A new IFFIm website is in production and will be ready for use by May 2011.
- 7.9 IFFIm media coverage has mainly centred on launches and bond issuances. The launch of IFFIm, reported on 7 November 2006, generated significant media coverage particularly in the UK. Given the Pope's and Bono's involvement in purchasing the first bond and the UK Chancellor's particular involvement, coverage was extensive and not primarily in finance media. Of the 130 monitored articles and broadcasts, 45% primarily emphasised the innovative nature of the mechanism, 25% led with the religious connection to the Pope, whereas 30% led prioritised health and development issues. Whilst the launch of IFFIm was clearly a unique and significant event, the extent and reach of the coverage shows the value of government support on media initiatives as well as the reach of prominent figures.

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<sup>&</sup>lt;sup>32</sup> GAVI Alliance: IFFIM website research, Flow Interactive Ltd (Nov 2009)



7.10 For this evaluation we have conducted an analysis of archived media coverage<sup>33</sup> relating to IFFIm for the period September 2009 to December 2010. Over the period, a total of 70 press and web-based articles were archived. The overwhelming majority of articles present a positive image of IFFIm. There were significant peaks in the coverage (September 2009; June 2010 and; November 2010) with extreme troughs in between. 51% of articles referenced IFFIm positively as an innovative financing mechanism. The number of articles promoting IFFIm as a success in raising money or in raising investor confidence rose over the survey period. The analysis also shows that association with prominent figures helps to increase coverage. The table below illustrates the uneven nature of IFFIm media coverage.



#### **Recommendations:**

- xix) The IFFIm brand logo should be reviewed and redesigned during 2011 to clarify its purpose and communicate impact
- xx) IFFIm/GAVI should consider developing creative media approaches outside of bond issuances, including field visits for reporters, research reports, debates on innovative finance and the use of prominent figures
- xxi) The redevelopment of the IFFIm web site should ensure a clear investor focus, promoting issues known to have an impact on investor decisions.

<sup>&</sup>lt;sup>33</sup> IFFIm media coverage analysis



#### 8. Results and added value of advocacy and communication

Overall, this evaluation assesses IFFIm advocacy and communications positively. There are excellent examples, recognised by donors and investors themselves of effective communication initiatives and advocacy efforts. The evaluation recommends the next phase of IFFIm's developments will require more focus and investment in these areas to maintain and build donor support and to broaden the investor supporter base. The evaluation recommends that management arrangements improve, ensuring advocacy and communication is more central to strategy going forward, that a more robust approach is taken to communication planning and measurement to understand audience perceptions and the value of inputs, and that increased efforts are made to communicate both to donors, especially sub groups thereof, and investors, especially to develop a broad support base for IFFIm and responsible investment.

The key demonstrable results and added value of advocacy and communication for IFFIm have been:

- 8.1 The work of the Board, and Board Chair as a strong figurehead, in communicating and advocating for IFFIm have been widely recognised as impressive. Bond dealers, donors and the GAVI Secretariat in particular all note the leaderships, communication skills and powers of argument that the Board has displayed both at donor meetings and around bond issuances.
- 8.2 The association with the World Bank, its ability to communicate into the markets and ensure confidence has been critical to the success of IFFIm in raising funds. The World Bank manages complex and technical communications that ensure bond issuances are launch and sold successfully.
- 8.3 Media coverage around certain bond issuances has been significant. When IFFIm/GAVI is able to develop proactive media relations and advocacy campaigns, the results can be seen in the levels and reach of media coverage. Work in this area is particularly effective when conducted in partnership with bond dealers.
- 8.4 IFFIm communications has enabled a significant reach into business and finance media. This has ensured a strong development message reaches new audiences. Whilst its direct impact on the sales of bonds cannot be proven, investors and dealers report strong support for the purpose of IFFIm bonds and association with IFFIM/GAVI.
- 8.5 Broad and creative communication for IFFIm, including around bond issuances, has acted as an important advocacy tool. Evidence of the HSBC ISA launch and of specific creative media initiatives demonstrates that the



IFFIm message can communicate to wider audiences and support donor focused advocacy.

- 8.6 The IFFIm model communicates strong messages to investors and donors. Its message of innovation has been widely recognised as an essential component in the positioning of GAVI. Its clear, single developmental purpose is a strong message for investors.
- 8.7 Peer-to-peer donor communication has been critical in building support for the IFFIm model before its launch and in attracting new donors into IFFIm. Strong political will and commitment has ensured that IFFIm has been an advocacy instrument to maintain and build long term donor commitments to development.

#### 9. Lessons for future development

IFFIm is entering a period of potential transition. There are two broad scenarios that IFFIm faces, each with its own set of communication challenges. The first scenario envisages IFFIm running down as donors repay commitments. The second see IFFIm entering a period of expansion as new long term pledges are made from mid 2011.

- 9.1 If IFFIm funds start to be paid down with no new pledges made by donors, there is a serious risk that the IFFIM and GAVI story becomes extremely difficult to sell. It becomes difficult for donors to justify expenditure that is not buying new vaccines to their own publics. This issue is given added pressure when there are budgetary constraints. The media and public is likely to be more critical of resources be used to pay down previous vaccinations. In terms of messaging, the media and public may be attracted to the idea that their future was mortgaged by previous governments, whether or not this was the case. Different political parties will be able to blame previous governments for these commitments. This also makes IFFIm/GAVI communications and advocacy challenging as, publicly at least, this may lead to donor country criticisms of the IFFIm model. Key communications tasks to manage this scenario include:
  - Ensuring the full story of the benefits of frontloading is communicated in donor countries
  - Ensuring messages on financial efficiency are prominent
  - Bringing the GAVI story to the fore on the health impacts of vaccination, especially with civil society groups.
  - Pre-emptive advocacy work with donor countries to minimise negative messages
  - Direct communication targeted at Parliamentarians in particular to build positive perceptions of the IFFIm model
  - Setting IFFIm in the context of having spearheaded new and innovative approaches to financing for development
  - Orienting senior advocates towards making the case on health impacts achieved through IFFIm funds.



9.2 The second scenario envisages IFFIm expansion. If this takes place, then IFFIm has to demonstrate that it is a current and ongoing investment vehicle. It is worth noting that IFFIm/GAVI have developed advocacy approaches to manage the extension/expansion scenario. Resource mobilisation strategies have been in operation since the high level meeting on Financing Country Demand in March 2010. In this scenario, IFFIm has to move beyond perceptions that it is a "one time" instrument for investing in development. However, it also presents communication challenges that are political in nature. In the current financial climate, encouraging countries to make long term commitments may prove difficult. However, it may be seen by countries as a palatable methods of making large budgetary commitments without committing funds immediately. Those countries without large budget deficits, however, may not see the need for IFFIm given that they have immediate funds to spend. These countries may be encouraged to make direct grants to GAVI. The former group of countries, with large budget deficit, can be presented as large donors to GAVI over a long period of time. Thus, they can reap the communication benefits of this commitment in their home media markets. Key communication tasks to manage this scenario include:

- Positioning IFFIm as a vehicle that enables donors to maintain their commitments
- Developing strong advocacy networks in potential donor countries to build the case for continued commitments
- Increasing IFFIm awareness in donor media markets
- Managing potential negative perceptions on value for money and cost
- Developing strategically targeted bond issuances in target countries
- Building expert advocates in finance and development to make the case for expansion
- Enhancing and investing in IFFIm advocacy and communications, including website, toolkits for segmented donor audiences and impact reports.



#### Annex 19.1

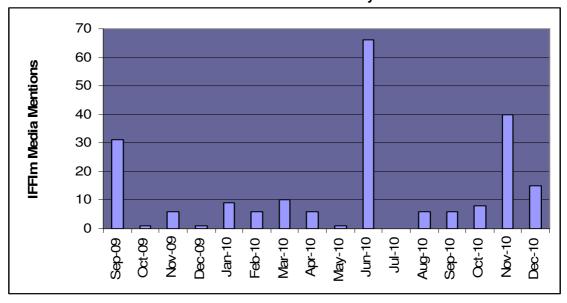
#### IFFIm Media Analysis (September 2009 – December 2010) IFFIM MEDIA COVERAGE ANALYSIS Introduction

The following brief document provides analysis of a total of 70 press/web-based articles referring directly to IFFIm (by name or inference) published between September 2009 and December 2010 and collated by GAVI. It considers both content and origin/source of the articles, makes recommendations designed to promote the overall objectives of IFFIm and looks beyond to consider the role of media communication in promoting IFFIm.

#### **Main Findings**

- The overwhelming majority of articles presented a positive image of IFFIm and only two of the 70 were negative (see below).
- Coverage crossed a range of media from major national newspapers and international news agencies to news websites such as the Huffington Post, environmental media like Earth Times and niche media covering medicine to finance/investment.
- Quantity of IFFIm coverage was very uneven, with significant peaks in Sep 2009; June 2010 and Nov/Dec 2010 and 'lulls' in the intervening periods (including one month where there was no coverage at all) See table one below:

Table One: Media Mentions of IFFIm Over the Survey Period

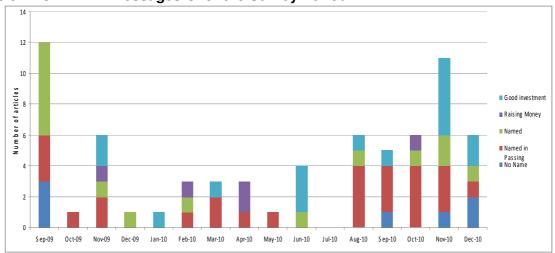




NB: Media mentions include multiple IFFIm references within one article

- 10% of articles referred did not mention IFFIm by name, using other reference points (such as GAVI). A further 39% of articles referred to IFFIm by name but only in passing.
- 51% of articles referred positively to IFFIm by name, frequently referring to it as an 'innovative funding mechanism'. Many of these articles (21 out of 36) specifically referred either to IFFIm's success in raising money or were likely to promote confidence in bond investment (see Table Two).





- The number of articles promoting IFFIm as a success (either because it was succeeding in raising money for vaccinations or it because of investor confidence in the bonds) rose over the survey period (see Table Two)
- Association of IFFIm with key major figures (the Pope and Raj Shah of USAID) has helped secure coverage.

#### **Message Analysis**

Media coverage over the survey period overwhelmingly presents a positive image of IFFIm as an innovative financial mechanism

The majority of articles which encourage confidence in IFFIm bonds (either by referring to the triple A rating or by generally promoting confidence in the bonds) arose in the second half of the survey period. In the first eight months there were just four such articles against a total of 12 articles in the following eight months.



