



SECOND GAVI EVALUATION

GAVI ALLIANCE

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SG3 REPORT

Prepared by:

CEPA LLP



CONTENTS

Acronyms and abbreviations	i
Summary and conclusions.....	1
1. Introduction	4
1.1. Evaluation approach	4
1.2. Structure.....	6
2. Performance against GAVI strategy indicators (2007-10)	8
3. SG3.1: Level of global donor financial resources for immunisation.....	12
3.1. Introduction.....	12
3.2. Background.....	15
3.3. GAVI funding and global funding for immunisation, health and development.....	16
3.4. Relative prioritisation of GAVI/ immunisation by donors.....	22
3.5. Additionality of GAVI funding	24
3.6. Structured interviews.....	29
3.7. E-survey	30
3.8. Summary and conclusions on SG3.1	33
4. SG3.2: Predictability and sustainability of donor immunisation finance.....	35
4.1. Introduction.....	35
4.2. Profile of GAVI donors	37
4.3. Duration of donor commitments.....	40
4.4. Volatility of funding	43
4.5. Impact of IFFIm on predictability	43
4.6. Predictability of GAVI funding to countries.....	45
4.7. Structured interviews and e-survey feedback	46
4.8. Summary and conclusions on SG3.2	49
5. SG3.3: Financial sustainability at the country level.....	51
5.1. Introduction.....	51
5.2. E-survey and structured interviews.....	53
5.3. Review of GAVI's approach, activities and policies	55
5.4. Prospects for sustainability.....	59
5.5. Implications of the choice of vaccine on country level financial sustainability.....	74
5.6. Overall conclusions on SG3.3	76
6. SG3.4: Innovative financing mechanisms	80
6.1. Introduction.....	80
6.2. GAVI's role in the design and implementation of IFFIm	81

6.3.	GAVI's role in the design and implementation of AMC	84
6.4.	E-survey	88
6.5.	Summary and conclusions of SG3.4.....	89
7.	Summary and conclusions for SG3.....	91
7.1.	Introduction.....	91
7.2.	SG3.1: Level of global donor immunisation finance.....	91
7.3.	SG3.2: Predictability and sustainability of donor immunisation finance.....	92
7.4.	SG3.3: Financial sustainability at the country level.....	92
7.5.	SG3.4: Innovative financing mechanisms.....	93
7.6.	Overall assessment of GAVI's performance on SG3	93

ACRONYMS AND ABBREVIATIONS¹

AD	Auto Disable (syringes)
ADIP	Accelerated Development and Introduction Plan
AFRO	Regional Office for Africa (WHO)
AMC	Advance Market Commitment
APR	Annual Progress Report
BCG	Bacillus Calmette-Guérin
CAGR	Compound Annual Growth Rate
CEPA	Cambridge Economic Policy Associates
CFPR	Co-financing Policy Revision (Task Team)
CGD	Center for Global Development
cMYP	comprehensive Multi-Year Plan
CRS	Creditor Reporting System
CSO	Civil Society Organisation
CTT	Co-financing Task Team
DAC	Development Assistance Committee
DAH	Development Assistance for Health
DFID	(UK) Department for International Development
DTP3	(Third dose of) Diphtheria, Tetanus and Pertussis vaccine
EC	European Commission
EMRO	Regional Office for the Eastern Mediterranean (WHO)
EPI	Expanded Program on Immunisation
EURO	Regional Office for Europe (WHO)
FSP	Financial Sustainability Plan
FTF	Financing Task Force
GDP	Gross Domestic Product
GFA	GAVI Fund Affiliate
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHP	Global Health Partnership
GNI	Gross National Income
GPEI	Global Polio Eradication Initiative
HSS	Health System Strengthening
IAC	Independent Assessment Committee
IDA	International Development Association
IF	Immunisation Funding (database)
IF&S	Immunisation Financing and Sustainability (Task Team)
IFF	International Finance Facility
IFFIm	International Finance Facility for Immunisation
IHME	Institute of Health Metrics and Evaluation
INS	Injection Safety Support
IPV	Inactivated Polio Vaccine
IRC	Independent Review Committee

¹ This list also contains acronyms for the annexes, which are in a separate document.

ISS	Immunisation Services Support
IVB	Immunisation, Vaccines and Biologicals (WHO department)
JHU	Johns Hopkins University
LSHTM	London School of Hygiene and Tropical Medicine
M&E	Monitoring and Evaluation
M(N)CH	Maternal (Neonatal) and Child Health
MDG	Millennium Development Goal
MMR	Measles, Mumps and Rubella
MOH	Ministry of Health
MTSP	Medium Term Strategic Plan
NGO	Non-Governmental Organisation
NHA	National Health Accounts
NPHCDA	(Nigerian) National Primary Health Care Development Agency
NVS	New and underused Vaccines Support
ODA	Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares (regression)
OPV	Oral Polio Vaccine
PAHO	Pan American Health Organisation (also WHO Regional Office for the Americas)
PATH	Program for Appropriate Technology in Health
PEPFAR	(US) President's Emergency Plan for AIDS Relief
PPP	Public Private Partnership
SAGE	Strategic Advisory Group of Experts (WHO)
SDF	Strategic Demand Forecast
SEARO	Regional Office for South-East Asia (WHO)
SG	(GAVI) Strategic Goal
TPP	Target Product Profile
TT	Tetanus Toxoid
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organisation
WPRO	Regional Office for the Western Pacific (WHO)

SUMMARY AND CONCLUSIONS

This report provides the detailed analysis and evaluation material for Strategic Goal 3 (SG3). A summary of the analysis can be found in the Executive Summary and Section 7 of the Evaluation Report. However, for ease of reference, we provide an overview of the conclusions contained in the detailed chapters in this report here.

1. Evaluation questions for SG3

GAVI's Strategic Goal 3 is: **'to increase the predictability and sustainability of long-term financing for national immunisation programs'**. The evaluation questions that we have examined under SG3 are:

- SG3.1: To what extent has GAVI increased the level of global financial resources from donors for immunisation activities?
- SG3.2: To what extent has GAVI increased the predictability and sustainability of global financial resources from donors for immunisation activities?
- SG3.3: To what extent has GAVI promoted and increased the sustainability of immunisation funding at the national level?
- SG3.4: To what extent is the existence of innovative financing mechanisms – the International Finance Facility for Immunisation (IFFIm) and Advance Market Commitments (AMCs) – dependent on the existence of GAVI in its current structure and form?

2. Level of global donor immunisation finance (SG3.1) (*Section 3*)

Our evaluation work on the assessment of GAVI's performance on raising the level of donor resources for immunisation suggests that it has made a significant contribution to increasing donor funding for immunisation. Its immunisation focus, Alliance nature and relatively flexible structure have attracted increasing amounts of donor resources – which would not have been allocated to immunisation in the absence of GAVI. Thus, one of GAVI's key value add has been its impact on raising substantial resources for immunisation. Although we note that in terms of attribution it is important to recognise the role of the Gates Foundation particularly in crowding in donor resources.

The data that we have access to from WHO and UNICEF suggests that funding for immunisation for both organisations have increased – suggesting that GAVI funding has been additional relative to these key Partners. However, for WHO particularly, there has been a significant change in sources of funding. There is also evidence to suggest that it has become more difficult for WHO to access bilateral funding for non-GAVI related immunisation priorities. Given this, our judgement is that it is reasonable to conclude that there has been a limited element of displacement of bilateral funding to the multilaterals (WHO in particular). (although it is not clear whether this can be attributed to GAVI, independent decisions by donors, or because of internal WHO resource allocation decisions).

3. Predictability and sustainability of donor immunisation finance (SG.3.2) (Section 4)

GAVI has had a positive impact in improving the predictability and sustainability of global financial resources for immunisation. Access to predictable/ sustainable funds by GAVI has contributed to its ability to make longer-term commitments to countries – one of the key aspects of its potential value add.

It has benefitted from long-term commitments from donors, particularly through IFFIm, which has had a very significant, positive effect on the predictability of donor funding for immunisation – and has provided the basis for a significant element of GAVI's value add in Phase II (and into Phase III) in terms of its ability to provide long term support for national programs. There are however advocacy and planning challenges that are likely to be more acute as a result of IFFIm frontloading.

An area where GAVI has not performed that well is in raising funds from a broad base of donors – as other Global Health Partnerships (GHPs) such as the Global Fund and the Global Polio Eradication Initiative (GPEI) have done.

We also note that the existence of the current funding gap for new vaccines has diluted GAVI's reputation to provide predictable funding to countries for their immunisation programs.

4. Financial sustainability at the country level (SG3.3) (Section 5)

Our review of the extent to which GAVI has promoted and increased financial sustainability of immunisation funding at the national level suggests first that GAVI has been innovative in terms of developing tools/ policies to support country level financial planning; however, frequent updates or revisions to policy has led to uncertainty on GAVI's overall approach to financial sustainability

Secondly, however, the prospects for financial sustainability are weak, particularly for low-income countries. The question is whether this may be regarded as a failure of GAVI, given that funding of comparatively expensive vaccines unambiguously 'saves lives', even if there is little prospect of financial sustainability for low-income countries at least.

In our view, in the narrow context of this aspect of this evaluation question, the evidence clearly points to the fact that GAVI's funding has not supported the achievement of financial sustainability. This relates in part to the (perhaps naïve) assumption at the outset that GAVI would be able to reduce prices. But perhaps more important are GAVI's decisions to provide support for 'new' life- saving vaccines, which were not part of the original portfolio. In Phase II this has been as much a feature of GAVI's success (in funding routine immunisation), as also presenting a significant challenge for financial sustainability.

In our view the main issue that arises from our review is whether there has been sufficient clarity within the organisation (and in its external communication) on the issue of financial sustainability. Indeed, part of the uncertainty in Phase II on co-financing relates to a failure to recognise explicitly, or communicate clearly, that financial sustainability (for low-income countries at least) would not be achievable in the medium term for the vaccines that GAVI supports.

Clarity on this point might have made it easier to define the co-financing policy in a way that distinguishes between the objectives of the policy for different categories of countries (in terms of income and eligibility) and potentially different vaccines. This is a similar conclusion to that reached by the authors of the Phase I evaluation report.

We understand that the Co-financing Task Team (CTT) is looking to address some of these issues in their revision of the co-financing policy – although this is not within the time frame of our evaluation.

5. Innovative financing mechanisms (SG3.4) (Section 6)

In the absence of a ready counterfactual, it is difficult to reach a strong conclusion on whether these mechanisms would have gone ahead without GAVI. However, the majority of the feedback suggests that it would have been more difficult to structure these mechanisms through the traditional multilateral aid architecture, and that GAVI's PPP structure and immunisation focus made it a particularly suitable platform for these instruments.

6. Overall assessment of GAVI's performance on SG3

SG3: “To increase the predictability and sustainability of long-term financing for national immunisation programs.”

One of GAVI's key value adds as a global financing mechanism lies in its ability to provide increasing amounts of funding to support national routine immunisation programs, in a manner that is both:

- *predictable*, so as to allow countries to plan for their routine immunisation programs and support the efficient procurement of vaccines;
- and *sustainable*, so that countries can continue to meet the expenditure required to provide immunisation services to its population.

Based on the analysis conducted for the four evaluation questions under SG3, our assessment is that GAVI has overall been successful in increasing the *predictability* of funding for national immunisation programs although this has been undermined more recently; but supporting *sustainability* of its financing has been an area of weaker performance.

1. INTRODUCTION

This document presents an evaluation of the extent to which GAVI has met the third of its four Strategic Goals (SG3): **‘to increase the predictability and sustainability of long-term financing for national immunisation programs’**. We provide an analysis of the achievements of GAVI on SG3 (i.e. the ‘results’) as also an assessment of the areas within this where GAVI has ‘added value’.

1.1. Evaluation approach

1.1.1. Scope of the evaluation

Similar to the other goals, our evaluation of SG3 is at both the global and national levels. At the global level, we examine GAVI’s performance in increasing the level, predictability and sustainability of donor resources for immunisation, including through the innovative financing mechanisms of International Financing Facility for Immunisation (IFFIm) and Advanced Market Commitments (AMC). At the national level, we examine GAVI’s role in promoting the financial sustainability of country immunisation programs.

Table 1.1 sets out the four evaluation questions that are examined under SG3.

Table 1.1: SG3 evaluation questions

SG3 evaluation questions	
SG3.1	To what extent has GAVI increased the level of global financial resources from donors for immunisation activities?
SG3.2	To what extent has GAVI increased the predictability and sustainability of global financial resources from donors for immunisation activities?
SG3.3	To what extent has GAVI promoted and increased the sustainability of immunisation funding at the national level?
SG3.4	To what extent is the existence of innovative financing mechanisms – IFFIm and AMC – dependent on the existence of GAVI in its current structure and form?