A selection of references from the 12 articles, published by some of the most respected financial institutions/commentators, is provided here:

- Nov 09 -Times online "leading fund managers report that investors see compelling investment arguments for thematic funds that invest in companies which provide solutions to environmental and social issues"
- Nov 09 Luxembourg Stock Exchange "LSE expresses its full support for the various initiatives in the field of social responsibility investment"
- World Bank "IFFIm has established itself as a supranational institution and its bonds are triple A rated."
- June 2010 FT blog IFFIm as proof that capital markets can be put to use for the greater good
- June 2010 HSBC release investors get another chance to buy vaccine bonds – 'unique opportunity to invest savings and save lives of children'
- Aug 2010 FT.com IFFIm partly responsible for rise in rise in assets of Ecclesiastical Insurance

This is the overwhelmingly positive picture generated by media coverage. The exceptions include an article in Pampazukanews.org, in which the deputy director of UN's Millennium Campaign Africa commented that rich countries were reluctant to make significant commitments to IFF.

The only other negative article, published on the ISN Insights website, states that "the chief drawback of the IFF mechanism is that frontloading reduces the amount of available assistance by incurring interest and commissions". The piece continues though "However, the return to the beneficiary countries is expected to outweigh these additional costs".

#### **Sources Analysis**

The 70 articles included coverage from very significant sources including major nationals titles such as the Guardian, FT and Times in the UK and the Malaysia News, South Africa Times and Japan Today. There were a number of articles published by international news agencies including one by Bloomberg and several by Reuters. Specialist media ranging from the Earth Times and UK medical media, the Lancet and BMJ and medical finance website, Scrip Intelligence.

However, it should be noted that nine out of 70 cuttings were actually GAVI press releases/statements and another nine 'articles' were press releases issued by range of organisations including Australian, Japanese and UK governments

#### **Observations**



The fact that more than a quarter of the articles included the cache are press releases slightly undermines the robustness of media analysis— not least because there is little or no evidence of whether these releases were actually picked up by the media. Further the cache also only deals with print articles and does not reflect broadcast coverage.

Nevertheless, the size of the sample and the clarity of some of the findings provide useful points for consideration, particularly around the value of more coherent media planning.

Most effective media communication is based on a proactive strategy which promotes a steady flow of media articles to build awareness of a product/set of messages over a period of time.

However, while messages about IFFIm clearly evolve over the survey period (see Table Two) media coverage itself is spasmodic and appears to be largely event driven and reactive, coinciding with bond issues, new donor commitments or statements from other organisations, with significant lulls in activity in between the two or three coverage peaks.

On the surface, this may not look like a problem. After all, what can possibly be wrong with IFFIm communication efforts when the bonds are selling in large quantities and more countries are signing up as donors?

The issue here is that, while initial success of the bonds is likely to have been driven by communication channels operated by the World Bank and the financial institutions, future sustainability of the mechanism is likely to rely more heavily on involvement of the general/financial media.

Existing donor nations will continue their support, and new donors will be attracted, where they can clearly see public acknowledgement of their support/the reflected glory that widespread coverage in the general news media can bring.

Further, if IFFIm wants to expand in the future, the general media will be a much more important communication tool because new audiences are unlikely to have access to the channels operated by the World Bank and will need more than a the knowledge of a triple A rating to persuade them to part with their money.

There are real opportunities here – not least by harnessing the power of the general media to both inspire and reflect a cultural shift in the way ordinary people – and charitable trusts - invest their money, ultimately developing nations of socially responsible investors.

Communication of IFFIm through the general media then becomes about creating a context in which socially responsible investment by whole populations can thrive – with IFFIm seen as the leader and the single greatest success in terms of both personal profit and social impact.



A final thought. Beyond the issues of the robustness of the survey sample, lies a much bigger question. Even having exhaustively gathered every single piece of media IFFIm coverage (including the fruits of press releases and broadcast articles) there is still a need to prove that those articles had actually influenced views of IFFIm amongst key audiences?

Testing the value of IFFIm media coverage then ultimately becomes a job of measuring the impact of coverage on the two critical audiences – donor governments and potential investors by:

- 1. Asking donor governments to identify whether they would have agreed to become donors without the opportunity to 'be seen' as socially responsible i.e. does or has media coverage on their donor commitment affect their enthusiasm for IFFIm?
- 2. Asking investors to state whether the general media (and other general communication mechanisms) had or would have any influence on their decision to invest beyond the information they will automatically have received through the World Bank. Has general communication about IFFIm created a 'mood music', encouraging investors to choose vaccine bonds above other Triple A opportunities?

#### Recommendations

- Develop and deliver a survey to test the extent to which the two key audiences identified in the previous section have been/or are likely to be influenced by positive media coverage of IFFIm.
- 2. Develop a coherent media strategy which clearly supports the overall IFFIm objectives and which is based on the findings of the above survey.
- The strategy should promote simple messages about IFFIm which capture its innovatory nature; the critical role of national governments; IFFIm success in actually saving lives; and the genuine investment opportunity which bonds present.
- 4. The strategy should be driven by a comprehensive media plan which ensures a steady and constant flow of news, building up awareness of IFFIm amongst key audiences in target countries over time.
- 5. As well as events such as new bond issues/donor statements, the media plan should be driven by, for example,:



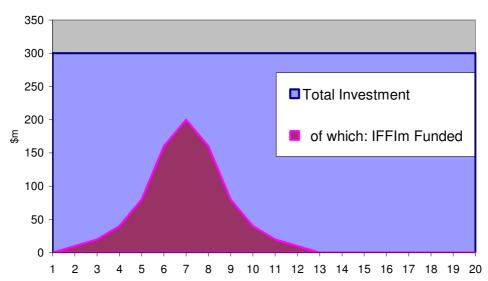
- Statements of support from third party advocates (as in the case of articles inspired by the Luxemburg Stock Exchange article quoted above or the Pope's symbolic bond purchase)
- Milestone events covering the amount of money pledged/raised, the number of vaccinations supplied/nations signing up as donors
- Features articles in leading national lifestyle media which uses IFFIm as a case study to explore the phenomenon of socially responsible investment – not simply by investors but, increasingly, by members of the public.
- 6. Evaluation of future media coverage to endeavour to capture broadcast coverage and the results of press releases.



### Annex 20: Illustration of Sustainability Challenges

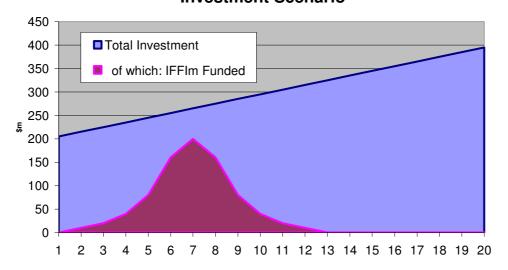
As the following schematics suggest an IFFIm type model might be better suited to an organisation where overall funding needs are constant (scenario 1), where it meets a one off investment need (scenario 3) or where funding needs are declining (scenario 4) rather than an organisation in GAVI's position (scenario 3). Our understanding is that GAVI is intending to use IFFIm funds to "time shift" rather than frontload – to meet large costs associated with the uptake of new vaccines – whose timing is not always clear. Such a targeted use of such funds (more related to scenario 3 below) would, in principle, appear to be a more appropriate way of using IFFIm funds in future that the mix of targeted/general approach used to date.

Scenario 1: Frontloaded Funds in a Stable Investment Scenario

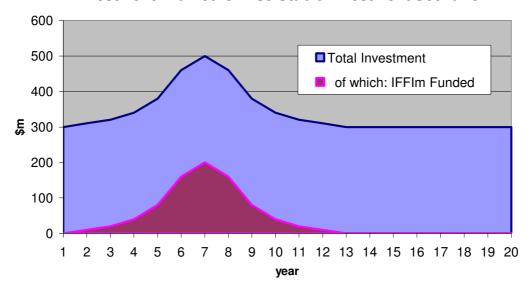




Scenario 2: Frontloaded Funds in a Growing Investment Scenario

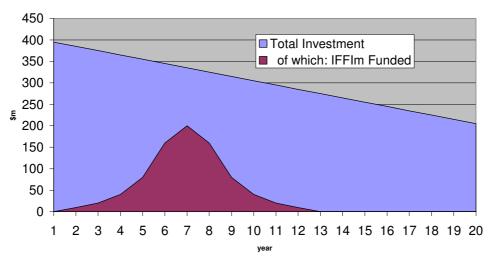


Scenario 3: Frontloaded Funding as a One Off Investment in an otherwise Stable Investment Scenario

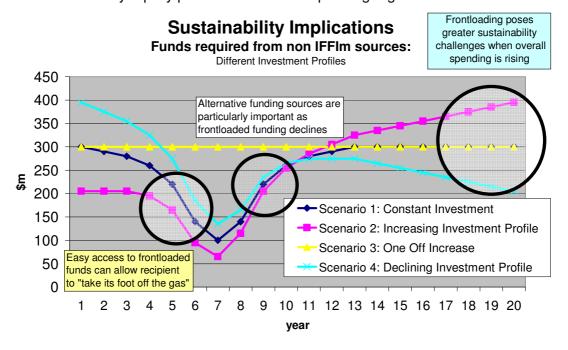




Scenario 4: Frontloaded Funding within a Declining Investment Scenario



The financing implications – and the need for non IFFIm sources to meet expenditure needs - are mapped out in the figure below. In all of the scenarios – except scenario 3 - frontloaded funding reduces any funding gaps in the short term. In the medium term the funding gap increases for all scenarios except scenario 3. However, it continues increasing under the increasing investment scenario (the one that best describes GAVI's use of IFFIm whilst it plateaus and even declines (under the declining investment scenario). It shows clearly that outstanding funding needs are highest – and can rise extremely rapidly post IFFIm - for an expanding organisation.





# Annex 21: Estimates of IFFIm Share of Future Deaths Averted – WHO Approach

IFFIm funding is available by vaccine not by disease. It is necessary therefore to assess the extent to which different vaccines provide cover for the different diseases

Table 1 shows the IFFIm share of GAVI funding by vaccine between 2006 and 2010. These figures are based on data provided by the GAVI Secretariat Finance Department. It shows, for example, that IFFIm provided 63.73% of funding for pentavalent vaccines between 2006 and 2010. We took and average of the period as there were, in some cases, reallocations of funds between years

Table 1

IFFIm Share of GAVI Funding									
	Нер В		Pentavalent	Pneumo	Tetra -	DPT Hep B	Tetra - DPT Hib	Yellow Fever	
2006	18.31		34.73	-	34.40		-	43.77	
2007	36.33		63.84	-	83.56		71.78	37.07	
2008	20.17		55.54	-	-	1,356.64	75.54	14.15	
2009	-	0.56	79.03	-	86.43		88.20	36.00	
2010	1.14		67.28	11.37	-		-	98.20	
Average	24.41		63.73	10.89	55.40		59.38	41.18	

We then applied these figures to the number of doses ordered (as a proxy for coverage). The table below shows the total number of doses ordered between 2006 and 2011 (projected) by vaccine. It shows for example that pentavalent accounted for over 80% of the DPT coverage between 2006 and 2011.

Table 2: Total Doses Ordered 2006-2011

	DPT	Нер В	Hib	Pneumo	IFFIm Share
Penta	305,879,340	305,879,340	305,879,340		63.73
DTP Hep B	71,488,398	71,488,398			55.40
DTP Hib	1,214,082		1,214,082		59.38
Hep B mono		4949,878,813			24.41
Pneumo				3,732,492	10.89
Total	378,581,820	427,246,551	307,093,422	3,732,492	

Source: GAVI Secretariat

Applying these figures to the share of IFFIm funding for the different vaccines we estimate the IFFIm share of coverage by disease as follows.



Table 3: Estimated IFFIm contribution by Disease

Weighted Average				
	DPT	Нер В	Hib	Pneumo
Penta	51.49	45.63	63.48	-
DTP Hep B	10.46	9.27	-	-
DTP Hib	0.19	-	0.23	-
Hep B mono	-	2.85	-	-
Pneumo	-	-	-	10.89
	62.15	57.75	63.72	10.89

These are then applied to the WHO estimates of GAVI supported future deaths averted

Table 4: Estimated Impact of GAVI and IFFIm funding

	Pertussis	Hib	НерВ	Rota	Pneumo	Total	Cumulative
					coccal		
2000						-	-
2001	2		5			7	7
2002	5	18	279			303	310
2003	16	20	348			384	694
2004	36	26	386			449	1,143
2005	60	29	430			519	1,661
2006	74	37	460			572	2,233
2007	68	62	358			488	2,721
2008	67	73	397	0.1		538	3,259
2009	82	145	367	0.2		595	3,854
2010	64	150	375	0.3	8	596	4,450
2011	14	135	365	8.0	36	551	5,001
Total GAVI	488	695	3770	1.4	44	5,001	
Total GAVI 2006-11	369	602	2322	1.4	44	3,340	
Total IFFIm 2006-11	229	384	1,341	-	5	2,076	

#### The WHO Model in Detail (source October 2010 Progress Report

#### **Pertussis**

Following the model described in Crowcroft and others (2003), the proportion of susceptible children becoming infected in countries with poor vaccination coverage (average over last 5 years <70%) at 30% by 1 year, 80% by 5 years, and 100% by 15 years of age and for countries with good



coverage (>= 70% average over last 5 years) at 10% by 1 year, 60% by 5 years, and 100% by 15 years. Vaccine efficacy was estimated at 80% for preventing infection and 95% for preventing deaths. Case fatality ratio in low mortality countries is assumed to be 0.2% in infants , 0.04% in children aged 1-4 years, and 0% in those over 5 years of age. In high mortality countries, the CFR

is assumed to be 3.7% among infants, 1% among children aged 1-4 years, and 0% in those over 5 years of age.

#### Hepatitis B

We employ a model that estimates the age- and sex-specific mortality that hepatitis B surface antigen (HBsAg) carriers experience due to HBV associated hepatocellular carcinoma (HCC) and cirrhosis and also acute HBV related deaths are assumed to be on the order of 10% of chronic deaths. Deaths from other chronic sequelae of HBV infection, such as chronic active hepatitis, are assumed to be relatively small and ignored in this model. Generally, the model operates by assuming that at any given age, the number of hepatitis B related deaths is modeled by the following relationship:

$$Deaths_{\text{Age j,Sex i}} = Survivors_{\text{Age j,Sex i}} \times P_{\text{HBsAG}} \times R_{\text{Risk of Death from Hepatcellular Carninoma or Cirrhosis for Age j, Sex i}} \times R_{\text{Risk of Death from Hepatcellular Carninoma or Cirrhosis for Age j, Sex i}}$$

As explained by Gay et al. the estimate of the risk of death from hepatocellular carcinoma (HCC) and cirrhosis in HBsAg carriers is based on incidence data of HCC and cirrhosis recorded between 1988 and 1997 by the National Cancer Registry of the Gambia as well as a prospective study from Taiwan (Beasley et al). The age- and sex-specific mortality rates for HCC and cirrhosis were assumed to equal the incidence of these conditions, as the life expectancy of most cases is short. In the base case, where the average of the rates derived for Taiwan and the Gambia is used, 27% of male carriers and 9% of female carriers would be expected to die from hepatitis before the age of 75 years, in the absence of death from other causes.

A key input parameter of the model is the prevalence of carriage at 25 years. Above this age the prevalence is estimated by the following relationship:

$$P_{\text{Age i, Sex}} = P_{\text{Age 25}} \times \exp\left\{-\alpha(i-25)\right\} \times \exp\left\{-\beta_{\text{Sex}}i^{n+1}/(n+1)\right\}$$

$$\text{Prevalence of carriage at Age i, for given Sex} \qquad \text{Prevalence of carriage at Age 25, both sexes combined} \qquad \text{Probability of remaining from Hepatitis B related liver disease}$$

With the following parameter values:  $\alpha = 1$ ,  $\beta_M = 0.0133/100000$ ,  $\beta_F = 0.0038/100000$ , n = 2.71.



HBsAg prevalence by country is obtained from a WHO database compiled in 1996; efforts are underway to update this database, and a switch to an alternative model developed by CDC is currently underway.

#### Hib, Pneumococcal and Rotavirus

We used the integrated TRIVAC (Hib-Pneumococcal-Rotavirus) model developed by LSHTM with funding from GAVI's Hib Initiative and PAHO's ProVac Initiative. This is an Excel-based static cohort model. The model estimates years of life lived between 1 and 59 months based on United Nations Population Division annual estimates of live births and childhood mortality (2008 revision). Life-years 1-59m are then multiplied by countryspecific estimates of incidence to generate cases, and case fatality ratios to generate deaths. Recent Global Burden of Disease estimates were used for estimated incidence and CFRs for Hib and Pneumococcal (Watt 2010, O-Brien 2010). Rotavirus estimates were derived from recent WHO estimates of rotavirus mortality (Parashar 2009). Baseline estimates of pathogen-specific mortality are updated each year based on the underlying trend in under-5 mortality. Vaccination coverage data were projected based on WHO/UNICEF estimates of Hib3, PCV3 and the last dose of Rotavirus. Coverage for doses 1 and 2 were based on the same drop-out rates reported by WHO for DTP. In this evaluation, we assumed 3 doses and no booster for all three vaccines. Coverage projections were based on a 1% increase per year for DTP. For Hib. Pneumococcal and Rota virus a 1% increase per year was used if the coverage level had already reached the DTP3 level. If the coverage level had not reached DTP3 or introduction was 2010 or

2011, it was assumed that coverage would reach the DTP3 level in 3 years. Deaths averted are calculated by comparing scenarios with and without vaccination. The steps and parameters used to calculate vaccine impact are summarized in tables I and II below:

Table I . Seven steps used to estimate vaccine impact in the TRIVAC model

Step 1	Vaccine efficacy is estimated by dose (1, 2, 3)
Step 2	Vaccine efficacy is decreased to reflect the circulating serotypes that are vaccine type (relevant for Pneumococcal and Rotavirus). <i>Note: For Pneumococcal, this</i>
	is set to (exogenously) decline by a small fraction each year to simulate serotype replacement.
Step 3	Vaccine coverage is estimated by dose (1, 2, 3) and age (3m, 6m, 9m, 12m, 24m, 36m, 48m, 59m)
Step 4	Vaccine coverage is decreased to reflect the % of deaths actually reached by the program e.g. 0.25 if 80% of infants vaccinated yet only 20% of deaths reached.
Step 5	Adjusted efficacy is multiplied by adjusted coverage to generate direct protection by age and dose (dose-specific protection summed and assigned to appropriate age groups)
Step 6	Waning protection (% decrease per year) is applied to each age group, and post- waning protection is re-aggregated to produce direct protection for each age group.
Step 7	A crude inflation factor is applied to replicate herd effect scenario i.e. % direct protection / (1 - % of total impact contributed by herd effects).



Table II. Summary of impact parameters used for each vaccine

Table 11. Summary o	f impact parameters us	ed for each vaccine	
Pathogen	Hib	Pneumococcal	Rotavirus
3 dose vaccine efficacy	89% - Average from 4 major trials in Chile, Bangladesh, Gambia and Lombok. Also 89% if restricted to only double blind placebo controlled RCTs (ie. Gambia and Lombok).	80% (Lucero et al 2009, Cochrane Review)	57-93% depending on mortality quartile of country – based on results from several rotavirus vaccine trials (see K Neuzil, PATH).
2 dose vaccine efficacy	85% - Based on 2:3 dose ratio reported in Mulholland K et al, Lancet 1997 Apr 26;349(9060):1191-7 (Gambia)	70% - Based on 2:3 dose ratio reported in Black Pediatr Infect Dis J, 2000;19:187– 95 (Southern California)	Same as 3 doses (assumption to assume parity between the two available vaccines)
1 dose vaccine	54% - Based on 1:3	55% - Based on 1:3	38% - Based on last
% decline in vaccine	dose ratio reported in Mulholland K et al, Lancet 1997 Apr 26;349(9060):1191-7 (Gambia) 2.5% (assumption)	dose ratio reported in Kaye et al (unpublished poster, UK Health Protection Agency)  2.5% (assumption)	dose: 1 dose ratio reported in de Palma et al, BMJ 2010;341:c2825 doi:10.1136/bmj.c2825 (El Salvador) 7.5% (based on
efficacy per year			Linhares AC et al, Lancet 2008 Apr 5;371(9619):1181-9)
Vaccine serotype coverage	100%	84% globally (Johnson et al, Global Serotype Project)	100% (assumption)
Timing of vaccination	Same delays as reported for DTP (Clark and Sanderson, Lancet 2009, 373(9674):1543- 1549)	Same delays as reported for DTP (Clark and Sanderson, Lancet 2009, 373(9674):1543- 1549)	Restricted to those who arrive for 1st dose before 15 weeks (SAGE recommendation) and based on same delays reported for DTP (Clark and Sanderson, Lancet 2009, 373(9674):1543-1549)
% relative coverage of deaths (see step 4 above)	90% (assumption)	90% (assumption)	90% (assumption)
Decline in serotype coverage per yr (exogenous)	0% (assumption)	2.5% (assumption)	0% (assumption)
% contribution of herd effect in children <5yrs (exogenous)	20% (see Theodoratou E et al IJE 2010; 39 (suppl 1): i172-i185)	20% (see Theodoratou E et al IJE 2010; 39 (suppl 1): i172-i185)	0% (assumption)