1.1.2. Methodology and limitations

The evaluation of GAVI’s performance on SG3, as explored through the evaluation sub-questions set out in Table 1.1 above, has been informed by a number of sources of evidence. These include the review of documentation, quantitative analysis, regression analysis, structured interviews, surveys, country studies, and case studies of comparators and counterfactual analysis, where relevant. Each of these sources of evidence are described in more detail in Section 2 of the Main Evaluation Report. We note here the main features of the methodology (and its limitations) as relevant for the SG3 evaluation:

- The evaluation of SG3.1 and SG3.2 draws extensively on publicly available databases such as the Organisation for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) database of Overseas Development Assistance (ODA) as well as databases on health and immunisation donor funding developed as a part of academic research. These databases have some limitations

(described in detail in Annex 1) and cover a restricted time period. For example, the database on donor funding for immunisation only covers the period 2003-07.

- The evaluation of SG3.3 uses data from country Financial Sustainability Plans (FSPs) and Comprehensive Multi-Year Plans (cMYPs), which are not available for all GAVI country countries in a consistent and usable database – and hence the analysis is based on a subset of GAVI-eligible countries.
- The evaluation of SG3.4 on the role of GAVI in IFFIm and AMC particularly relies on feedback from structured interviews, given the limited relevant literature/ data to support the direct focus of the question.
- Case studies of comparator organisations – in particular the Global Fund for AIDS, Tuberculosis and Malaria (GFATM) – have formed an important component of the methodology for the evaluation of SG3, particularly for SG3.2. We have used publicly available data and information on these organisations, and where possible supplemented with consultations. The comparator analysis has been used to assess GAVI’s value add.

More details on the methodology and further limitations are highlighted for each of the evaluation questions in the sections below.

1.1.3. Analysis of Robustness

To assess the strength of a conclusion, we have allocated a ‘robustness scoring’ to each main finding². The definitions of the four scores (A-D) are set out in Table 1.2 below. But in general we are making an assessment of both:

- the extent to which we have a range of evidence types (e.g. quantitative and qualitative) and different sources (e.g. different data bases) that point to the same conclusion – we refer to this as ‘triangulation’; and
- the underlying quality of individual data types and evidence source (e.g. as determined by sample size, reliability/ completeness of data).

² In our Inception Report, we had anticipated assigning a robustness scoring to the evidence as opposed to the conclusion. Our judgement is that the revised approach is preferable – since it is more tractable and has less repetition. Further, assigning a robustness rating to the conclusion allows us to take account of the strength of the range of evidence sources applicable in drawing that conclusion.

Table 1.2: Robustness ranking for evaluation findings

Ranking	Description
A	The finding is consistently supported by the full range of evidence sources, including quantitative analysis and qualitative evidence (i.e. there is very good triangulation); and/ or the evidence source(s) is/ are of relatively high quality and reliable to draw a conclusion (e.g. solid sample sizes are available and there are no major data quality or reliability issues).
B	There is a good degree of triangulation across evidence, but there is less or 'less good' quality evidence available. Alternatively, there is limited triangulation and not very good quality evidence, but at least two different sources of evidence.
C	Limited triangulation, and/ or only one evidence source that is not regarded as being of a good quality
D	There is no triangulation and/ or evidence is limited to a single source and is relatively weak; or the quality of supporting data/ information for that evidence source is incomplete or unreliable.

Points to note for readers in interpreting these scores are as follows:

- They are not absolute measures of the robustness of the evidence base. Rather they are **relative** rankings that are intended to allow the reader to get an indication of our assessment of the strength of a finding.
- The scores are themselves judgemental and reflect our assessment of the evidence base that exists or that we have been able to identify as part of our evaluation.
- It is important to note, that it is possible for us to have 'good' triangulation of 'high quality' evidence but a mixed or ambiguous conclusion on GAVI performance. This might occur if we have a good range of evidence that all points to mixed performance for example.

1.2. Structure

This report is structured as follows:

- Section 2 provides an assessment of GAVI's performance against its strategy 2007-10 indicators.
- Sections 3-6 deal in turn with each of the evaluation questions under SG3.
- Section 7 provides our conclusions in relation to the evaluation of SG3 as a whole and any observations or themes that relate more widely to GAVI.

More details are provided in the following annexes (in a separate document):

- Annex 1 summarises the main databases used in the analysis (particularly for SG3.1 and SG3.2) and describes their limitations.
- Annex 2 provides some background data analysis on the growth of total and health specific ODA, as well as presenting some metrics on global immunisation funding.

- Annex 3 presents the source data provided by the World Health Organisation (WHO) and the United Nations Children’s Fund (UNICEF) on their immunisation expenditures since 2000.
- Annex 4 presents detailed results tables for the regression analysis on global level funding displacement (part of the evaluation of SG3.1).
- Annex 5 presents some background data analysis on the volatility of resource flows.
- Annex 6 presents a timeline of GAVI’s activities related to financial sustainability.
- Annex 7 presents a summary of our desk-based review of available reports/ literature on GAVI’s approach to national financial sustainability.
- Annex 8 provides case studies on the approaches of other Global Health Partnerships (GHPs) on financial sustainability of their support.
- Annex 9 provides some background data analysis on the scale of GAVI support in comparison to government health expenditure.
- Annex 10 provides details of the approach to and results of analysis of the cMYPs.
- Annex 11 provides some background information on IFFIm.
- Annex 12 provides some background information on the AMC.
- Annex 13 summarises the qualitative and quantitative responses to the electronic survey.

2. PERFORMANCE AGAINST GAVI STRATEGY INDICATORS (2007-10)

The GAVI Alliance Strategy 2007-10 sets out the hierarchy of outcomes, outputs and indicators to support the achievement of the overall goal: “Save children’s lives and protect people’s health through increased access to vaccines in poor countries”.

The SG3 outcome is: ‘Predictable, long-term and sustainable financing for national immunisation programs’. This outcome is supported by three outputs, namely:

- Output 3.1: ‘Improved sustainability of new vaccines and immunisation programs’ (*maps to our evaluation question SG3.3*)
- Output 3.2: ‘Increased donor government commitments made to innovative financing mechanisms through IIFIm, AMC, debt relief and an additional innovative finance mechanism’ (*maps to our evaluation question SG3.4*)
- Output 3.3: ‘Increased levels of multi-year government and private contributions’ (*maps to our evaluation questions SG3.1 and SG3.2*)

For each of these outputs there are several relevant indicators. This section presents an analysis of GAVI’s performance against these indicators, based on data provided by the GAVI Secretariat for use in this evaluation. Supporting Paper 8 provides further details on the indicators tracked and progress made to date to achieve the output.

Where relevant, we have included information from our evaluation work to assess progress against the strategy indicators. However, our evaluation parameters do not translate directly to the strategy indicators and hence the evaluation conclusions and analysis is wider. We provide a number of observations about the 2007-10 Strategy and GAVI’s monitoring of progress in our analysis of SG4.³

The following sub-sections contain progress assessments for each output, organised by SG evaluation question, rather than by the outputs set out in the strategy, for ease of reference to our evaluation report.

Evaluation questions SG3.1 and SG3.2

Output 3.3 relates to both the global level of funding (SG3.1), as well as the predictability and sustainability of this funding (SG3.2). The output is: ‘Increased levels of multi-year government and private contributions’. The indicators for this output and our assessment of progress are presented in Table 2.1 below.

We note that in attempting to compile GAVI’s progress against these indicators, some information sources provided conflicting or outdated data (for example, the data included in the dashboard, which we understand is a key source for monitoring GAVI’s performance against its strategy indicators, presented outdated data on two of these indicators).

³ GAVI second evaluation, SG4 evaluation report.

In addition, the language of the indicators creates some confusion as to whether these targets are annual or cumulative targets. Examining the evolution of GAVI donor funding data, we have assumed that these are annual targets only.

Finally, details on some targets for 2009 and 2010 have not been provided.

Table 2.1: Indicators for Output 3.3 and assessment of progress

Indicators	Assessment of Progress
Achievement of funding targets: - \$330m by 2007 (from traditional sources only) - \$625m by 2008 (inc IFFIm proceeds and private funds) - 2009, 2010 TBD	<ul style="list-style-type: none"> Funding from traditional sources peaked at \$282m in 2007 (falling short of the target for 2007), and total funding (including IFFIm proceeds and private funds as well as traditional sources) reached \$624m in 2008 (only marginally short of the 2008 target) (We assume that these are annual targets rather than cumulative)
Proportion of donor funding which are multi-year (3 years or more) – 75% by 2010	<ul style="list-style-type: none"> It is not clear which type of donors are to be counted under this indicator i.e. bilateral agreements only or other agreements as well such as private sector / foundation (i.e. Gates) agreements, etc. If only bilateral agreements are considered, proportion of donor funding which are multi-year (3 years or more) are as follows: 2008: 56% (5 out of 9 donors⁴); 2009: 33% (3 out of 9 donors); 2010: 67% (2 out of 3 confirmed donors as of 2009).^{5 6} If Gates and the EC is also included, the numbers are as follows: 55% (6 out of 11) in 2008; 36% (4 out of 11) in 2009; 75% (3 out of 4) in 2010. Based on the figures for 2008 and 2009 (given 2010 figures are not complete), this indicator has not been met.
Achievement of private fundraising targets - \$8m by 2008 - \$10m by 2009 - \$12m by 2010	<ul style="list-style-type: none"> Different evidence sources are not consistent, this is likely to be as a result of the ambiguity of the indicator. Based on recent information on GAVI's reporting of progress on the work plan, the indicator has not been met.

Thus, in summary:

- GAVI has fallen short of its fund raising targets, although some targets have been nearly met; and
- GAVI is not on track to meet its target on raising predictable finance in terms of raising multi-year commitments from donors.

⁴ Given the funding provided by the UK government for the 2006-08 grant agreement was provided in 2006-07, the UK is not included in this calculation.

⁵ We understand that the numbers for 2009 provided to us by GAVI and not final,

⁶ Ireland is included for 2008 only (its contributions in 2009 and 2010 related to its 2006-8 agreement). Spain is included in 2008 and 2009 (its contribution in 2008 related to a 2008-9 agreement).

Evaluation question SG3.3

Output 3.1 relates to country level sustainability, and is relevant for our evaluation question SG3.3. The output is: ‘Improved sustainability of new vaccines and immunisation programs’.

The indicators for this output and our assessment of progress are presented in Table 2.2 below. The indicators do not specify a baseline or a time period for assessment of progress (however we assume the time period would be the Strategy period i.e. 2007-10).

We note specifically that GAVI does not track these indicators. Based on our evaluation work, we have included information related to these indicators from the cMYPs – however as the data included in the cMYPs is forecast data only (i.e. not outturn data), the information is also not sufficient to assess progress.

The overall GAVI progress report as well as the partner progress reports provide some evidence of activities that may foster progress related to these indicators, but our view is that they do not help assess if the indicator has been achieved.

Table 2.2: Indicators for Output 3.1 and assessment of progress

Indicators	Assessment of Progress
Increased and sustained allocation of government resources to new vaccines	<ul style="list-style-type: none">• Data not available to track progress.• The indicator does not have a specific, time-limited target, hindering assessment• Based on cMYP data, there are projected increases in government finance per surviving infant for new vaccines
Increased and sustained allocation of all other sources of financing to immunisation programs	<ul style="list-style-type: none">• Data not available to track progress.• Again, the indicator does not have a specific time-limited target• The cMYP data provides some indication of forecasted trends: (i) If ‘all other sources of finance’ are to be interpreted as all non-government finance including GAVI, this indicator is on track to be met, based on cMYP projected increases in non-government finance per surviving infant for immunisation; and (ii) However, if this indicator refers to donor finance (and NGO/ private) <i>excluding GAVI</i>, then the cMYP data shows somewhat of a declining trend for multilaterals and bilateral donors.

It is not possible to assess progress against these indicators due to the absence of data/information.

Evaluation question SG3.4

Output 3.2 relates to the innovative financing mechanisms, and is relevant for our evaluation question SG3.4. The output is: ‘Increased donor government commitments made to innovative financing mechanisms through IIFIm, AMC, debt relief and an additional innovative finance mechanism’. The indicators for this output and our assessment of progress are presented in Table 2.3 below.

Table 2.3: Indicators for Output 3.2 and assessment of progress

Indicators	Assessment of Progress
Government commitments to IFFIm of: \$3.5bn by 2007; \$3.7bn by 2008; \$3.85bn by 2009; \$4bn by 2010	<ul style="list-style-type: none"> • Indicator met by 2010, although intermediate targets were not met
AMC - \$1.5bn committed by donors	<ul style="list-style-type: none"> • Not clear if this refers to the original contribution from donors for the AMC, or the additional funds that have to be raised to GAVI to honour its commitments. Hence it is not possible to assess if this indicator has been met.
Development of AMC policy and implementation (various)	<ul style="list-style-type: none"> • Several policy related targets are ambiguous (say on timelines, etc) and there is insufficient evidence to assess progress • AMC implementation related targets are being progressed, although we understand there have been delays
Debt relief funds used	<ul style="list-style-type: none"> • Not monitored
An additional innovative mechanism explored	<ul style="list-style-type: none"> • Insufficient information to assess progress

To a large extent there is insufficient information to assess progress against Output 3.2. Where evidence does exist for indicator targets relating to funding raised (donor commitments to IFFIm and AMCs), evidence suggests that these have been met.