### Annex 22: Overview of Scenarios for Projections

Assumptions underlying LRC&I model estimate of IFFIm attributable health impact

LRC&I Model

First we take the number of vaccines supplied based on country demands (provided by GAVI)

Table 1: Vaccines Needed to Meet Country Demand (does not include wastage or buffer stock)

Doses	Pneumo	Rota	Yellow Fever	Pentavalent (DTP-HepB- Hib)	DTP- HepB (Tetraval ent)	DTP-Hib (Tetravalen t)	Hep B mono	Hib mono
2001	-	-	149,977	1,133,117	1,572,912	-	1,763,733	-
2002	-	-	1,176,930	9,662,724	7,475,517	33,772	28,360,249	-
2003	-	-	1,861,892	9,766,389	9,379,191	170,673	44,640,822	-
2004	-	-	7,419,792	12,070,351	11,358,921	2,401,888	51,887,096	-
2005	-	-	4,270,898	16,799,238	13,189,702	190,347	65,998,865	-
2006	-	-	4,274,990	20,916,449	19,986,692	197,073	69,905,010	-
2007	-	-	8,787,626	30,359,409	40,012,042	449,967	72,713,108	89,547
2008	-	513,496	9,596,541	57,215,251	44,549,292	767,108	14,957,305	92,337
2009	-	802,923	10,105,737	107,757,735	2,885,952	130,296	30,115,181	95,700
2010	9,898,537	1,140,480	10,876,030	145,802,273	1,307,403	129,228	130,139	96,030

Source: GAVI

Table 2 sets out the assumptions related to the number of doses required to fully immunise a child and the number of future deaths expected to be averted by immunising 1000 children



Table 2: Key Assumptions – Vaccine Needs and Impact

	Number of Future Deaths Averted per 1000 Children Immunised	Doses Required to Fully Immunise a Child
Pneumo PCV 10	7.4	3
Pneumo PCV 7	7.4	3
Rota 2 dose	3.4	2
Rota 3 dose	3.4	3
Yellow Fever 10	0.2	1
Yellow Fever 20	0.2	1
Yellow Fever 5	0.2	1
DTP-HepB- Hib10	12.5	3
DTP-HepB- Hib2	12.5	3
DTP-HepB- Hib1	12.5	3
DTP- HepB10	10.1	3
DTP-HepB2	10.1	3
DTP-Hib10	4.8	3
HepB1	7.7	3
HepB10	7.7	3
HepB2	7.7	3
HepB6	7.7	3
HepBunj	7.7	3
Hib1	2.4	3

Source: GAVI Secretariat

Based on the data in tables 1 and 2 we can estimate the expected number of children immunised using GAVI funds



Table 3 Estimated Children Immunised

HepB-Hib)         (Tetra)           2001         -         -         149,977         377,706         524,304         -         587,911           2002         -         -         1,176,930         3,220,908         2,491,839         11,257         11,094,450           2003         -         -         1,861,892         3,255,463         3,126,397         56,891         17,358,194           2004         -         -         7,419,792         4,023,450         3,786,307         800,629         19,089,963           2005         -         -         4,270,898         5,599,746         4,396,567         63,449         24,043,624           2006         -         -         4,274,990         6,972,150         6,662,231         65,691         25,276,522									
2002       -       -       1,176,930       3,220,908       2,491,839       11,257       11,094,450         2003       -       -       1,861,892       3,255,463       3,126,397       56,891       17,358,194         2004       -       -       7,419,792       4,023,450       3,786,307       800,629       19,089,963         2005       -       -       4,270,898       5,599,746       4,396,567       63,449       24,043,624         2006       -       -       4,274,990       6,972,150       6,662,231       65,691       25,276,522			Rota		t (DTP-	HepB			Hib mono
2003       -       -       1,861,892       3,255,463       3,126,397       56,891       17,358,194         2004       -       -       7,419,792       4,023,450       3,786,307       800,629       19,089,963         2005       -       -       4,270,898       5,599,746       4,396,567       63,449       24,043,624         2006       -       -       4,274,990       6,972,150       6,662,231       65,691       25,276,522	2001	-	-	149,977	377,706	524,304	-	587,911	-
2004       -       -       7,419,792       4,023,450       3,786,307       800,629       19,089,963         2005       -       -       4,270,898       5,599,746       4,396,567       63,449       24,043,624         2006       -       -       4,274,990       6,972,150       6,662,231       65,691       25,276,522	2002	-	-	1,176,930	3,220,908	2,491,839	11,257	11,094,450	-
2005     -     -     4,270,898     5,599,746     4,396,567     63,449     24,043,624       2006     -     -     4,274,990     6,972,150     6,662,231     65,691     25,276,522	2003	-	-	1,861,892	3,255,463	3,126,397	56,891	17,358,194	-
2006 - 4,274,990 6,972,150 6,662,231 65,691 25,276,522	2004	-	-	7,419,792	4,023,450	3,786,307	800,629	19,089,963	-
	2005	-	-	4,270,898	5,599,746	4,396,567	63,449	24,043,624	-
	2006	-	-	4,274,990	6,972,150	6,662,231	65,691	25,276,522	-
2007 8,787,626 10,119,803 13,337,347 149,989 26,345,225 29	2007	-	-	8,787,626	10,119,803	13,337,347	149,989	26,345,225	29,849
2008 - 256,748 9,596,541 19,071,750 14,849,764 255,703 6,239,759 30	2008	-	256,748	9,596,541	19,071,750	14,849,764	255,703	6,239,759	30,779
2009 - 394,743 10,105,737 35,919,245 961,984 43,432 10,038,394 31	2009	-	394,743	10,105,737	35,919,245	961,984	43,432	10,038,394	31,900
2010 3,299,512 511,351 10,876,030 48,600,758 435,801 43,076 43,380 32	2010	3,299,512	511,351	10,876,030	48,600,758	435,801	43,076	43,380	32,010

Based on the data in table 3 and column 1 of table 2 we attribute these to IFFIm in relation to the IFFIm share of GAVI funding (shown in table 4) and translate to IFFIm attributable children immunised (in table 5) and to expected future deaths averted (in table 6)

Table 4: IFFIm share of GAVI Funding

	Нер В	Pentavale nt	Pneu mo	Tetra - DPT Hep B	Tetra - DPT Hib	Yellow Fever
2006	18.31	34.73	-	34.40	-	43.77
2007	36.33	63.84	-	83.56	71.78	37.07
2008	20.17	55.54	-	- 1,356.64	75.54	14.15
2009	- 0.56	79.03	-	86.43	88.20	36.00
2010	1.14	67.28	11.37	-	-	98.20
Avera ge	24.41	63.73	10.89	55.40	59.38	41.18

Source – see previous annex. Data based on GAVI Finance Department

Table 5: Estimate of IFFIm Attributable Children Immunised

	Pneumo	Yellow Fever	Pentavalent (DTP-HepB-Hib)	DTP-HepB (Tetravalent)	DTP-Hib (Tetravalent)	Hep B mono
2006	-	1,871,143	7,263,355	11,072,141	-	12,801,052
2007	-	3,257,786	19,380,561	22,165,698	322,990	26,416,232
2008	-	1,357,470	31,775,282	24,679,224	579,439	3,017,444
2009	-	3,638,568	85,162,717	1,598,747	114,923	- 168,572
2010	1,125,246	10,679,889	98,089,717	724,269	-	1,480
2011	1,640,508	4,392,762	57,108,156	732,961	-	-

Table 6:



	Pneumo	Yellow Fever	Pentavalent (DTP-HepB-Hib)	DTP-HepB (Tetravalent)	DTP-Hib (Tetravalent)	Hep B mono	Total
2006	-	0	30	37	-	33	101
2007	-	1	81	75	1	68	224
2008	-	0	132	83	1	8	224
2009	-	1	355	5	0	0	361
2010	3	2	409	2	-	0	416
Total	3	4	1,007	203	2	108	1,326

#### Key limitations:

- The data are based on orders they analysis assumes the orders were actually delivered in full.
- Assumes that children are immunised in the year the order was placed.
- That the LRC&I coefficients are sound

#### All of these assumptions are questionable

Remaining IFFIm Funds – Post 2010									
		Full GRL	Cushion 5%						
Total	2011-2015	1,156	970						
	2016-2025	940	1,126						
Annual	2011-2015	231	194						
	2016-2025	188	225						



### Assumptions underlying LRC&I model estimate of IFFIm attributable health impact

Table 1: Scenarios for Use of Funds

	Use of Funds	Access to Funds	Timing of Funds	Alternative Scenarios
Scenario 1	50% Penta; 25% rota; 25% pneumo - throughout	5% cushion for GRL	Frontloaded 2011-15; Equal 2021-5	25% to non NVS eg HSS
Scenario 2	100% to penta 2011-15; 50% each to pneumo and rota 2021-5	5% cushion for GRL	Frontloaded 2011-15; Equal 2021-5	25% to non NVS e.g. HSS
Scenario 3	As scenario 2	Up to GRL Maximum	Frontloaded 2011-15; Equal 2021-5	25% to non NVS e.g. HSS

Source: HLSP

Table 2: Assumptions on Availability of Funds

	Period	Full GRL*	Cushion 5%
Total	2011-2015	1,156	970
	2016-2025	940	1,126
Annual	2011-2015	231	194
	2016-2025	188	225

i.e. assumes IFFIm goes up to current GRL ceiling of 69.7%

Source: HLSP - based on World Bank data



#### Results

Results						
		1	00% to NVS			75% to NVS
						_
	Scenario 1	Scenario 2	Scenari o 3	Scenario 1	Scenario 2	Scenario 3
2006	0.10	0.10	0.10	0.10	0.10	0.10
2007	0.33	0.33	0.33	0.33	0.33	0.33
2008	0.55	0.55	0.55	0.55	0.55	0.55
2009	0.91	0.91	0.91	0.91	0.91	0.91
2010	1.33	1.33	1.33	1.33	1.33	1.33
2011	1.56	1.65	1.72	1.50	1.57	1.62
2012	1.77	1.96	2.08	1.66	1.80	1.89
2013	1.96	2.23	2.41	1.80	2.01	2.14
2014	2.11	2.47	2.69	1.92	2.19	2.35
2015	2.23	2.65	2.90	2.00	2.32	2.51
2016	2.23	2.65	2.90	2.00	2.32	2.51
2017	2.23	2.65	2.90	2.00	2.32	2.51
2018	2.23	2.65	2.90	2.00	2.32	2.51
2019	2.23	2.65	2.90	2.00	2.32	2.51
2020	2.23	2.65	2.90	2.00	2.32	2.51
2021	2.49	2.77	3.00	2.20	2.41	2.58
2022	2.75	2.88	3.10	2.39	2.49	2.65
2023	3.01	3.00	3.19	2.59	2.58	2.73
2024	3.27	3.11	3.29	2.78	2.67	2.80
2025	3.53	3.23	3.39	2.98	2.75	2.87

Assumptions related to use of LiST Assumptions

\$m	2011	2012	2013	2014	2015	2021	2022	2023
Possible IFFIm spend	445	390	340	340	325	200	360	280
60% Expenditure on Pentavalent	267	234	204	204	195	120	216	168
Estimated Doses Purchased	68.1	62.7	56.3	65.7	69.9	44.9	80.8	62.7
Estimated Children Immunised	19.6	18.2	16.5	19.0	20.0	13.2	23.9	18.6

Source: HLSP assumptions -based on data provided by World Bank

Impact of IFFIm funding on Coverage Rates

%		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2022	2023	2024
DPT	With IFFIm	78.7	78.6	79.4	80.9	82.3	83.7	85.1	86.5	87.9	89.3	95.0	95.0	95.0
	Without IFFIm	76.0	71.5	70.4	59.2	56.7	57.2	60.7	64.5	62.9	63.2	78.0	64.1	70.8
Hib	With IFFIm	26.3	37.4	57.1	60.5	64.0	67.4	70.9	74.3	77.8	81.2	95.0	95.0	95.0
	Without IFFIm	22.3	25.0	43.9	31.6	31.9	35.9	43.0	50.1	51.1	54.0	78.4	64.9	71.5

Source: HLSP Only covers years in which IFFIm funding disbursed



### Annex 23: IFFIm funded Investment Cases

IFFIm funds have been used to fund – or part fund – a range of Investment Cases presented to the GAVI Board.

#### IFFIm Funded Investment Cases

Investment Case	Grantee	Amount
MNT	WHO, UNICEF	\$62 million
Measles	UN Foundation	\$139 million
Yellow Fever	WHO, UNICEF	\$101 million
Polio	WHO	\$191 million
Meningitis	WHO, UNICEF	\$68 million

In broad terms they have been used to support a range of activities – typically focusing on scaling up supplementary activities aimed at target groups, providing support to deal with outbreaks, encouraging the development and use of new products. Target disease areas range from ones entering the eradication end game – polio and those where eradication may be feasible within at least the medium to long term – Meningitis A and measles – to non communicable diseases such as MNT where the focus is on elimination rather than eradication. The target areas also vary in terms of their market access to the necessary vaccines. TT is cheap and widely available – yellow fever presents far more market constraints – progress in delivering polio objective has required the development of new, more effective, monovalent vaccines.

#### Conclusions

- Investment Case support has given many of the programmes a much needed boost but the support has often been of a one off nature and the programmes are struggling to sustain and expand benefits. Many have large funding gaps going forward
- The investment cases seem of offer good value for money though this is dependant in some cases on major assumptions being realised e.g. that polio is actually eradicated
- Assessing impact is extremely difficult. In some cases the data base is extremely weak e.g. yellow fever, estimates of measles incidence upon which deaths averted are estimated
- Actual deaths averted are likely to be much lower than those set out in the investment cases

   largely because the ICs were not always funded in full. We found no evidence of any
   reappraisal of benefits. Where relevant we have reduced expected benefits on a pro rata
   basis as a crude approximation of impact
- Attribution is extremely difficult and controversial. The approaches adopted are not consistent
   – in some of the cases our view is that too many of the benefits are being attributed to IFFIm.
   In some cases this is because GAVI/WHO are counting benefits achieved before IFFIm even existed; in some cases country contributions were made to the programmes but are not included..
- The overemphasis on lives saved does not fully reflect the benefits from the investment cases. For some of the investment cases – notably polio – the focus on lives saved is not appropriate as other benefits are far greater. Moreover such benefits offer significant opportunities for GAVI.
- In the absence of IFFIm funds the results achieved by the investment cases would not have occurred



We focus on the measles and polio investment cases given they account for the majority of IFFIm support

#### 1. Measles Investment Case

Global measles mortality has decreased by 78% from an estimated 733,000 deaths in 2000 to an estimated 164,000 deaths in 2008. Around 2/3 of these occur in India.

Expected Impact – Measles Investment Case

=										
000	200	200	200	200	200	200	200	200	200 8	200 0- 200 8
(1)Expected measles deaths without the Measles Initiative	1,758	1,778	1,799	1,820	1,842	1,861	1,882	1,900	1,918	16,558
(2)Total measles deaths with the Measles Initiative	733	659	603	528	447	347	218	179	164	3,878
(3) Total measles deaths averted	1,025	1,119	1,196	1,292	1,395	1,514	1,664	1,721	1,754	12,680
(4) Total deaths averted with SIA (supplementary immunization activities) and improved routine	127	212	280	368	460	571	710	760	784	4,272
(5)Total deaths averted with routine immunisation	898	907	916	924	935	943	954	961	970	8,408

Source: WHO

A contribution of \$139m was made to the UN Foundation in support of the Measles Initiative. Funds were transferred up front in 2007 and spent in 2007 and 2008. according to data provided by the American Red Cross IFFIm funds accounted for 67% of the funds disbursed by the Measles Initiative in 2007 and 42% in 2008. The IFFIm funds account for 18% of the funds disbursed by the Measles Initiative between 2001 and 2010. These figures, it is noted, do not include country contributions. We understand that these can be quite significant e.g. contributions by the Nigerian Government IFFIm funding has clearly played an important role in sustaining the programme The latest Measles Initiative report points but that "financial support to the Measles Initiative has decreased from US\$ 150 million in 2007 to slightly more than \$20m in 2009" most of which would be accounted for by IFFIm's one off contribution. The latest report raises concerns about future resurgence and models a number of scenarios in which deaths begin to rise again

IFFIm Support to the Measles Investment Case

Investment cases initiative		Year of disbursement				
Paid to	2007	2008	2009	2010	Grand Total	
Measles Mortality Reduction	139,000,000	0	0	0	139,000,000	
UN Foundation	139,000,000				139,000,000	

A large proportion of the benefits from the investment cases relate to measles. The team were provided with two possible assessments of IFFIm attributable impact:

• IFFIm's website states that "IFFIm's contribution to GAVI's funding represented 28% of the total amount of all external funding available to high-burden countries for measles in 2000-08. This allowed rapid scale-up, providing preventing 1.2 million measles deaths through vaccination".



According to WHO between 2001-2009, IFFIm contributed \$139m out of a total of \$730m spent by the Measles Initiative USD (or 19% of the total). It is suggested that this has helped avert some 860,000 deaths averted. If 19% of the benefits achieved through SIA (column 4) are attributed to IFFIm this would suggest some 813,000 deaths averted<sup>34</sup>. This figure includes deaths to 2008 (as 2009 measles deaths are not currently available).

We have not been able to replicate these figures from the available data on spending and impact. Another way – and we would argue a more appropriate way - to look at this issue would be to look at the marginal impact on deaths averted since the establishment of IFFIm. By restricting any attribution to deaths achieved since 2006 and making assumptions about future trends in measles deaths<sup>35</sup> would result in a much lower figure of 162,000 deaths averted (see tables below). This assumes that death rates would remain at constant levels and not immediately revert to 2000 level immediately which is likely to be rather pessimistic.

If one we to assume that death rates were to revert immediately to the "without Measles Initiative" death rates and one attributed benefits achieved in 2007 and 2008 (an estimated 1.544 million deaths averted due to supplementary immunisation activities according to the share of IFFIm funding in total external Measles Initiative funding. over that period (58.3%) one would arrive at a figure of around 886,000.

As pointed out in the GAVI phase 2 evaluation the figures are highly dependant upon the initial assumptions of measles deaths in 2000 which, we understand, is open to some doubt. (A lower starting point would mean fewer deaths averted to attribute). One could also question the logic of attributing benefits to IFFIm which occurred well *before* IFFIm was established.

Ideally, a marginal analysis would look at the additional benefits IFFIm brought to the initiative. As such the current estimates represent a useful, but crude, approximation of health impact based on some questionable assumptions.

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<sup>&</sup>lt;sup>34</sup> In correspondence we were given a figure of 860,000

<sup>&</sup>lt;sup>35</sup> we simply extrapolate current trends to 149,000 in 2009 and 134,000 in 2010 – these are in some doubt given current fears about a resurgence)



#### Summary (deaths and deaths averted in thousand

		2000	2001	2002	2003	2004	2005	2006	2007	2008	Extrap	olated*
											2009	2010
Health Impact	Expected measles deaths without the Measles Initiative	1,758	1,778	1,799	1,820	1,842	1,861	1,882	1,900	1,918	1936	1954
	Total measles deaths with the Measles Initiative	733	659	603	528	447	347	218	179	164	149	134
	total measles deaths averted	1,025	1,119	1,196	1,292	1,395	1,514	1,664	1,721	1,754	1,787	1,820
	total deaths averted with SIA and improved routine	127	212	280	368	460	571	710	760	784	808	832
	total deaths averted with routine immunisation	898	907	916	924	935	943	954	961	970	979	988
	Deaths averted compared to 2006 baseline								39	54	69	84
Funds	Non IFFIm (\$m)	n/a	25.0	39.0	56.5	74.3	158.4	77.5	50.0	53.2	57.3	50.3
正	IFFIm (\$m)	-	-	-	-	-	-	-	100.0	39.0		
	Total (\$m)	-	25.0	39.0	56.5	74.3	158.4	77.5	150.0	92.2	57.3	50.3

SIA = supplementary immunization activities

#### Summary Table

		2001-2010	2007-2010
Health	Expected measles deaths without the Measles Initiative (1)	18,690	7,708
Impact	Total measles deaths with the Measles Initiative (2)	3,428	626
	Total measles deaths averted (3) (3=1-2; 3=4+5)	15,262	7,082
	Total deaths averted with SIA and improved routine (4)	5,785	3,184
	Total deaths averted with routine immunisation (5)	9,477	3,898
	Deaths averted against 2006 baseline	-	246
Funding	Non IFFIm	641.5	210.9
(\$m)	IFFIm	139.0	139.0
	Total	780.5	349.9



#### Attribution of Benefits

		2001-2010	2007-2010
Health	Expected measles deaths without the Measles Initiative (1)	18,690	7,708
Impact	Total measles deaths with the Measles Initiative (2)	3,428	626
	Total measles deaths averted (3) (3=1-2; 3=4+5)	15,262	7,082
	Total deaths averted with SIA and improved routine (4)	5,785	3,184
	Total deaths averted with routine immunisation (5)	9,477	3,898
	Deaths averted against 2006 baseline	-	246
Funding	Non IFFIm	641.5	210.9
(\$m)	IFFIm	139.0	139.0
	Total	780.5	349.9

As shown in the table above if one we to consider only the marginal reductions in deaths averted since 2006 (i.e. compared to the 2006 figure of an estimated 218,000 deaths averted – rather than the 2000 baseline. Adopting the latter approach would suggest that without external funding deaths would immediately revert to the 2000 levels. Whilst current estimates suggest that the figure may well rise in future would be gradual.