3. SG3.1: LEVEL OF GLOBAL DONOR FINANCIAL RESOURCES FOR IMMUNISATION

3.1. Introduction

The first question that we examine as a part of the SG3 evaluation is: **‘To what extent has GAVI increased the level of global financial resources from donors for immunisation activities?’**

The focus of this evaluation question is on the *level* of global financial resources for immunisation. The next question (evaluation question SG3.2) examines the predictability and sustainability of funding. Funding at the national level is considered in evaluation question SG3.3.

GAVI was established (in 1999/2000) at the end of a decade where international donor and national government funding for immunisation had been declining – resulting in declining immunisation coverage rates in the 1990s. Given this context, an assessment of the level of resources raised by GAVI (as well as the ‘nature’ of the resources, in terms of being predictable and sustainable, as examined in the next question SG3.2) is a key aspect of the review of its performance.

3.1.1. Scope of the evaluation question

Our analysis under SG3.1 covers an assessment of the following:

- **The level and rate of growth of GAVI resources, within the context of total global resources for immunisation, health, and development aid more generally.** We examine this at an aggregate level (i.e. in terms of total funding flows) as well as for a small number of key donors (i.e. in terms of changes in their contributions to development/ health/ immunisation and GAVI).
- **Whether the resources raised through GAVI for immunisation are additional or have resulted in displacement from other channels of immunisation.** Within this, we specifically examine the trends in WHO and UNICEF immunisation funding.

3.1.2. Sources of evidence

The assessment of this evaluation question is primarily driven by quantitative analysis of publicly available databases (including regression analysis, where data is available for a reasonably long period of time). The quantitative analysis is supplemented by structured interviews – primarily with the donor community – which has been particularly useful in validating the data analysis and also in interpreting the results (for example in understanding GAVI’s value add).

We refer to the following databases in our work:⁷

- The OECD DAC database on donor funding. We have extracted time series data on total ODA, health specific ODA, and the ODA of some key health sector bilateral

⁷ More information on these data sources and their limitations is provided in Annex 1.

donors. While the data is available for a longer period of time (from 1967 onwards), we have focused on the period 1990-2008 for the purposes of our analysis. 2009 data was not available at the time of writing.

- The Development Assistance for Health (DAH) database. This is a relatively new database that has been developed by the Institute of Health Metrics and Evaluation (IHME).⁸ The data covers total funding for health over the period 1990-2007 for bilateral and multilateral donors (traditional multilateral organisations and two GHPs – GAVI and the Global Fund), private foundations, and Non-Governmental Organisations (NGOs) (mainly US NGOs). Thus this database provides a broader measure donor assistance for health than the OECD DAC database. Limitations of the database include:
 - Only two GHPs (GAVI and GFATM) are tracked, and hence any contributions from bilateral donors to other GHPs is recorded as bilateral funding.
 - The data is drawn from the OECD Creditor Reporting System (CRS) database, which we understand suffers from some underreporting.
- The Immunisation Funding (IF) database (included as a part of a database on donor funding for Maternal Neonatal and Child Health (MNCH)).⁹ This is also a relatively new database that has been compiled as a part of academic research by the London School of Hygiene and Tropical Medicine (LSHTM). The database covers bilateral and multilateral (traditional multilaterals and GAVI) donor funding for immunisation over the period 2003-07. Some limitations of the database include:
 - Since it draws on the OECD CRS database¹⁰ it excludes WHO data. However, for completeness, CEPA has added immunisation funding data provided directly by WHO to the series¹¹ (although we note that the WHO data may not be completely consistent with the other data).
 - The database separates donor funding for polio and non-polio immunisation, however data on GAVI funding for polio has not been included. (GAVI has provided funding for polio through IFFIm to WHO for a polio stockpile, part of which was re-distributed for Global Polio Eradication Initiative (GPEI)).

In addition, to the above-listed databases, we have also analysed data from WHO and UNICEF on their immunisation expenditure from 2000.

Structured interviews (primarily with the donor community) and the e-survey have also supported the conclusions.

Table 3.1 summarises the key sources of evidence for the evaluation of this question.

⁸ Ravishankar et al (2009): “*Financing of global health: tracking development assistance for health from 1990 to 2007*”, Lancet.

⁹ Greco et al (2008): “*Countdown to 2015: assessment of donor assistance to maternal newborn and child health between 2003 and 2006*”, Lancet, and Greco et al (2006): “*Countdown to 2015: tracking donor assistance to maternal newborn and child health*”, Lancet.

¹⁰ CRS = Creditor Reporting System; <http://www.oecd.org/dataoecd/50/17/5037721.htm>

¹¹ Note that we only have data on WHO non-polio immunisation funding (i.e. we do not have data on WHO polio funding) and hence the revised database by CEPA is still incomplete.

Table 3.1: Description of evidence sources

Evidence source	Description
Review of documentation	Review of GAVI documentation (primarily Board papers, but also other reports from the Secretariat and GAVI progress reports). Academic literature including supporting papers for the databases used in the analysis (DAH and IF databases), and other relevant global literature.
Quantitative analysis	Analysis of data from the DAH, OECD DAC and IF databases. Analysis of data from WHO and UNICEF on their immunisation expenditure.
Regression analysis	Regression analysis to test whether funding to GAVI has displaced funding to WHO and/ or UNICEF in particular, and global health funding in general.
Structured interviews	Interviews with a range of GAVI stakeholders, including Secretariat, Board members, GAVI partners, experts, etc.
Electronic surveys	Two questions included in the global e-survey.
Country studies	n/a
Comparator analysis	n/a

3.1.3. Structure of the section

We have structured this section so as to first present the quantitative and regression analysis, followed by the feedback from the structured interviews and e-survey. The section is structured as follows:

- Section 3.2 provides a brief background of the funds raised by GAVI from inception to date.
- Section 3.3 presents the data analysis on the assessment of the growth of GAVI funding as compared to total immunisation, health and development aid.
- Section 3.4 presents the data analysis and regressions that examine the additionality of GAVI funding.
- Section 3.5 presents the overall feedback from the structured interviews.
- Section 3.6 describes the results from the electronic survey.
- Section 3.7 concludes.

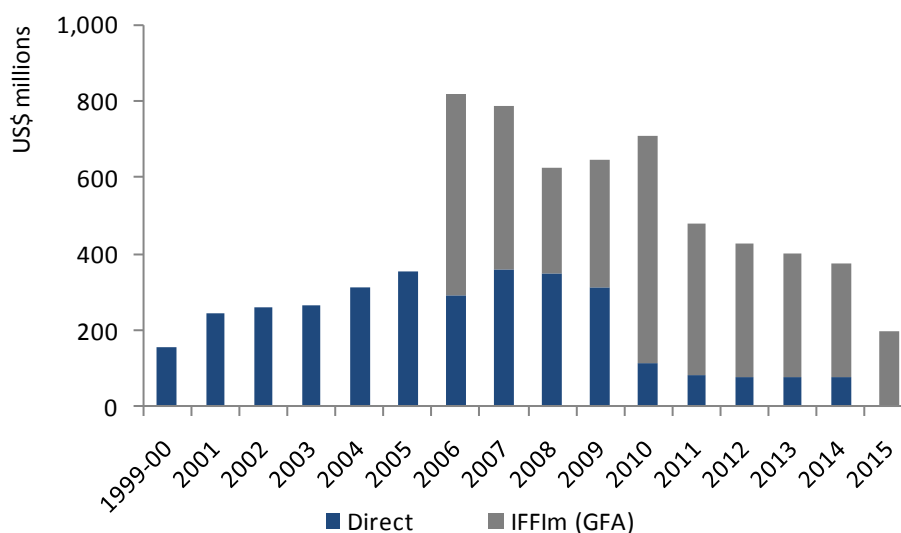
3.2. Background

By way of background, we summarise in this section the funds raised by GAVI from inception to date.

3.2.1. Total funds raised by GAVI

In total, GAVI received \$5.2bn in contributions in Phase I and II¹², through direct contributions from bilateral donors plus funds received from IFFIm through the GAVI Fund Affiliate (GFA), with a further \$1.9bn committed over Phase III (refer Figure 3.1).¹³ Note that this total does not include donor contributions for the AMC that have been earmarked for transfer to GAVI in relation to purchase of the pneumococcal vaccine. If this amount were included it would increase the total contributions in Phase III by \$1.2bn (bringing the total to \$3.1bn).¹⁴

Figure 3.1: Donor contributions to GAVI (1999-2015)¹⁵



Source: GAVI Secretariat

The above data reflect a mix of actual contributions (to 2009, including the estimated total for 2009) and commitments (from 2010 onwards).

Sources of funding in each GAVI Phase vary. Key points to note are as follows:

- Contributions received during Phase I (1999/2000-2005) – a total of \$1.6bn – were comprised entirely of direct donor contributions.

¹² Including an estimated \$644m for 2009 and a projected \$712m for 2010.

¹³ Please note that this is as per the data provided by the GAVI Secretariat in November 2009, and does not include any new commitments for funding thereafter.

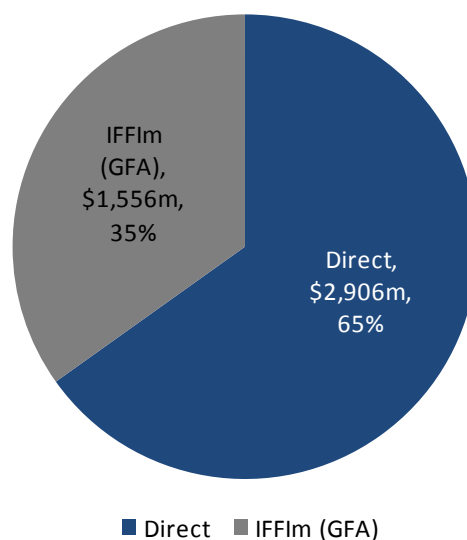
¹⁴ The total amount available to GAVI for the AMC is \$1.5bn, with \$1.2bn being made available until 2015.

¹⁵ Data from 1999-2008 are actual. Data for 2009 is estimated actual. Data for 2010-15 are commitments. Note that we have smoothed the data provided by the Gates Foundation. It provided catalytic support of \$325m in 1999/2000 and \$425m in 2001; these amounts have been apportioned equally over the period 1999-2004. Similarly, the contribution of \$154m in 2005 has been apportioned equally to 2005-6.

- During Phase II (2006-10), the majority of contributions have come through IFFIm. Of the total of \$3.6bn, 60% (\$2.2bn) were received from the GFA. The remaining 40% (\$1.4bn) came from direct donor contributions (GAVI has received additional direct donor funding in 2010 which is not included here; direct donor contributions comprised 46% of total funds from 2006-09).
- Known contributions of \$1.9bn for Phase III are presently dominated by the GFA, which accounts for 84% (\$1.6bn).

Figure 3.2 below presents the breakdown of contributions by type based on actual data only. It shows that, as of November 2009, the majority of contributions received were accounted for by direct contributions from bilateral donors.

Figure 3.2: Breakdown of contributions by type (as of Nov 2009)



Source: GAVI Secretariat

3.2.2. Private philanthropy

Private philanthropy contributions to GAVI are dominated by the Gates Foundation, which provided start-up contributions of \$750m in the first two years following GAVI's formation. The Gates Foundation was particularly important as a proportion of actual contributions from 1999-2009. It accounted for 26% of total contributions (including IFFIm proceeds) over this period, and has committed to provide a further \$375m between 2010 and 2015.

GAVI also receives contributions from La Caixa Foundation and other private donors, but these comprised a small proportion (<1%) of total actual contributions from 1999-2009.

3.3. GAVI funding and global funding for immunisation, health and development

This section examines the level and rate of growth of GAVI funding in the context of total immunisation, health and development aid.

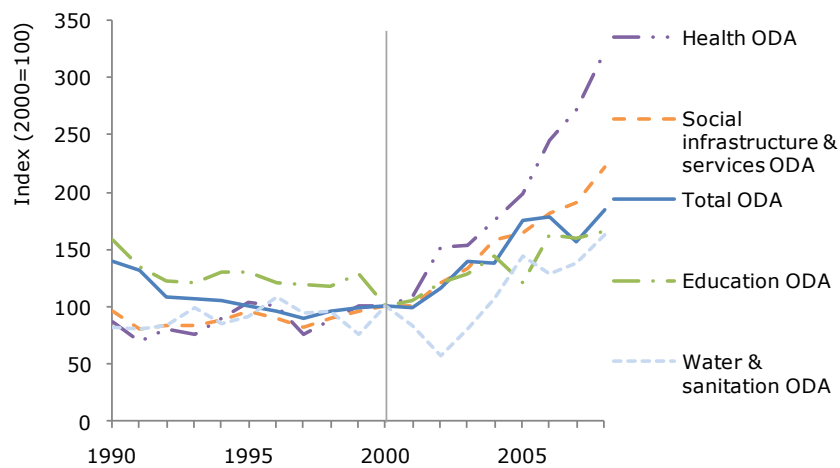
We have examined the trends in total ODA, and health and immunisation funding (based on data from the DAH and IF databases respectively), and compared these with the trend in GAVI

funding. The purpose of this analysis is to understand the relative importance of GAVI in the context of total global funding for immunisation, health and development. Four key facts are presented below (please refer Annex 2 for more details).