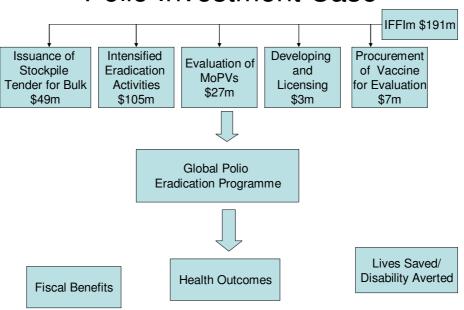
In terms of externalities measles vaccination campaigns are also contributing to the reduction of child deaths from other causes. They have become a channel for the delivery of other life-saving interventions, such as bed nets to protect against malaria, de-worming medicine, and vitamin A supplements.

#### 2. Polio Investment Case

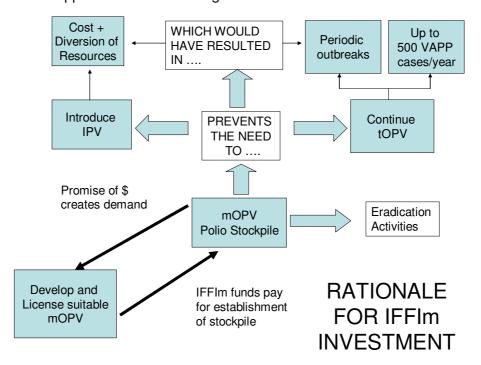
The Global Polio Eradication Initiative (GPEI) was launched in 1988 with the goal of eradicating polio world-wide. At the time wild poliovirus was endemic in more than 125 countries on five continents. Since 1988, some two billion children around the world have been immunized against polio, and indigenous polioviruses have been eliminated in all but four countries of the world - Nigeria, India, Pakistan and Afghanistan. The Board considered an initial investment case as set out in the figure below



### Polio Investment Case



The rationale for the support is set out in the figure below



IFFIm Support for Polio Investment Case

US\$ 191.28 million investment made by the International Financing Facility for Immunization (IFFIm) was initially intended to provide the up-front financing needed to partially establish a mOPV stockpile for countries to access (as needed) after they stop using tOPV and as soon as possible after confirmation of the interruption of all wild poliovirus transmission globally. The scope of the project was later expanded to provide support for intensified eradication activities



#### IFFIm Support for Polio Investment Case (\$)

Paid to	2007	Grand Total
Polio Stockpile	191,280,000	191,280,000
WHO	191,280,000	191,280,000

The allocation of funds was subsequently revised as shown in the table below

Changing Allocation of IFFIm Funds

	Original Budget	First Revised Budget	Second Revised Budget
Activity:			
Intensified eradication activities	\$0.00	\$104.62	\$104.62
Evaluation of mOPVs	\$26.94	\$26.94	\$27.34
Developing and licensing	\$20.95	\$10.50	\$2.80
Procurement of vaccine for evaluation	\$10.50	\$0.00	\$7.30
Issuance of Stockpile Tender for Bulk	\$66.45	\$49.22	\$49.22
Initiation of Bulk Production	\$66.44	\$0.00	\$0.00
Finalization of Filling Schedule	\$0.00	\$0.00	\$0.00
Totals	\$191.28 M	\$191.28 M	\$191.28 M

Source: WHO

#### **Assessment of Impact**

A focus on lives saved/deaths averted is particularly inappropriate for a disease such as polio where efforts are entering the late stage eradication phase. The amount of mortality and morbidity is now at low levels has little further to fall. The main prize is the achievement of eradication which should unlock huge costs savings. In theory, the ideal way to assess the impact of the IFFIm support to polio would be to assess what its marginal impact on the likelihood and timing of actual eradication is. For practical purposes – for the purposes of this evaluation we use the results from an overall assessment of the impact of the Global Polio Eradication Initiatives from 1998 through to 2035 (Duintjer Tebbens et al) and places IFFIm's contribution in relation to this. These figures are broadly consistent with (slightly lower than) figures provided by WHO. Either way the number of deaths averted is relatively low

In terms of lives saved the data suggests that the number of cases averted over the period through GPEI (as compared to routine immunisation) is 7.6m. The IFFIm contribution to total GPEI costs over the period is 0.77% or 1.25% depending on whether countries use inactivated poliovirus vaccine (IPV) or stop routine immunisation - post eradication. This would imply the IFFIm attributable share of cases averted would between 58000 and 95000- implying some 2,942 to 4,758 deaths averted (assuming 5% of cases result in deaths These figures are broadly consistent with figures provided by WHO which suggest that the GAVI/IFFIm contribution has accounted for approx 8.4% of the total global budget between 2007 and 2009 which correlates. to the following impact:

- 75,600 cases of polio averted (out of a total of 900,000 cases averted)
- 3,780 polio deaths averted (out of a total of 45,000 polio deaths averted)



• 37,800 deaths averted through Vitamin A (out of a total of 450,000 deaths averted through Vitamin A) (these are referred to in the section on externalities

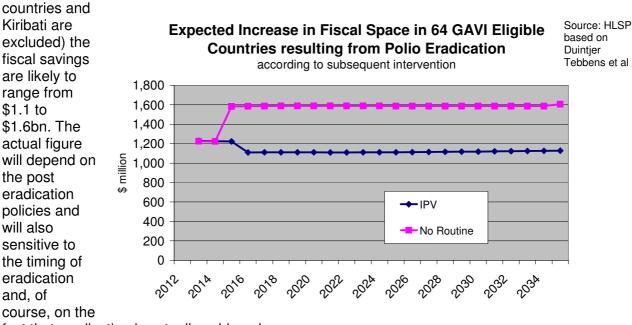
#### Assessment of Health Impact - Polio Investment Case

	GPEI (followed by IPV*)	GPEI (followed by no immunisation
Cases Averted 1988 - 2035 (compared to routine immunisation) millions	7.612	7.605
Total Costs 1988 – 2035 (\$m)	24,708	15,264
IFFIm Support (\$m)	191	191
IFFIm Share (%)	0.77	1.25
"IFFIm attributable" share of cases averted (number)	58,843	95,165
"IFFIm attributable" share of deaths averted (number)	2,942	4,758

Author based on (Duintjer Tebbens et al

#### **Non Health Benefits**

As noted above the major benefits are from cost savings created through the cessation/reduction of preventive efforts post eradication. For 64 of the GAVI eligible countries (Latin American



fact that eradication is actually achieved

To put this in perspective cost savings are likely to be roughly the same order of magnitude as likely total GAVI spend for the period after 2015 (assuming GAVI plans to maintain spending at proposed 2011 to 2015 levels). Depending on post eradication policies the IFFIm attributable

<sup>\*</sup> assumes cost per dose between \$0.60 and \$2.4 (mode \$1.20) and 3 doses per infant



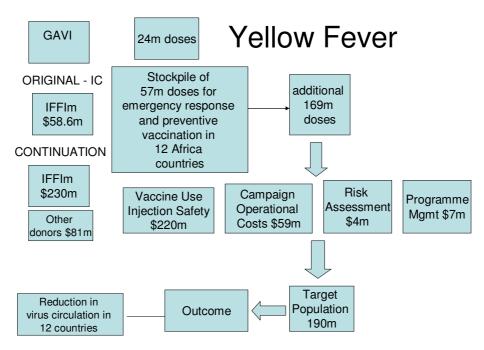
share of the cost savings range from some \$200m to \$447m. (Discounted at 3% per annum these figures amount to some \$124m and \$274m – the latter well in excess of IFFIm's original contribution). The approach does not consider the reduction in the direct financial costs incurred in the treatment, rehabilitation and long- term care of polio patients which is far more expensive than prevention.

The *intensified eradication effort* has shown that everything is in place to achieve a lasting success and consign polio to the history books once and for all. No child need ever again know the pain of life-long polio paralysis. GAVI and IFFIm will have played a major role in this achievement. Polio Stockpile Final Report

#### 3. Yellow Fever Investment Case

WHO estimates that yellow fever causes 200 000 cases and 30 000 deaths each year. During epidemics in unvaccinated populations, case-fatality rates among severe cases may exceed 50% for adults and 70% for children. No treatment beyond supportive care is available. Yellow fever has a huge economic impact - yellow fever outbreaks result in productivity loss estimated at 1.5m DALYs per year in the 12 West and central African countries carrying the world's highest burden of this disease.,

IFFIm is providing the funds to increase the supply of yellow fever vaccine (procured by UNICEF), expand immunization coverage (in collaboration with ministries of health), and support WHO in a risk assessment exercise aimed at identifying target populations and supporting government decisions



GAVI has been supporting the Yellow Fever programme since 2000 by funding Yellow Fever vaccine in the childhood routine immunization programme. The support has been provided under the new and underutilized vaccines window. In addition, the GAVI Alliance provided funding for an annual stockpile of 6million doses of Yellow Fever vaccine, initially for 3 years starting from 2003



In 2005, the GAVI Board approved the Yellow Fever Investment Case. This investment of \$58.64 million financed a stockpile of 57 million doses of Yellow Fever vaccine and provided operational cost for preventive and emergency outbreak response campaigns over a five year period (2006-2010) in 12 West African countries Of the continuation proposal, totalling of \$45.7m approved in 2008,. \$34 m was allocated for vaccines and \$10m for other components of the control programme.