First, total (all sectors) ODA has grown substantially over the period 1997-2008, increasing at a compound growth rate of 6.8% per year.

Second, within the total, since the year 2000, health sector ODA has grown faster than other comparable sectors – as shown in Figure 3.3 below. In particular, health sector ODA grew at a compound rate of 14.1% over the period 1997-2008, compared with 9.5% for the Social Infrastructure and Services category as a whole (of which the health sector is a part). Education sector ODA grew at a compound rate of only 3.1% over the same period. These significant increases in donor health funding are also observed in the DAH and IF databases.

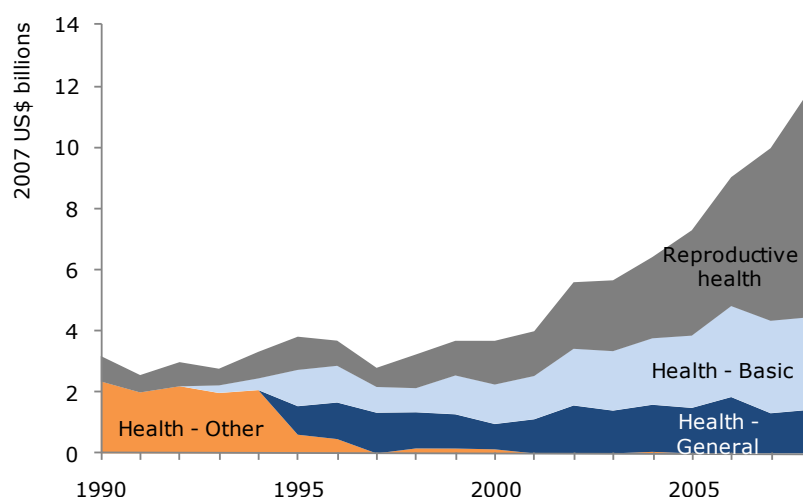
Figure 3.3: Index of ODA (1990-2008)



Source: OECD DAC

Third, disaggregating Health ODA suggests that (for the period 1990-2007) funding for ‘basic health’ – which includes immunisation – did not grow as fast as ‘reproductive health’ and HIV/AIDS funding (refer Figure 3.4 below). Table 3.2 shows that in addition to growing faster than basic health, reproductive health grew faster than our two measures of total health aid – ODA and DAH.

Figure 3.4: Health-specific ODA funding by sub-sector (1990-2008)



Source: OECD DAC

Table 3.2: Growth rates in donor funding

Category	Growth rate (1995-2007)
Basic health	8.1%
Reproductive health	17.4%
Total DAH	9%
Total health ODA	5.1%

Source: OECD DAC

Looking across data sets we observe that (for the time periods available) immunisation, although growing, grew slower than other health. For example, the IF database shows a total growth rate of 10.5% for immunisation over the period 2003-07 as compared to 15.3% for health ODA over the same period.

Fourthly (and finally), we note that funding for non-polio immunisation did better than funding for polio (in terms of growth rates)¹⁶. Comparing across datasets, we find that the growth rate for non-polio immunisation is comparable to the growth rate in total health ODA – the IF database shows a total growth rate of 15.4% for non-polio immunisation in particular, as compared to 15.3% for health ODA over the period 2003-07 – as represented in Table 3.3 below. This result is, in our view, less strongly supported given the volatility of the data over this period.

¹⁶ However this is not complete as we do not have data on WHO polio funding which is an important source of funding for polio.

Table 3.3: Growth rates in donor funding

Category	2003-04	2004-05	2005-06	2006-07	2003-07
Total imm. funding (polio and non polio) ¹⁷	-11%	15%	-1%	48%	10.5%
Non-polio imm. funding	-4%	6%	-9%	91%	15.4%
Total DAH	15%	15%	6%	15%	12.6%
Total health ODA	13%	14%	24%	11%	15.3%

Source: Immunisation funding database; DAH database; OECD DAC

To summarise, we find that:

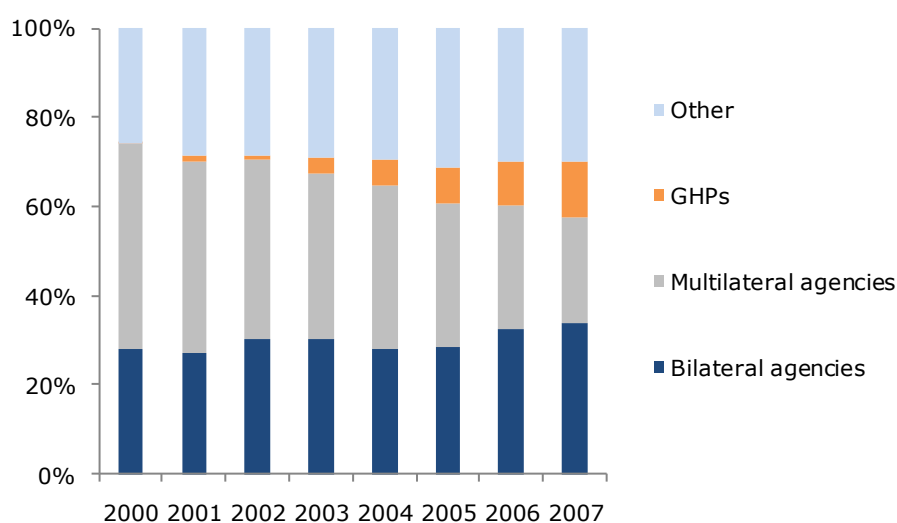
- total ODA, health and immunisation funding is increasing over the period;
- health sector funding is growing in importance compared to many other ODA sectors;
- but funding for basic health (which includes immunisation) has not increased as much as funding for reproductive health in particular; and
- there is some (albeit relatively weak) evidence to suggest that within immunisation, non-polio immunisation funding has done better than the total (and by implication polio immunisation funding).

It is interesting to note that underlying this growth in total health and non-polio immunisation funding is a shift in the relative proportion accounted for by different ‘channels of assistance’ i.e. bilaterals, multilaterals and GHPs (i.e. GAVI and the Global Fund).¹⁸ Figure 3.5 shows this shift for total health funding (using DAH data).

¹⁷ Please note that as per the above footnote, this does not include WHO polio funding, which we can expect to be fairly large.

¹⁸ We also carried out exploratory regression analysis to test the hypothesis: ‘Has GAVI benefited from the wider trend in increasing DAH?’. To address this we regressed year-on-year changes in GAVI funding on changes in DAH (and other variables). However, there were only six observations since GAVI disbursements began in 2001, DAH data ends in 2007, and one observation is lost in calculating differences. As a result the results were inconclusive and are not presented here.

Figure 3.5: % of DAH by channel of assistance (2000-07)



Source: DAH database

As can be seen from Figure 3.5:

- Following the emergence of GAVI and the Global Fund in 2000 and 2002 respectively, a greater proportion of total health disbursements is accounted for by these organisations – with their share increasing to 12% of total DAH in 2007.¹⁹
- Over the same period, the proportion of total health disbursements accounted for by multilateral agencies fell from 46% to 24% in 2000 and 2007 respectively.
- At the same time, the bilateral agencies and ‘Other’ (primarily US NGOs, but also including private foundations such as the Gates Foundation) also increased their share – the former from about 28% to 34% and the latter from 26% to 30% in 2000 and 2007 respectively.²⁰

Thus we can conclude that of total health disbursements, the GHPs have become increasingly important relative to multilaterals. See the analysis of DAH data in Ravishankar et al (2009).²¹

Similar trends are also apparent in the channel of assistance recorded by the immunisation funding database (see Figure 3.6).²²

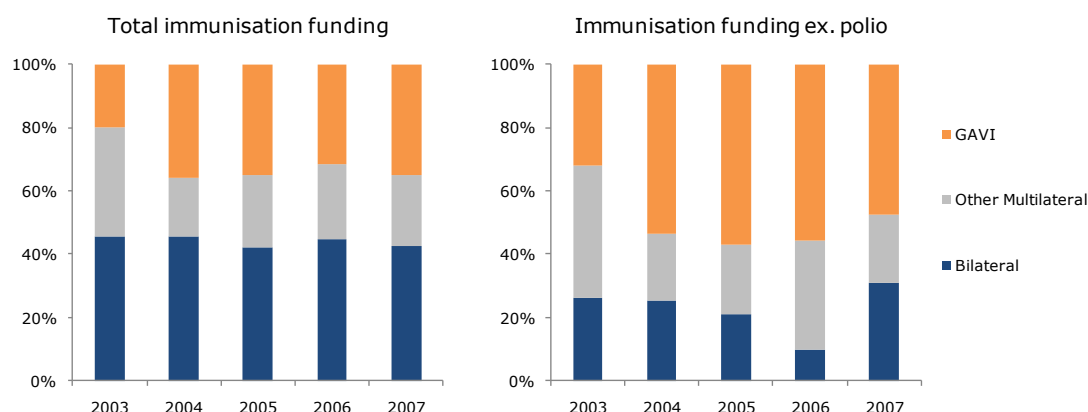
¹⁹ Note that this trend cannot be discerned from the ODA data as the category on ‘multilateral ODA’ includes funding through the multilateral organisations such as WHO, UNICEF, etc as well as the GHPs.

²⁰ Note, however, that as only GAVI and the Global Fund are included in the GHP category, the proportion accounted for by bilateral agencies includes resources channelled through other GHPs, including GPEI.

²¹ The authors note that the proportion of publicly-financed DAH for which the channel of assistance was unspecified fell from 1990 to 2007. This may have had the effect of artificially inflating growth in the share of DAH for non-bilateral channels, and so these trends should be interpreted with caution.

²² It is important to note that since these data are drawn from the OECD CRS database (except for GAVI, which supplied data directly to the researchers concerned) they are incomplete for multilateral institutions. Though we have included WHO data from an alternative source, the total remains only partial.

Figure 3.6: % of recorded immunisation funding by channel of assistance: total immunisation and non-polio immunisation (2003-07)



Source: Immunisation funding database

Our conclusions from Figure 3.6 are the following:

- In terms of total immunisation funding, the bilateral share has been relatively constant and the multilateral share has declined, while the GHP (i.e. GAVI) share has increased. Between 2003 and 2007, the proportion of disbursements for total immunisation accounted for by multilateral institutions fell from 35% to 22%, while the proportion accounted for by GAVI rose from 20% to 35%. However, note this data does not include WHO polio funding, and hence the conclusions are to be interpreted with caution.²³
- For non-polio immunisation, the increasing share of GAVI is apparent²⁴, while the share of multilaterals is declining. Bilateral funding is broadly constant in the early years and then relatively volatile in 2005-07 (the reduction in 2006 is mostly accounted for by changes in US funding).²⁵ The share of GAVI increased from 32% to 48%, that of the multilaterals declined from 42% to 21%, and for the bilaterals increased marginally from 26% to 31%.

Thus we conclude that both total health funding and immunisation (total and non-polio) suggest a growing importance of GHP funding and a declining share of total multilateral funding. We assess whether these declining shares in multilateral funding are associated with actual declines in funding levels below (Section 3.5).

²³ Also, as mentioned above, GAVI funding for polio is not included in this database.

²⁴ We note that some IFFIm monies have been used to fund polio, however our data on immunisation funding does not include this.

²⁵ The sharp decline in bilateral funding in 2006 is mainly on account of the US, which provided ~\$40m in 2003-5, almost zero in 2006 and ~\$110m in 2007.

3.4. Relative prioritisation of GAVI/ immunisation by donors

We have also examined trends in ODA, health and GAVI funding for a small number of key donors – the US, UK and Norway. The purpose of this analysis is to understand the relative prioritisation of GAVI by donors.

3.4.1. US

The US government is the largest source of government contributions for DAH for all years covered by the database (1990-2007). Table 3.4 below shows that it has placed increasing emphasis on health as a proportion of its total aid budget. DAH as a proportion of total ODA grew from 7.2% in 1990 to 25% in 2007 – though much of this increase came before 2000 (and the emergence of GAVI).

While we do not have data on annual immunisation funding by the US government, we have access to data on health funding by different categories for the United States Agency for International Development (USAID). According to this data (see Table 3.4 below), USAID moved towards a greater prioritisation of HIV/AIDS over ‘Child and Maternal Health’ (where we understand any funding for immunisation would be accounted for) in the period. While aid for Child and Maternal Health rose from 5.8% to 9.2% as a proportion of ODA, aid for HIV/AIDS rose from 0% to 11.5% between 2000 and 2007. As a further contrast, (although it is not possible to draw specific conclusions from the comparison) contributions to GAVI (also zero in 2000) rose to 3.3% of aid for Child and Maternal Health by 2007.

Table 3.4: US funding for health²⁶

Category	1990	2000	2007
Total ODA (2008 \$)	\$17.1bn	\$12.2bn	\$22.3bn
US government DAH as a % of US ODA ²⁷	7.2%	15.1%	25.0%
Aid for Child and Maternal Health as a % of US ODA		5.8%	9.2%
Aid for Global HIV/AIDS Initiative as a % of US ODA		0.0%	11.5%
Contributions to GAVI as a % of US Child and Maternal Health funding		0.0%	3.3%

Source: OECD DAC; DAH database; USAID website

²⁶ Source of data: the DAH and ODA databases as well as the USAID website.

²⁷ We have used US DAH as a proxy for US health ODA.

3.4.2. UK

UK was not a major donor for health relative to other donor countries in the 1990s. However, from 2000 onwards it scaled up its aid contributions dramatically, and became the second-largest source for public DAH from 2003 onwards. While it has increased ODA in general, the UK has prioritised health over other areas. Table 3.5 below shows that DAH as a proportion of total ODA²⁸ increased from just 2.6% in 1990 to 16.8% in 2007. Although contributions to GAVI more than trebled as a proportion of ODA between 2000 and 2007, they remained small as a percentage of its total ODA at 0.4%.

Table 3.5: Resources as a proportion of total ODA (UK)

Category	1990	2000	2007
Total ODA (2008 \$)	\$4.4bn	\$6.6bn	\$9.2bn
UK government DAH as a % of UK ODA	2.6%	10.8%	16.8%
Contributions to GAVI as a % of UK ODA		0.1%	0.4%

Source: OECD DAC; DAH database

3.4.3. Norway

Over the period 1990-07, Norway accounts for around 4% of total public DAH. Similar to the US and the UK, it has increased DAH as a proportion of its ODA between 1990 and 2007, from 5.3% to 14.4% (see Table 3.6 below). GAVI appears to have been a major driver of Norway's increased focus on health, as contributions to GAVI rose from zero in 2000 to 2.3% of ODA in 2007.

Table 3.6: Resources as a proportion of total ODA (Norway)

Category	1990	2000	2007
Total ODA (2008 \$)	\$2.6bn	\$2.8bn	\$4.2bn
Norway government DAH as a % of Norwegian ODA	5.3%	6.4%	14.4%
Contributions to GAVI as a % of Norwegian ODA		0.0%	2.3%

Source: OECD DAC; DAH database

The above analysis of the ODA contributions of some of the key health sector donors shows that as they increase their contributions to health, they also provide increasing contributions to GAVI. We cannot however compare their contributions to GAVI with their other health sector contributions i.e. they may also be prioritising HIV/AIDS over other health (as in the case of the US above), but we do not have data to verify this.

²⁸ Similar to the analysis for US funding, we have used DAH as a proxy for health ODA.

3.5. Additionality of GAVI funding

We have established above that GAVI has become an increasingly important channel of delivery for non-polio immunisation, while the relative importance of multilaterals in particular is declining. This section further analyses data to disaggregate this change and explore how funding for immunisation channelled through multilaterals have performed in absolute terms.

We examine the following evidence:

- The rates of growth of different channels of assistance for DAH and IF; and
- Specific data from WHO and UNICEF on their immunisation funding²⁹.
- Regression analysis to assess whether funding to GAVI has resulted in a decline in funding for WHO and UNICEF in particular and total health funding in general.

3.5.1. Growth rates of different channels of assistance for DAH and IF

Table 3.7 presents the compound growth rates of health funding (DAH) from different channels. As can be seen from the table, total DAH has increased in real terms for all four categories of channel of assistance (although some specific multilateral institutions have seen declines³⁰).

Table 3.7: Real growth (Compound Annual Growth Rate; CAGR) in funding by channel for DAH

Category	Bilateral	GHPs (GAVI and GF)	Multilateral	Other
Total DAH (1990-2007)	6.3%	168.6% (from 2000-07)	5.3%	12.8%

Source: DAH database

Table 3.8 presents growth rates by channel of assistance from the IF database. For immunisation disbursements, bilateral and GHP (i.e. GAVI) channels have seen real growth over the period 2003-07, while the multilateral channel has seen a marginal decline (both in the case of total immunisation disbursement data and that excluding polio).³¹ However we note that given the absence of WHO polio related disbursements, the result for total immunisation is not robust.

²⁹ Note that we have data for WHO on: (i) its immunisation expenditure by source of finance (2000-09); and (ii) bilateral donor financing of WHO non-polio immunisation (2002-09). For UNICEF, we have data on its immunisation expenditure by source of finance only (2000-09).

³⁰ The World Bank and Asian Development Bank are some of the multilaterals that experienced real declines over 2003-07. Additionally, funding through UNICEF declined between 2004 and 2007.

³¹ GAVI funding of polio through IFFIm monies is not included here (the Immunisation Financing database does not include this data).

Table 3.8: Real growth (CAGR) in funding by channel

Category	Bilateral	GHPs (GAVI)	Multilateral
Immunisation (2003-07)	8.7%	27.5%	-1.0%
Immunisation excl. polio (2003-07)	20.4%		-2.5%

Source: Immunisation funding database

In the case of non-polio immunisation, this decline is dominated by a dramatic fall in disbursements through the International Development Association (IDA). WHO and UNICEF total disbursements in particular have not shown a decline over the period.³²

3.5.2. Analysis of WHO immunisation funding and expenditure data

WHO has provided CEPA with data on their non-polio immunisation expenditure for use in this evaluation (Annex 3 provides the data). We have not had access to polio-related WHO immunisation expenditure, and are not therefore in a position to consider immunisation more broadly. Although non-polio immunisation expenditure is most directly relevant to GAVI's activities, we recognise that polio and non-polio expenditure should ideally be considered together and that GAVI has provided some funding for polio.³³

This section presents a detailed analysis of the data that has been made available. Please note that 'immunisation' for the rest of this section denotes 'non-polio immunisation' only.

WHO non-polio immunisation expenditure

WHO expenditure on non-polio immunisation has increased over the period 2000-09.^{34 35} This is evidence to support the view that GAVI's funding has not lead to any 'absolute displacement' from WHO (i.e. actual reductions in total funding received by WHO for non-polio immunisation).

³² Note that data for WHO has been added by CEPA and hence may not be consistently recorded as that for other channels included in this database.

³³ IFFIm has provided funding to WHO for polio immunisation as well. Initially, in 2006, \$191m of funding was approved for WHO (for a polio stock pile), and in 2007, \$104.6m of this was transferred to GPEI.

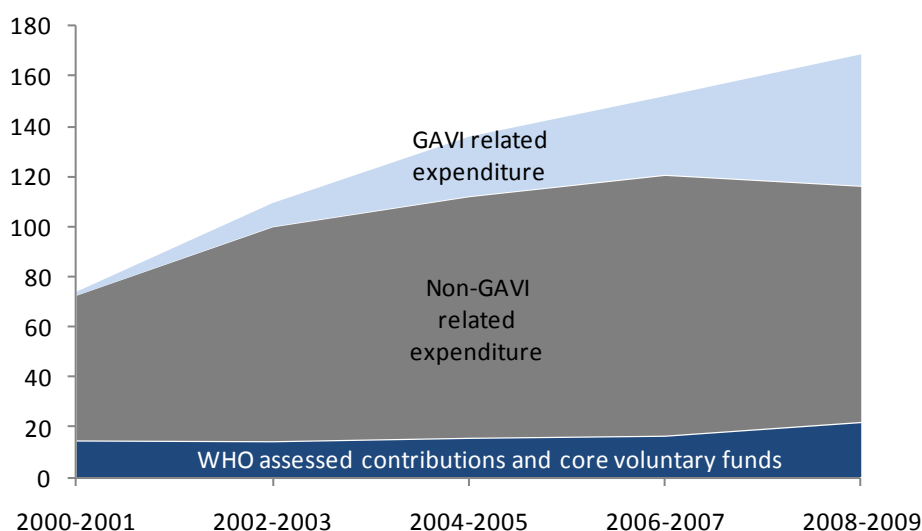
³⁴ While total WHO expenditure has declined as a proportion of total DAH (it comprised 19.7% of total DAH in 1990, 11.6% in 2000 and 7.1% in 2007), it has grown in importance in terms of non-polio immunisation expenditure (its share grew from 15.3% in 2003 to 17.8% in 2006/7). However we note that the immunisation funding database covers a short period of time only (2003-07) and hence this may not be fully reflective of the trend.

³⁵ WHO has provided CEPA with its global expenditure for non-polio immunisation by source/ category of funding over the period 2000-09. Of the total funds, we have excluded the following: (i) GAVI funds for countries that have been channelled through WHO (for example some program funds for Pakistan, Somalia, etc); (ii) pandemic influenza funds, as these were one-off during the biennium 2006-07 and 2008-09; and (iii) IFFIm funds for measles campaigns (Measles Partnership), as we understand that these funds were used for country campaigns only and did not include any program administration cost.

However, within the total expenditure, there have been significant shifts in the sources of funding (see Figure 3.7):

- contributions from ‘WHO assessed and core voluntary funds’³⁶ for immunisation have been broadly flat and have increased marginally in the last biennium;
- funding from the GAVI sources³⁷ have increased dramatically (within this increases in GAVI Work Plan Funding have more than off-set reductions in ‘bilateral funding for GAVI-related activities’);³⁸
- funding from sources for ‘non-GAVI’ related expenditure³⁹ have increased, although have reduced slightly in the last biennium. These trends mask a significant reduction in earmarked bilateral support, which has been largely offset by funding from other sources (e.g. from the Gates Foundation).

Figure 3.7: Trends in WHO immunisation expenditure, by source of funding category (\$m)



Source: Data provided by WHO

Despite increases in total expenditure on immunisation, these trends are consistent with the concern expressed by WHO that it has become more difficult to attract bilateral funding for non-GAVI related immunisation priorities (especially given that over 95% of the core funds allocated to immunisation are used to support the salaries of WHO immunisation staff).

We have requested further information on total WHO expenditure broken down by donor source – but WHO have been unable to provide this within the time available for this evaluation.

³⁶ ‘WHO assessed funding’ is compulsory for donors/ membership fees. ‘WHO core voluntary funds’ is non-compulsory/ voluntary funding from donors.

³⁷ This includes: (i) GAVI work plan funds; (ii) ADIP funds received through John Hopkins, PATH and GAVI work plan; (iii) Hib Initiative funds received through John Hopkins; (iv) Bilateral contributions towards GAVI related activities (Denmark, Netherlands and Norway provided direct funds to WHO earmarked for GAVI over the period 2000-07); and (v) maternal and neonatal tetanus funds from IFFIm.

³⁸ We note that over the mid 2000s, some bilateral donors provided funds directly to WHO for GAVI related activities, but this has been discontinued. All bilateral funding for WHO is now channelled through the work plan.

³⁹ This includes all voluntary contributions (from bilateral government donors, private foundations, etc) that are not directly linked to GAVI.

Given this, we do not have enough evidence to distinguish between two possible explanations of this shift in WHO's funding sources:

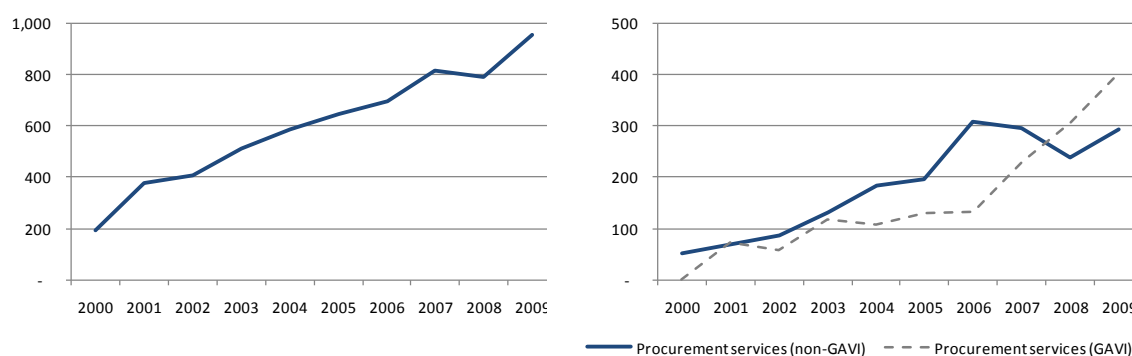
- if reductions in earmarked bilateral donations for immunisation have been offset by increased un-earmarked contributions from bilateral donors, then this displacement is, in effect, an internal WHO allocation decision (which may or may not indirectly relate to GAVI);
- alternatively if increases in core contributions from bilateral donors have not offset reductions in earmarked bilateral donor support for immunisation, it may suggest that either GAVI has had some impact, or that donors have independently reduced the amounts of ODA that they are prepared to channel through WHO.