IFFIm Support to the Yellow Fever Investment Case (\$)

The cappet to the te	The capport to the Tenent Tover introducion (4)						
Investment cases initiative	Year of disbursement						
Paid to	2007	2008	2009	2010	Grand Total		
Yellow Fever	17,435,760	0	0	1,352,2 50	18,788,0 10		
UNICEF	2,319,760			957,250	3,277,01 0		
WHO	15,116,000			395,000	15,511,0 00		

	2007	2008	2009	2010	Grand Total	
YF IC	17,728,657	10,145,03 5	14,087,138	20,127,771	62,088,602	
Benin			6,971,073	-1,356,440	5,614,633	Unicef
Brazil		3,379,499			3,379,499	Unicef
Burkina Faso	10,403,683	-2,179,381	-494,956		7,729,346	Unicef
Cameroun	143,446	4,834,853		92,866	5,071,166	Unicef
CAR		194,055	683,663	3,389,818	4,267,536	Unicef
Congo			52,249		52,249	Unicef
Congo DR				82,778	82,778	Unicef
Cote d'Ivoire			-82,438	9,226,000	9,143,562	Unicef
Côte d'Ivoire		1,538,376	185,279	-14,999	1,708,656	Unicef
Guinea		110,822	44,223	350,888	505,933	Unicef
Guinea Conakry				7,424,197	7,424,197	Unicef
Liberia		233,373	3,324,493	-162,338	3,395,528	Unicef
Mali	5,379,905		-227,552		5,152,353	Unicef
Paraguay		1,677,511	-1,677,491		20	Unicef
Senegal	1,801,623		1,011		1,802,634	Unicef
Sierra Leone		355,927	4,679,753		5,035,680	Unicef



	2007	2008	2009	2010	Grand Total	
Unicef - not allocated yet			627,832	1,095,000	1,722,832	Unicef

Impact is extremely difficult to measure for yellow fever. WHO is planned to look at this issue over the next year. For the purposes of this evaluation, in the absence of other approaches apply the LRC&I model assumptions to the initial 57m stockpile – which suggests deaths averted might be of the order of 10,000 – but we have no great confidence in this figure. Adding in the continuation investment case would almost double this figure. The use of funds to deal with outbreaks also poses particular challenges in terms of assessing impact – how bad would the outbreak have been otherwise? WHO is planning to strengthen its modelling approach over the coming year.

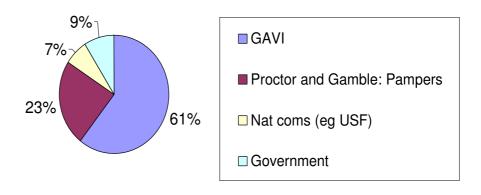


#### 4. Maternal and Neonatal Tetanus Investment Case

IFFIm provided US\$ 61.5 million for maternal and neonatal tetanus elimination from a total of US\$ 62 million approved in 2007. IFFIm funds represented 90% of the resources allocated in 2007 for the campaign's activities up to 2009. These resources constitute a 60% boost over those raised for the initiative from other sources between 1999 and 2006 IFFIm website

"The Maternal and **Neonatal Tetanus** Elimination Initiative was launched by UNICEF, WHO and UNFPA in 1999. The Initiative raised more than \$ 196 million for the Elimination activities between 1999 and 2009. As of end March 2010, the unmet funding needs were \$ 237 million. Of these \$ 125 million were needed for elimination activities in India and were expected to be met domestically. This leaves a funding gap of \$ 112 million" WHO estimated that "in 2008, 59,000 newborns

# Estimated Source of Funds MNTE 2007-10

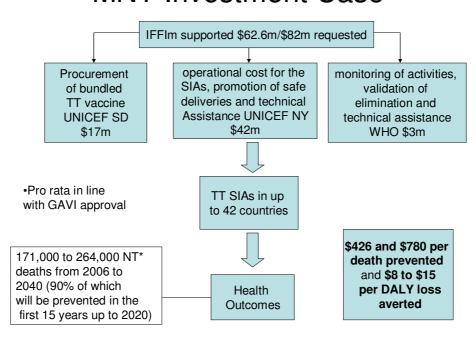


died from NT, a 92% reduction from the situation in the late 1980s. MNT is not a communicable disease – the aim is elimination (less than one NT case per 1000 live births in every district. Maternal tetanus is assumed to be eliminated once NT elimination has been achieved  $\,$  ). As at December 2010, 39 countries had not reached MNT elimination status".

The Investment Case for Neonatal Tetanus Elimination was jointly prepared by UNICEF and WHO in July 2005 and approved by the GAVI Board in November 2005. The original MNT investment case funding of \$82m for phase I (TT SIAs in 2006), and \$373.1m for phase II (2007-2010 quarterly pulses) with additional funding and technical support to be provided by national governments, WHO and UNICEF. A total of \$62m was approved by the GAVI Board. Proctor and Gamble Pampers' Division, also provided significant support – approx \$ 15 million - for the MNTE activities in 2008 and 2009 Pampers have raised more than \$ 28 million for the initiative in the last three years and have pledged another \$ 7.5 million next year. Other fund raising efforts are ongoing. An overview of the investment case and expected benefits is shown in the table below



### **MNT Investment Case**



Initial expectations were that the TT SIAs in 2006 would prevent an estimated 225,000 to 348,000 NT deaths between 2006 and 2040 (90% of which will be prevented in the first 15 years up to 2020). This would have been achieved at a cost of between \$426 and \$780 per death prevented and \$8 to \$15 per DALY loss averted, depending on the time frame of the analysis, routine coverage, and discounting. We pro rata the figure down to account for the fact that only \$62.6m of the original \$82m proposal was approved. Our assessment is that a through appraisal was carried out. Results were modelled -assumptions were clearly laid out – and conservative approach was adopted

Source: MNT Investment Case

Discounted cost per death averted 200	06-2040		Non-discounted cost per death	averted 20	06-2040
If coverage remained constant	\$	646.77		\$	548.92
If coverage improved gradually	\$	499.72	If coverage improved gradually	\$	415.35
If coverage improved rapidly	\$	426.09	If coverage improved rapidly	\$	354.60
Discounted cost per case averted 200	6-2040		Non-discounted cost per case a	everted 20	06-2040
If coverage remained constant	\$	537.80	If coverage remained constant	\$	456.35
If coverage improved gradually	\$	414.19	If coverage improved gradually	\$	344.16
If coverage improved rapidly	\$	352.00	If coverage improved rapidly	\$	292.84
Discounted cost per DALY averted 200	06-2040		Non-discounted cost per DALY	averted 20	006-2040
If coverage remained constant	\$	12.42	If coverage remained constant	\$	10.53
If coverage improved gradually	\$	9.61	If coverage improved gradually	\$	7.99
If coverage improved rapidly	\$	8.21	If coverage improved rapidly	\$	6.84
Discounted cost per death averted 200	06-2015		Non-discounted cost per death	averted 20	006-2015
Discounted cost per death averted 200 If coverage remained constant	06-2015 \$	780.51		averted 20	703.93
	06-2015 \$ \$		-		
If coverage remained constant	06-2015 \$ \$ \$	629.82	If coverage remained constant	\$	703.93
If coverage remained constant If coverage improved gradually	\$ \$ \$	629.82	If coverage remained constant If coverage improved gradually	\$ \$ \$	703.93 560.79 471.64
If coverage remained constant If coverage improved gradually If coverage improved rapidly	\$ \$ \$	629.82	If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per case	\$ \$ \$	703.93 560.79 471.64
If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per case averted 200	\$ \$ \$	629.82 531.12 649.12	If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per case	\$ \$ \$ averted 20	703.93 560.79 471.64 <b>06-2015</b>
If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per case averted 200 If coverage remained constant	\$ \$ \$	629.82 531.12 649.12 522.22	If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per case If coverage remained constant	\$ \$ \$ averted 20	703.93 560.79 471.64 <b>06-2015</b> 585.22
If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per case averted 200 If coverage remained constant If coverage improved gradually	\$ \$ 6-2015 \$ \$	629.82 531.12 649.12 522.22	If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per case If coverage remained constant If coverage improved gradually	\$ \$ averted 20 \$ \$	703.93 560.79 471.64 <b>06-2015</b> 585.22 464.74 389.55
If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per case averted 200 If coverage remained constant If coverage improved gradually If coverage improved rapidly	\$ \$ 6-2015 \$ \$	629.82 531.12 649.12 522.22	If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per case If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per DALY	\$ \$ averted 20 \$ \$	703.93 560.79 471.64 <b>06-2015</b> 585.22 464.74 389.55
If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per case averted 200 If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per DALY averted 200	\$ \$ 6-2015 \$ \$ \$ 06-2015	629.82 531.12 649.12 522.22 438.90	If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per case If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per DALY If coverage remained constant	\$ \$ averted 20 \$ \$ \$ averted 2	703.93 560.79 471.64 <b>06-2015</b> 585.22 464.74 389.55
If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per case averted 200 If coverage remained constant If coverage improved gradually If coverage improved rapidly Discounted cost per DALY averted 200 If coverage remained constant	\$ \$ 6-2015 \$ \$ \$ 06-2015	629.82 531.12 649.12 522.22 438.90	If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per case If coverage remained constant If coverage improved gradually If coverage improved rapidly Non-Discounted cost per DALY If coverage remained constant If coverage improved gradually	\$ \$ averted 20 \$ \$ averted 2	703.93 560.79 471.64 <b>06-2015</b> 585.22 464.74 389.55 <b>006-2015</b>

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# Total expenditure to end September 2010 is shown in the tables below IFFIm support to MNT Investment Case

\$	2007	2008	2009	2010	Total	
MNT IC	4,659,477	11,480,446	66,742	-110,420	16,096,245	
Afghanistan				-8,261	-8,261	Unicef
Burkina Faso	71,300	10,105	-6,923		74,482	Unicef
Cambodia		25,100	-3,761		21,339	Unicef
Cameroun		686,460			686,460	Unicef
CAR	297,296	308,429			605,725	Unicef
Chad		224,130	-38,936		185,194	Unicef
Congo DR			- 359,282		-359,282	Unicef
Congo DRC	401,122	3,385,875			3,786,997	Unicef
Cote d'Ivoire			-48,096		-48,096	Unicef
Côte d'Ivoire	1,218,455	560,098			1,778,553	Unicef
East Timor	175,200				175,200	Unicef
Ethiopia	794,178	1,068,068	- 101,518		1,760,728	Unicef
Guinea		63,730			63,730	Unicef
Guinea Bissau	76,261	13,163			89,424	Unicef
Haiti	319,058	852,390		-16,667	1,154,781	Unicef
Indonesia		311,500		-21,261	290,239	Unicef
Kenya		1,050,140			1,050,140	Unicef
Liberia		124,470			124,470	Unicef
Madagascar		179,500			179,500	Unicef
Mali		399,320			399,320	Unicef
Mauritania		105,560		1,188	106,748	Unicef
Mozambique	12,159	-4,192			7,967	Unicef
Myanmar	605,000	118,211			723,211	Unicef
Niger	122,000	217,750	-10,344		329,406	Unicef
Senegal		224,540	-10,729		213,811	Unicef
Sierra Leone	201,978				201,978	Unicef
Somalia		552,050	305,018	-57,812	799,256	Unicef
Southern Sudan			-8,005		-8,005	Unicef
Sudan		841,139			841,139	Unicef
Sudan North	26,770				26,770	Unicef
Sudan South		162,910			162,910	Unicef



\$	2007	2008	2009	2010	Total	
Tanzania			349,318	-7,608	341,710	Unicef
Uganda	338,700				338,700	Unicef