3.5.3. Analysis of UNICEF immunisation funding

An examination of the data provided by UNICEF on its immunisation-related expenditure over the period 2000-09 reveals the following (see Figure 3.8 below)⁴⁰:

- Total UNICEF expenditure on immunisation has increased over the period 2000-09.
- Within the total expenditure, there have been significant shifts in the sources of funding:
 - Contributions from the regular and voluntary funds to immunisation have been increasing until 2005, and marginally declining thereafter.
 - Funding for immunisation procurement activities has been increasing – with that for GAVI related procurement being higher than non-GAVI related procurement from 2008 (which we understand reflects purchase of pentavalent vaccine in large birth cohort countries).
 - Funding from the GAVI work plan has increased over time (albeit with a decline in 2005); however it represents only a small proportion of UNICEF immunisation expenditure.

Figure 3.8: Trend in UNICEF immunisation expenditure



Source: Data provided by UNICEF

As is the case with WHO, while there has been no decline in total UNICEF immunisation expenditure, GAVI-related funding has increased. (We note however the difference in the nature

⁴⁰ Note that for UNICEF the data covers both polio and non-polio immunisation.

of GAVI-related funding for UNICEF – i.e. procurement services, with a related commission to UNICEF – as against WHO, where increases in GAVI-related funding refers mainly to the work plan). In addition, data from UNICEF suggests that the percentage of funds from total UNICEF regular and voluntary funds (assumed to be the same as Medium Term Strategic Plan (MTSP) funds) has declined marginally over the period. This suggests that UNICEF immunisation department is not being provided the similar level of funds for its activities.

Thus in the case of UNICEF, the data does not point towards displacement of funding in favour of GAVI.

3.5.4. Regression analysis

We have carried out simple regression analysis to assess whether funding to GAVI has resulted in a decline in funding for WHO and UNICEF in particular, and total health funding in general. The detail of our analysis can be found in Annex 4.

Approach

The IF database covers the period 2003-07 only, giving too few data points for a rigorous regression analysis. We therefore carry out our regression analysis at the health level using data from the DAH database.

Our models address two separate questions:

- *Channel specific displacement:* Has GAVI funding displaced funding for WHO/UNICEF specifically?
- *Net overall displacement:* Has GAVI funding displaced total donor resources for health?

The DAH database provides data on disbursements, and not funding, and hence we regress year-on-year dollar changes in health disbursements on year-on-year changes in GAVI disbursements, *using disbursements data as a proxy for funding.*

- For the channel-specific regressions we use WHO/UNICEF health disbursements as recorded in the DAH database
- For the overall health regressions, we use total DAH excluding GAVI.

For consistency, we also take data on GAVI disbursements from the DAH source.

Annex 4 also contains details of control variables used, including total ODA, Gross National Income (GNI), population and a dummy variable indicating years after 2000.⁴¹ The time period covered by the analysis is 2000-07. The technique we use is a simple Ordinary Least Squares (OLS) regression, with robust standard errors⁴².

Because of data limitations, we do not claim to have developed a fully-specified model (with hypotheses about causality). In addition, given the short history of GAVI (and therefore

⁴¹ The rationale for the inclusion of this variable is that there was a change in overall context around this time, with increased focus on the MDGs.

⁴² Formally, we use Huber-White standard errors to correct for general forms of heteroskedasticity. While we recognise that more complex and sophisticated time series techniques are available, our aim here is simply to highlight high-level associations and so we favour the ease of interpretation given by this approach.

relatively few data points), the regression results summarised below and presented in detail in Annex 4 need to be interpreted with caution.

Conclusions

Based on our regressions results, using alternate specifications as elaborated in Annex 4, our conclusions are as follows:

- Looking at the two specific channels (WHO and UNICEF) most closely related to GAVI, the evidence suggests a negative relationship between funding for GAVI and funding for WHO/ UNICEF. We have investigated further, and found no similar relationship between WHO/ UNICEF funding and funding from GFATM and bilateral donors. It is therefore possible that these results do indeed indicate some degree of displacement (although we may have omitted other relevant variables). However, the size of this effect is relatively uncertain given varying magnitudes of coefficients from different model estimations and datasets (note that as mentioned in the approach section upfront, we are using expenditure as a proxy for funding).
- The regression results using total donor health aid as the dependent variable suggest that little or no discernable relationship exists between GAVI disbursements and DAH across all other channels. To an extent this is expected given the small magnitude of GAVI funding compared with total DAH, and given the relatively small number of data points. It is also consistent with GAVI crowding in resources for health through some channels (e.g. bilateral donors) and displacing resources through others (e.g. WHO/UNICEF), such that its net effect is close to zero.

3.6. Structured interviews

CEPA conducted structured interviews with a range of GAVI stakeholders (including the Secretariat, Board members, GAVI partners, wider donor community, etc) to solicit their views on:

- (a) the attribution of the increase in immunisation funding to GAVI; and
- (b) the additionality of funding to GAVI.

We discuss below the main feedback provided, highlighting the feedback received from the four representatives of GAVI's key donors – given their role in relation to this evaluation question. (Note that since each bilateral donor representative that we spoke with, represents three GAVI donor countries, our consultee sample accounts for 62.5% of GAVI's donors (providing direct funding) and 95% of the contributions from 1999-09).⁴³

Interviewees were strongly of the view that donor funding for immunisation has increased due to GAVI. Donor members consulted noted that they are keen to fund GAVI as they view it as a focused immunisation agency providing a measurable return on donor investment, and as an agile and flexible mechanism to achieve development results (compared to traditional multilateral and bilateral channels). They clearly noted that in the absence of GAVI, they would not have

⁴³ In addition, we also spoke with some ex-Board members who were previously representatives of the donor community, as also some donor members in their capacity as chairs of Board Committees.

channelled the same amount of funding for immunisation (and this is particularly the case for donor contributions to the IFFIm and AMC).

The donors (and other consultees) also noted the critical role of the Gates Foundation in ‘crowding-in’ other donor investments into GAVI.

Many consultees (especially Board members) raised the issue of the additionality of GAVI funding and have expressed keen interest in analysis of available data to help reach a conclusion. We received two different messages from donors on additionality of funding to GAVI:

- Donors indicated that they have not reduced their total funding to the multilaterals. While they have increased their contributions to GAVI, this has not reduced the amount of funding they channel through the multilaterals. (We understand from the donors that their earmarked contributions to multilaterals for immunisation may have declined from the early 2000s, following a policy shift to increasingly provide more core funding as against earmarked funding.)
- Some donors however noted that there may be some displacement, as the decision to fund GAVI would come at the cost of providing funding for other health organisations, given a fixed total health sector support budget. A donor consultee also noted that in obtaining approvals for immunisation funding, they have to clearly establish why the funding cannot be routed through GAVI.

The overall message was that in the absence of GAVI, a similar amount of funding would not have gone for immunisation, for the reasons outlined above. Donors noted that they may not have channelled the amount of funding they have through GAVI, to the multilaterals instead – suggesting that GAVI has increased funding for immunisation from the donors.

3.7. E-survey

The e-survey included two statements relevant to this evaluation question, to which respondents had to comment on whether they agreed/ disagreed⁴⁴:

- “The global level of funding for immunisation by donors would have been substantially lower in the absence of GAVI”; and
- “GAVI has displaced global immunisation funding through traditional channels such as the multilaterals (i.e. GAVI resources do not represent truly additional funds)”.

Although we expect to place a greater degree of weight on analysis of the data, it is useful to have included these questions in order to get an understanding of general perceptions of global impact.

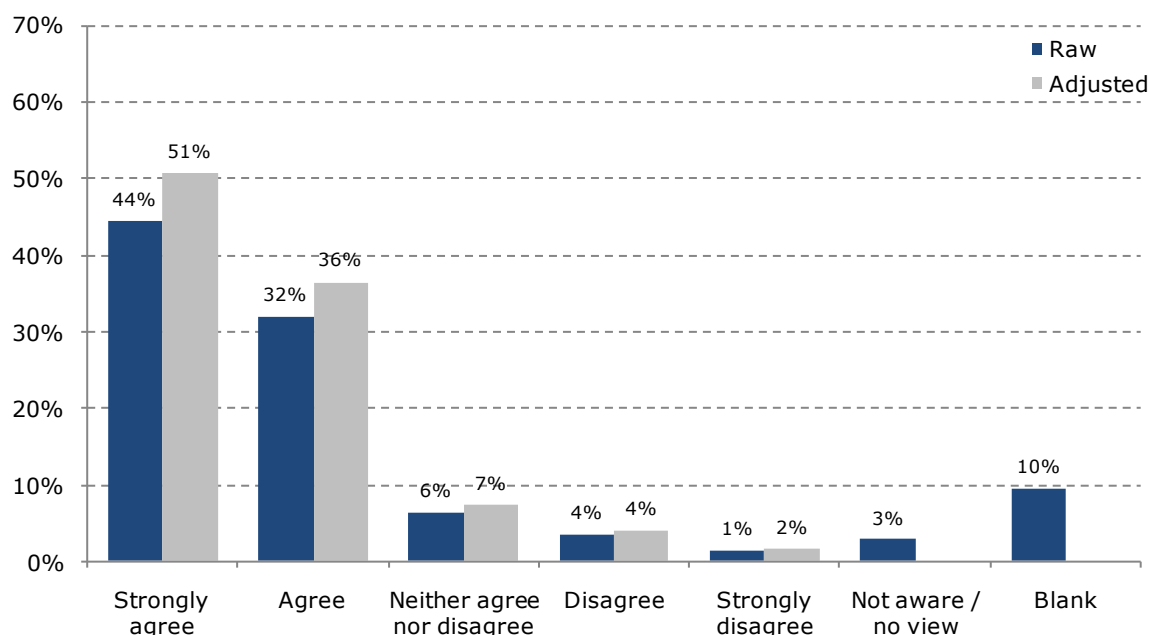
The vast majority of respondents ‘strongly agreed’ or ‘agreed’ that global funding would have been substantially lower in the absence of GAVI (see Figure 3.9 below). The comments were broadly consistent with others received as part of our structured interview process.

⁴⁴ The scale of responses for the e-survey included: ‘strongly agree’, ‘agree’, ‘neither agree nor disagree’, ‘disagree’, ‘strongly disagree’ and ‘not aware/ no view’.

A small proportion of respondents disagreed/ strongly disagreed with this statement. The comments made by those who disagreed tended to relate either to (i) the view that GAVI has, in practice only pooled together existing sources of finance; or (ii) that there has been displacement at the country level.

Details on the responses by stakeholder category are presented in Annex 13

Figure 3.9: E-survey responses to question 16 – ‘The global level of funding for immunisation by donors would have been substantially lower in the absence of GAVI’ (282 responses, of which 255 were non-blank)⁴⁵



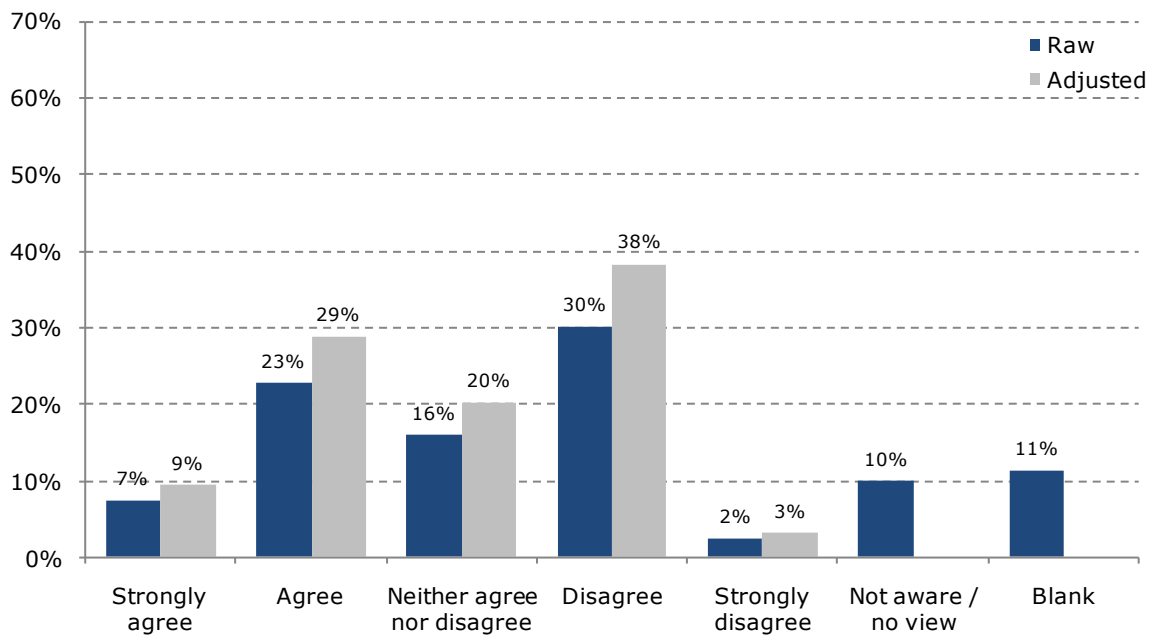
On the second statement, on the displacement of immunisation funding through traditional channels as a result of GAVI, the responses were more mixed. The largest proportion of respondents disagreed, however if we club the number of responses that ‘agreed’ or ‘strongly agreed’, this is nearly the same as those that disagreed/ strongly disagreed. The mean score is 1.30 and the variance is 0.80.⁴⁶ Figure 3.10 presents the percentage of responses in each category. Detailed responses by stakeholder category are presented in Annex 13.