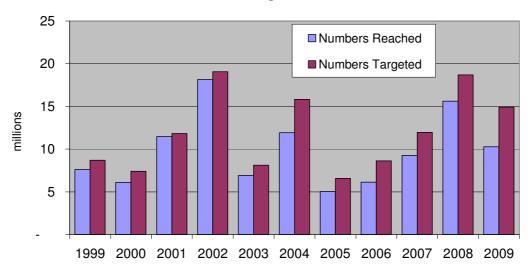
Investment cases initiative \$		Ye	ear of dis	sbursement	
Paid to	2007	2008	2009	2010	Grand Total
Maternal and Neonatal Tetanus	45,330,606	0	0	0	45,330,606
UNICEF	42,762,286				42,762,286
WHO	2,568,320				2,568,320

IFFIm funds were received by UNICEF and WHO in April 2007, for most of the first half and part of the second half of 2007 countries used other funding sources including but not limited to locally raised funds, funds raised by UNICEF National committees. However, most activities in the latter half of 2007 and most of 2008 and 2009 benefited from the GAVI/ IFFIm funds

As of 18th March 2010, 92% of the total funds had been committed and 89% spent. Between 2007 and 2009, 36 countries conducted multiple rounds of TT-SIAs in over 2200 HRDs; of these, TT-SIAs in 2140 HRDs were implemented in 34 GAVI eligible countries. Twelve countries launched TT-SIAs for the first time during this time including Burundi, Central African Republic, Cote d'Ivoire, Gabon, Guinea Bissau, Lao PDR, Liberia, Mauritania, Nigeria, Senegal Sierra Leone and Timor Leste. In addition, many countries where activities had stalled due to funding constraints re-launched the TT-SIAs during this time. These countries include Angola, Comoros, Cameroon, DR Congo, Ethiopia, Haiti, Kenva, Pakistan, Tanzania, Uganda and Yemen. In 2009. more than 39 million WRA were targeted through TT-SIAs for vaccination with at least one dose of TT in more than 1300 districts in 24 countries. These countries are Afghanistan, Angola, Burkina Faso, Cambodia, Cameroon, Cote d' Ivoire, DR Congo, Ethiopia, Gabon, Haiti, Lao PDR, Liberia, Mauritania, Myanmar, Niger, Nigeria, Pakistan, Senegal, Somalia, Sudan North, Sudan South, Tanzania, Timor Leste, Uganda and Yemen. While all 24 countries are GAVI eligible, 23 of them received GAVI support for the operational cost of the TT-SIAs. In addition, four countries namely Burundi, Congo Republic, Comoros and Turkey were validated by WHO as having eliminated MNT bringing the total number of countries yet to eliminate MNT to 42 (subsequently declined to 39 –which additional countries) (source)

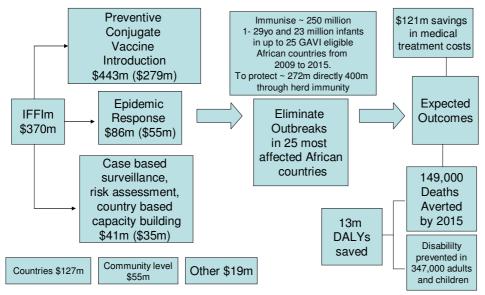


# Number of WRA Targeted and Reached with 2 Doses of TT during TT-SIAs 1999-2009



#### 5. Meningitis A Investment Case

### Meningitis A Investment Case



Given that the programme was not supported in full we reduce the expected impact downwards on a pro rata basis – this would suggest a total of 21,000 deaths averted by 2015 and over 50,000 cases of disability averted. Allying the LRC&I model coefficients to the 45m dose stockpile would result in a somewhat higher figure of almost 30,000 deaths averted



IFFIm Support to Meningitis Investment Case (\$)

Country	2009	2010	Grand Total	Procured by
Meningitis IC	8,127,166	37,593,381	45,720,547	
Burkina Faso		4,851,807	4,851,807	Unicef
Chad		359,510	359,510	Unicef
Chad		1,074,980	1,074,980	WHO/MSF
Ghana		203,200	203,200	Unicef
Mali		6,974,510	6,974,510	Unicef
Niger	2,839,291	4,384,390	7,223,681	Unicef
Nigeria	4,897,122	265,975	5,163,097	Unicef
Nigeria		1,251,132	1,251,132	WHO/MSF
Sudan		180,120	180,120	Unicef
Unicef - not allocated yet	390,753	15,228,247	15,619,000	Unicef
United Arab Emirates		2,819,509	2,819,509	Unicef
Programme Costs		10,538,000	10,538,000	
UNICEF		2,206,500	2,206,500	
WHO		8,331,500	8,331,500	

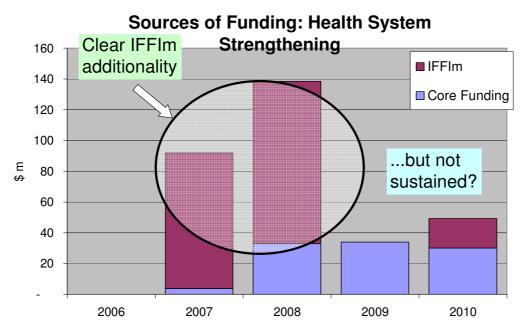
Source: GAVI Finance Department<sup>36</sup>

 $<sup>^{36}</sup>$  To note: GAVI programme staff report that no applications are yet approved for Nigeria, Chad or Ghana.



### Annex 24: Health System Strengthening

GAVI got involved in HSS not because they felt it was their area of comparative advantage but because a) they felt that without such support scaling up immunisation was not feasible and b) no other agencies were taking on the role. Though some finding has come from GAVI core funds the vast majority has been IFFIm funded. Whilst the initial IFFIm pledges were not earmarked to any particular purpose the more recent pledges by the UK, Norway and Australia have been linked to HSS use. To the end of September 2010 68% of HSS funding had come from IFFIm since inception – the IFFIm share has declined from 96% in 2007 to 39% in 2010.



A more detailed breakdown of IFFIm funded HSS support – with the largest recipients highlighted - is presented in the table below. Funds are allocated on a per capita income basis – those with a GNP per capita > \$365 eligible to apply for \$2.5 per head – those below \$5 per head. The drop off in spending in 2009 reflected the Secretariat's efforts to tighten up it cash funded programmes

IFFIm Funded Support to HSS

			a capport to		
\$	2007	2008	2009	2010	Grand Total
Ethiopia	68,840,803				68,840,803
DRC		41,665,000			41,665,000
Nigeria		22,098,500			22,098,500
Pakistan		16,898,500			16,898,500
Kenya		5,831,000		4,072,000	9,903,000
Vietnam	3,648,000			4,186,500	7,834,500
Bangladesh				7,243,500	7,243,500
Afghanistan	6,700,000				6,700,000
Nepal		6,166,500			6,166,500
Other	9,095,500	12,895,000	-	3,749,750	25,740,250



The key issues in relation to HSS for this evaluation are whether impact can be measured and how. The recent HSS evaluation clearly spells out the problems and raises questions about the feasibility of assessing HSS impact fully in 2012. It pointed out that "given the relatively recent start of GAVI HSS programmes in countries, the evaluation was unlikely to detect any outcomes (i.e. increased coverage) or impact (i.e. improved survival) resulting from GAVI HSS funding. Instead, (it) focused on what was being targeted and achieved in terms of processes (e.g. proposal design, approval and implementation) and, wherever possible, on outputs". It did, however, point out that "monitoring is also weak and will be extremely difficult to demonstrate even by 2012 the impact of HSS interventions in a meaningful manner. Specifically it referred to that fact that "poor data verification combined with selection of indicators and absence of baseline data in most countries was found to seriously compromise the possibility of GAVI being ever in a position to measure". The evaluation did raise some concerns that the desired results might not be achieved suggesting that "in some cases, GAVI may have spread itself too thinly for measurable impact to be achieved even in some downstream interventions, by either providing amounts of funds that are too small or that are not matched by essential complementary funding. or by not taking sufficient account at the time of HSS grant application of governance, financial management or implementation capacity weaknesses in order to better manage risk, or by combinations of these issues"

The issue is not that HSS is considered unimportant – it is that the causal pathway through which HSS is likely to have any impact is so complex. In terms of this evaluation we could either pro rata benefits of HSS investments through IFFIm in proportion to benefits enjoyed by other IFFIm investments. Alternatively we could take the view that HSS investments are essential preconditions for GAVI achieving the expected benefits through its immunisation specific programmes – but do not actually add any additional benefits themselves. The other issue to consider is whether HSS investments offer benefits beyond immunisation. Analysis of HSS proposals reveals a range of activities supported – some are more downstream and quite immunisation specific – others are more general upstream, activities related to issues such as governance or human resource development. For the purposes of this evaluation we take a very conservative approach and assume that HSS does not add any additional benefits nor benefits outside immunisation.

Our understanding is that the decision was taken at the recent GAVI Board meeting to remove any earmarking of IFFIm funds to HSS but set a 15% floor on cash based programme from *all* GAVI resources



### Annex 25: Breakeven Analysis

	L basilia a suus	4I DAI V-	Discounts	-LDALV-
	Undiscounted DALYs		Discounted DALYs	
m deaths	per capita income		per capita income	
averted	500	1000	500	1000
0.1	0.35	0.71	0.13	0.25
0.2	0.71	1.42	0.25	0.51
0.3	1.06	2.13	0.38	0.76
0.4	1.42	2.83	0.51	1.01
0.5	1.77	3.54	0.63	1.27
0.6	2.13	4.25	0.76	1.52
0.7	2.48	4.96	0.89	1.78
0.8	2.83	5.67	1.01	2.03
0.9	3.19	6.38	1.14	2.28
1.0	3.54	7.08	1.27	2.54
1.25	4.43	8.85	1.58	3.17
1.5	5.31	10.63	1.90	3.80
1.75	6.20	12.40	2.22	4.44
2	7.08	14.17	2.54	5.07
2.25	7.97	15.94	2.85	5.71
2.5	8.85	17.71	3.17	6.34
2.75	9.74	19.48	3.49	6.97
3	10.63	21.25	3.80	7.61
3.25	11.51	23.02	4.12	8.24
3.5	12.40	24.79	4.44	8.88
3.75	13.28	26.56	4.75	9.51
4	14.17	28.33	5.07	10.14
4.25	15.05	30.10	5.39	10.78
4.5	15.94	31.88	5.71	11.41
4.75	16.82	33.65	6.02	12.05
5	17.71	35.42	6.34	12.68

We assume each death averted saves 42.5 DALYs. This is based on the assumption that 50% of deaths averted are child deaths and save 70 DALYs – the other 50% are In adults and saved 15 DALYs (reflecting the fact that a high proportion of lives saved are for adults through the Hep B vaccine. In discounted terms 42.5 DALYs translates to 15.2 DALYs per death averted.