The qualitative comments noted that it is difficult to conclude on this issue in the absence of data. However there were quite a few comments that suggest the view that GAVI has displaced some funding, but there has been an overall net increase in the funding for immunisation. Some respondents commented that benefits of channelling funding through GAVI include the avoidance of supplanting resources/ waste and more predictable/ organised channelling of funds.

⁴⁵ Adjusted % is calculated after taking out the ‘not aware/ no view’ and the blank responses to the statement

⁴⁶ Our scale for this calculation is: strongly disagree (-2), disagree (-1), neither agree nor disagree (0), agree (+1) and strongly disagree (+2).

Figure 3.10: E-survey responses to question 18 – ‘GAVI has displaced global immunisation funding through traditional channels such as the multilaterals (i.e. GAVI resources do not represent truly additional funds)’ (282 responses, of which 250 were non-blank)⁴⁷



⁴⁷ Adjusted % is calculated after taking out the ‘not aware/ no view’ and the blank responses to the statement

3.8. Summary and conclusions on SG3.1

To what extent has GAVI increased the level of global financial resources from donors for immunisation activities?

3.8.1. Summary

Table 3.9 below presents a summary of our findings for each area of analysis conducted as a part of the evaluation question SG3.1. The findings are accorded a robustness score based on CEPA’s judgement of the evidence set supporting the conclusion.

Table 3.9: SG3.1 – conclusions

Evaluation question SG3.1: To what extent has GAVI increased the level of global financial resources from donors for immunisation activities?			
Issue/ Theme	Findings	Robustness	
Contribution of GAVI to an increase in donor immunisation funding	Considerable increases in funding for immunisation should be seen against the backdrop of large increases in total ODA and higher increases in health ODA. However, there is good evidence to suggest that GAVI (i) has been important in capturing these increases for non-polio immunisation; and (ii) has made a contribution to driving the overall increases.	A	Conclusion supported by multiple sources of evidence (data and feedback from interviews/ e-survey).
Additionality of resources raised through GAVI for immunisation	Total WHO and UNICEF immunisation expenditure has risen over the decade – indicating GAVI funding additionality. However there is some element of displacement of bilateral donor funding, to WHO. We have not been able to conclude about the extent to which this is attributable to GAVI or internal resourcing decisions within WHO/ independent decisions of donors on the amount of ODA they would like to channel through WHO.	B	Multiple evidence sources arrive at this conclusion.

3.8.2. Conclusions

Thus we conclude that GAVI **has** increased the global level of funding from donors for immunisation. While this increase has taken place against the context of an overall increase in donor development assistance, and donor health funding in particular, GAVI has played a major role in driving the total increases in immunisation (non-polio) funding.

There has been consistent feedback from donors and other stakeholders that GAVI’s immunisation focus, its Alliance/ Partnership structure and relatively agile/ flexible nature has presented itself as an attractive funding option for the donors.

Donors choose to fund GAVI because of these features, and there has also been a clear message that in the absence of GAVI, a similar amount of funding would not be channelled for

immunisation (through the traditional multilateral channels). Thus GAVI, by virtue of its nature/structure, has played an important ‘added value’ role in increasing global donor resources for immunisation. The importance of the Gates Foundation as a catalyst for GAVI and in ‘crowding-in’ donor contributions should not be underestimated.

At the same time, there is some mixed evidence that suggests that not all of the resources raised/channelled through GAVI are additional:

- The analysis of WHO immunisation expenditure data, while inconclusive, suggests some element of displacement of bilateral funding for WHO (although we cannot necessarily attribute this to GAVI).
- The analysis of UNICEF immunisation expenditure data does not suggest any element of displacement.
- Our regression models suggest there is an inverse relationship between GAVI funding and total donor funding for health for both WHO and UNICEF. However, the specific limitations⁴⁸ of this regression analysis means that we are not able to place too excessive weight on it in our overall conclusions.
- Feedback from the structured interviews indicates a mixed view – with some donors noting clearly that their funding to GAVI has not come at the cost of their total funding to multilaterals; while others suggesting that this displacement is not entirely implausible.
- Finally, the e-survey also presents a mixture of responses – with almost an equal number of respondents agreeing and disagreeing on whether funding to GAVI has displaced funding to multilaterals.

Given the evidence, our judgement is that it is reasonable to conclude that there has been some limited element of displacement of bilateral funding to the multilaterals (WHO in particular). We have not been able to conclude, however, about the extent to which this is attributable to GAVI directly or internal resourcing decisions within WHO (which may of course relate to GAVI indirectly) or independent decisions of donors on the amount of ODA they would like to channel through WHO.

⁴⁸ Limitations include: (i) the absence of a reasonably long time series of data; (ii) the use of expenditure data as a proxy for funding; (iii) the use of health instead of immunisation funding data; and (iv) the possibility of omitting other relevant variables.

4. SG3.2: PREDICTABILITY AND SUSTAINABILITY OF DONOR IMMUNISATION FINANCE

4.1. Introduction

The second evaluation question under SG3 is: **‘To what extent has GAVI increased the predictability and sustainability of global financial resources for immunisation activities?’** This question builds on the previous one on the levels of global financial resources, to assess the *predictability* and *sustainability* of resources raised through GAVI.

One of the key aspects of GAVI’s potential value add lies in its ability to make longer-term commitments to countries, enabling them to plan their immunisation programs and support efficient procurement of vaccines by UNICEF (or other procurement mechanisms).

Achieving this relies on GAVI’s ability to

- maximise the period of commitments to it from donors;
- to hold ‘cash’ (i.e. have a balance sheet) and therefore spread donor commitments over a longer period; and/ or
- to take some element of funding risk (i.e. making funding approvals to countries that are greater than levels of assets or donor commitments) through ‘portfolio effects’ – which allows diversification of its funding risk.

GAVI’s ability to obtain preferably long-term commitments from its donors is central to its ability to make long-term commitments to country programs.

4.1.1. Scope of the evaluation question

In order to assess the predictability of resources, we examine:

- The duration of commitments of funding by donors to GAVI, and comparisons with the Global Fund.
- The volatility of funding to GAVI, and comparisons with the Global Fund.
- The impact of IFFIm on predictability.

Our assessment of sustainability of funding draws on the profile of GAVI donors in terms of the *number* and *diversity* of funders, and comparisons with other GHPs such as the Global Fund and the GPEI.

We also analyse the predictability of GAVI funding to countries as a part of this question – note that sustainability of GAVI funding to countries is however the subject of the next evaluation question (SG3.3).

4.1.2. Sources of evidence

Our main source of evidence is analysis of GAVI funding data, and benchmarking with other relevant comparators. The data sources used are the same as those for SG3.1 – described in

Section 3.1.2 above as well as Annex 1. We have used data on donor commitments to the Global Fund and the GPEI sourced from their websites in January/ February 2010. In addition, we have used data from the cMYPs to assess the predictability of funding from GAVI to countries.

The data analysis is supplemented by feedback from structured interviews and the e-survey. These sources of evidence are particularly useful in interpreting the results from the data analysis as well as gauging general perceptions of GAVI’s achievements in this area.

Table 4.1 summarises the key sources of evidence for the evaluation of this question.

Table 4.1: Description of evidence sources

Evidence source	Description
Review of documentation	<ul style="list-style-type: none"> Review of GAVI Board papers and broader literature on donor funding.
Quantitative analysis	<ul style="list-style-type: none"> Analysis of several metrics on predictability and sustainability, including length of donor commitments, volatility of funding, and number and profile of donors for GAVI. Analysis of cMYP data to assess predictability of GAVI funding, in terms of its stability over time and extent of ‘secure’ financing.
Regression analysis	<ul style="list-style-type: none"> n/a
Structured interviews	<ul style="list-style-type: none"> Interviews with a range of GAVI stakeholders, including Secretariat, Board members, GAVI partners, experts, etc.
Electronic surveys	<ul style="list-style-type: none"> One question in the e-survey.
Country studies	<ul style="list-style-type: none"> n/a
Comparator analysis	<ul style="list-style-type: none"> Comparisons with Global Fund and GPEI on predictability and sustainability metrics.

4.1.3. Structure

The remainder of this section is structured as follows:

- Section 4.2 presents the profile of GAVI donors in terms of the number and diversity of funders, and comparisons with other GHPs such as the Global Fund and the GPEI.
- Section 4.3 presents analysis of the duration of commitments of funding by donors to GAVI, and comparisons with the Global Fund.
- Section 4.4 presents analysis of the volatility of funding to GAVI, and comparisons with the Global Fund.
- Section 4.5 discusses the impact of IFFIm on predictability.
- Section 4.6 presents an analysis of the predictability of GAVI funding to countries.
- Section 4.7 presents the feedback from structured interviews and the e-survey.
- Section 4.8 concludes.

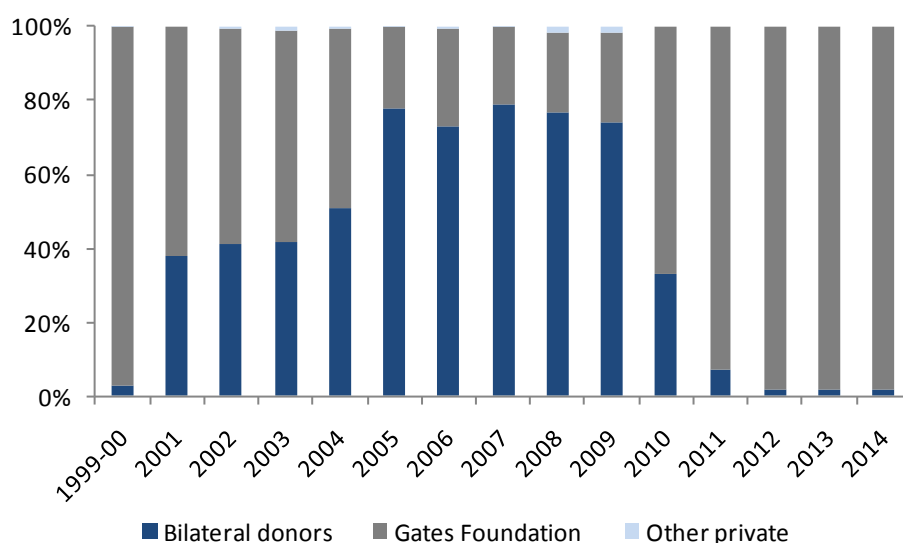
4.2. Profile of GAVI donors

This sub-section presents an analysis of the profile of GAVI donors, in terms of the number, average level of contributions, type of donors (i.e. bilateral, private sector, etc) and other characteristics. We also compare GAVI's donor profile with other organisations – the Global Fund and GPEI.

GAVI has received direct contributions from 16 major donors from 1999-2009 (excluding small private contributions). The number of donors contributing in any one year has grown from just two original donors in 1999/2000 (the UK Department for International Development (DFID) and the Gates Foundation). Most donors have provided repeat funding, with only Spain (in 2008) and France (in 2004 and 2006) providing only one-time direct contributions (as at 2009).⁴⁹

Figure 4.1 below shows the relative importance of different donors (bilateral, Gates and other private donors) for direct contributions up to 2014 (the last year for which we have projected data). In comparison with Phase I (when the Gates Foundation was by far the biggest contributor to GAVI) much of the recent impetus has come from bilateral donors. Based on direct contributions alone, and given the limited number of multi-year bilateral donor agreements that run beyond 2010, at present, Gates dominates GAVI's future committed funding.

Figure 4.1: % of GAVI direct contributions by donor category



Source: GAVI Secretariat

Between 2006 and 2009, GAVI also attracted contributions from seven donors through IFFIm, with an additional donor, the Netherlands, also making commitments from 2010. Two of the IFFIm donors (Italy, which is a G8 member, and South Africa) have not made any direct contributions, and so are additional donors for IFFIm.

Including IFFIm, Gates support is significantly lower as a proportion of total funding, accounting for only 16% of Phase III funding (rather than close to 100% as shown in Figure 4.1).

⁴⁹ France however continues to support GAVI through IFFIm.

In addition to the donors providing direct contributions and funding to IFFIm, Russia is one of the donors for the original \$1.5bn committed to date for the AMC.

4.2.1. Comparison with other organisations

To enable the most direct comparison, we first compare direct donor contributions to GAVI with direct donor contributions to the GFATM and the GPEI over the period 2000-08 (see Table 4.2 below).⁵⁰ The following are our main conclusions:

- The Global Fund has a broader set of contributing donors. It has nearly three times the total number of donors (and therefore more donors in each category), and the median yearly contribution from a donor is \$2.5m as compared to \$9.3m for GAVI. Similarly, contributions to GPEI are sourced from a large number of donors typically providing relatively small contributions (the median yearly contribution is \$0.8m).
- An additional, distinctive feature of GPEI is the wide range of non-traditional donors it has been able to attract. Alongside contributions from OECD countries it received contributions from 13 other (mostly Arab) countries, a large number of private sector donors, and seven developing countries.
- Both GF and GPEI have received direct contributions from all G8 donors. GAVI has so far received direct contributions from only five.⁵¹
- In terms of concentration of donor funding, it is interesting to note that despite a large total number of donors (47), the Global Fund has a broadly similar concentration of its funding (77%) from the G8 donors and the Gates Foundation as GAVI (72%). However, our judgement is that GAVI is marginally more concentrated than GF – since (i) the Global Fund receives direct contributions from all G8 donors (as opposed to five in the case of GAVI); (ii) GAVI is particularly dependent on a single donor – Gates – for 41% of its funding to date.

⁵⁰ We have excluded IFFIm from this table in order to ensure a like for like comparison. Similarly we have excluded the funding that Global Fund receives from the private sector through innovative approaches (e.g. Product Red) as also the Debt2Health funds.

⁵¹ Two other G8 donors have committed funds to the IFFIm and AMC.

Table 4.2: Donor contribution statistics (2000-08) – direct contributions only

Donor type	No. of donors ⁵²	% of total contributions	Median contribution (\$m) ⁵³
GAVI			
G8	5	31%	17.4
Other OECD	9	28%	9.0
Other bilateral	0	-	-
Gates ⁵⁴	1	41%	118.1
Other private ⁵⁵	1	0%	6.0
Total	16	100%	9.3
GFATM			
G8	8	73%	113.4
Other OECD	20	23%	4.2
Other bilateral	16	1%	0.5
Gates	1	4%	75.0
Other private ⁵⁶	2	0%	0.5
Total	47	100%	2.5
GPEI⁵⁷			
G8	8	71%	32.0
Other OECD	17	12%	0.6
Other bilateral	12	0%	0.1
Gates	1	11%	55.6
Other private	1	6%	28.3
Total	39	100%	0.8

Source: GAVI Secretariat; Global Fund website; GPEI website

We have analysed direct contributions above in order to compare the three organisations on a like for like basis. However, each organisation has also drawn on innovative sources of contributions. As noted above, GAVI has received contributions from a total of 18 donors if IFFIm contributions are included (and 19 if AMC is also included), though this total is still lower than that for the Global Fund or GPEI for direct contributions alone.

The Global Fund has also employed a number of innovative financing mechanisms – however it is not possible to make a direct comparison with GAVI (in terms of the number of donors and

⁵² Defined as donors who have made at least one yearly contribution. Excludes small private donors.

⁵³ Defined as the median of all countries' yearly contributions.

⁵⁴ Note special treatment of funding provided by the Gates Foundation. It provided catalytic support of \$325m in 1999/2000 and \$425m in 2001; these amounts have been apportioned equally over the period 1999-2004. Similarly, the contribution of \$154m in 2005 has been apportioned equally to 2005-6.

⁵⁵ The la Caixa Foundation. Other private donors (through the GAVI Campaign) are excluded.

⁵⁶ Includes only Communitas Foundation and Chevron Corporation. Other private donors are excluded.

⁵⁷ Figures exclude multilateral transfers and contributions from other developing countries, for comparability.

level of funding), given the different nature of these mechanisms. In addition to the direct contributions discussed above, the Global Fund also receives contributions from seven innovative schemes including Debt2Health and Product Red. The latter in particular is a significant source of funding, providing 1% of total contributions to 2008, although we note that this is not on the same scale as GAVI's funding from IFFIm.

4.3. Duration of donor commitments

The duration of donor commitments to GAVI is one determinant of the duration of funding it can itself provide to countries. We present below an analysis of the duration of donor commitments to GAVI, and also compare with the experience of the Global Fund.

Table 4.3 provides a number of metrics on the length of commitment period by donors for direct contributions to GAVI.

Table 4.3: Duration of donor grant agreements for GAVI

Category	Total ⁵⁸
No. of donors	16 ⁵⁹
Mean/ average duration of agreement	1.7
Mean duration of agreement, weighted by agreement size	4.4 ⁶⁰
Median duration of agreement	1.0
% donors with at least one 3+ year agreement ⁶¹	56%
% agreements lasting 3+ years ⁶²	18%

Source: GAVI Secretariat

⁵⁸ Please note that we have excluded from this total the funding raised through the GAVI campaign, etc i.e. only funding from donor country governments and the two private sources of funding for GAVI (Gates and La Caixa) are included here.

⁵⁹ Includes 13 bilateral government donors, the EC, Gates and la Caixa foundation.

⁶⁰ Note that the mean duration of agreements, weighted by agreement size is 1.8 years for bilateral donors alone.

⁶¹ Calculated as the number of donors with at least one agreement lasting 3 or more years divided by the total number of donors. Thus for example if a donor makes 4 grant agreements, with some being for 3+ years and some not, then the donor gets captured in the numerator of this metric. However if all of the grant agreements made by the donor are under 3 years then the donor is not counted in the numerator.

⁶² Calculated as the number of grant agreements across all donors lasting 3 or more years, divided by the total number of grant agreements by all donors. Note that in this metric, each grant agreement by a donor is accorded weight i.e. if a donor makes 4 grant agreements with GAVI, with only 1 being for a period greater than 3+ years then only this agreement gets reflected in the numerator and all 4 grant agreements are included in the denominator.

As can be seen from the table:

- The average period of funding to GAVI from its donors has been 1.7 years (this average is marginally skewed by the longer-term funding provided by one donor – the Gates Foundation⁶³; the average duration of agreement by bilateral donors alone is 1.5 years).
- GAVI's larger donors have also provided funding over a longer period of time, as can be seen by the higher average duration of agreements, weighted by agreement size. The average is however substantially skewed by the large-long term Gates funding.
- More than half of GAVI's donors have committed to at least one grant agreement of 3+ years. However, of these nine donors only four (Australia, France, The Netherlands and Gates) committed exclusively to 3+ year agreements – for the other five, agreements were a mixture of long- and short-term.
- As a result, of the total number of agreements across all countries, only 18% are for three years or more.

The bilateral donor countries with large multi-year agreements are the Netherlands, Canada and the UK. (We understand that that the UK is looking at new ways to increase the length of its commitments and has recently announced in March 2010 a new commitment of £150m to GAVI over 10 years (2010-19), with a rolling three year binding element.)⁶⁴

We have also considered the progression of agreement duration over time. There is some evidence that the average duration of agreements has risen for bilateral donors. For agreements beginning in Phase I, the average duration was 1.4 years, while for Phase II it rose to 1.7 years.⁶⁵

Of course length of donor commitment is not the only indicator of the strength of support. Indeed GAVI's largest and second-largest government donors (for direct funding only), the US and Norway respectively, have not committed to any formal multi-year grant agreements (as is not consistent with their funding policies/ arrangements).⁶⁶ Instead, their contributions have come from a series of one-year commitments in every year since 2001. However, in terms of GAVI's ability to make firm commitments to countries, one year grant agreements are clearly less certain.

Considering IFFIm as well (in terms of the 10 year commitment to the GFA), the weighted (by size) average duration of commitments rises to 6.4 years. Thus, through IFFIm, GAVI has access to even longer periods of funding from donors.

4.3.1. Comparison with the Global Fund

We do not have comparable information on the duration of grant agreements for the Global Fund. Instead, we have information on the total period over which different donors have provided support to the Global Fund (i.e. the number of consecutive years of contributions by

⁶³ Gates have provided two agreements of 5 and 10 years covering the period 2000-04 and 2005-14 respectively.

⁶⁴ Discussions with DFID indicated that they had also used a similar funding approach for the Global Fund.

⁶⁵ We exclude the Gates Foundation from this analysis: its two long-term agreements, both beginning in Phase I, dominate the overall figures.

⁶⁶ We understand that Norway politically pledged in 2005 a contribution of NOK 500m per year between 2006 and 2015.

the donors). We refer to this as ‘duration of support’ as opposed to ‘duration of grant agreements’

Table 4.4 summarises this information for GAVI and Global Fund. Given the difference in metrics this table is not comparable with Table 4.3 above.

Table 4.4: Comparison of total period of funding support for GAVI and the Global Fund⁶⁷

Category	GAVI	Global Fund
No. of donors	16 ⁶⁸	47
Mean ‘duration of support’	4.9	5.1
Mean ‘duration of support’ weighted by size of support	10.8	9.1
Median ‘duration of support’	4.0	5.0
% donors providing support for at least one 3+ consecutive year period	81%	72%

Source: GAVI Secretariat; Global Fund website

The key points to note from the table are as follows:

- Looking at the simple mean, there is not much difference in the average number of consecutive years that donors have funded both GAVI and Global Fund. For both organisations, donors have contributed for an average of around five consecutive years (4.9 for GAVI; 5.1 for Global Fund), and the majority of donors (81% for GAVI; 72% for Global Fund) have provided support for at least three consecutive years.⁶⁹
- However looking at the average weighted by size of support, we note some difference between GAVI and the Global Fund – with GAVI receiving longer periods of consecutive funding by larger donors, as compared to the Global Fund.

We note that the results presented above are fairly similar for the two organisations, despite both organisations following different approaches to mobilising resources from donors. In particular, the Global Fund follows a more formal approach of a voluntary replenishment system, based on periodic contributions.⁷⁰

⁶⁷ We exclude “Other private contributions” from both datasets, as these cover small private donations. We also exclude contributions to the Global Fund from initiatives such as Debt2Health, Product Red, etc which are not amenable to this analysis.

⁶⁸ Includes 13 bilateral government donors, the EC, Gates and la Caixa foundation.

⁶⁹ It is noted that for GAVI, donors such as France have moved from providing direct contributions to supporting GAVI through IFFIm.

⁷⁰ To date, the Global Fund has had two rounds of replenishment, with a recent meetings conducted for the third replenishment round.

4.4. Volatility of funding

We analyse the volatility in funding for GAVI as another measure of predictability, and compare with that for the Global Fund.⁷¹

We analyse the volatility by looking at the following two measures:

- The standard deviation of yearly percentage changes in funding; and
- The coefficient of variation of yearly percentage changes – which is a dimensionless indicator of volatility.⁷²

Table 4.5 presents the data.

Table 4.5: *Volatility of donor contributions to GAVI⁷³ and Global Fund⁷⁴*

Category	Standard deviation of yearly percentage changes 2000-08	Coefficient of variation of yearly percentage changes 2000-08
GAVI direct contributions	21.7%	1.76
GF direct contributions	24.9%	1.06

Source: GAVI Secretariat; Global Fund website

As can be seen from the table, contributions to the Global Fund may have been marginally more stable than those to GAVI. Although the standard deviations of the yearly percentage changes are similar, the mean yearly change for the Global Fund (23.6%) is nearly twice that of GAVI (12.4%). As a result the coefficient of variation for contributions to GAVI is higher than that for the Global Fund.

We conclude that in terms of volatility of funding, the experience of GAVI has not been materially different from that of the Global Fund.

4.5. Impact of IFFIm on predictability

4.5.1. Introduction

Details of the structure and history of IFFIm can be found in Annex 11. In our assessment of the contribution of IFFIm to predictability and sustainability we distinguish between: (i) donor commitments to IFFIm; and (ii) expected IFFIm disbursements to GFA for GAVI use.

⁷¹ Annex 5 presents a comparison of the volatility of GAVI funding with overall immunisation and health funding.

⁷² The coefficient of variation is defined as the ratio of the standard deviation to the mean.

⁷³ Note special treatment of funding provided by the Gates Foundation. It provided catalytic support of \$325m in 1999/2000 and \$425m in 2001; these amounts have been apportioned equally over the period 1999-2004. Similarly, the contribution of \$154m in 2005 has been apportioned equally to 2005-6.

⁷⁴ Note that we have excluded IFFIm in the estimate for GAVI given the time period of comparison with Global Fund includes only three years where GAVI received IFFIm proceeds.

4.5.2. Donor commitments to IFFIm

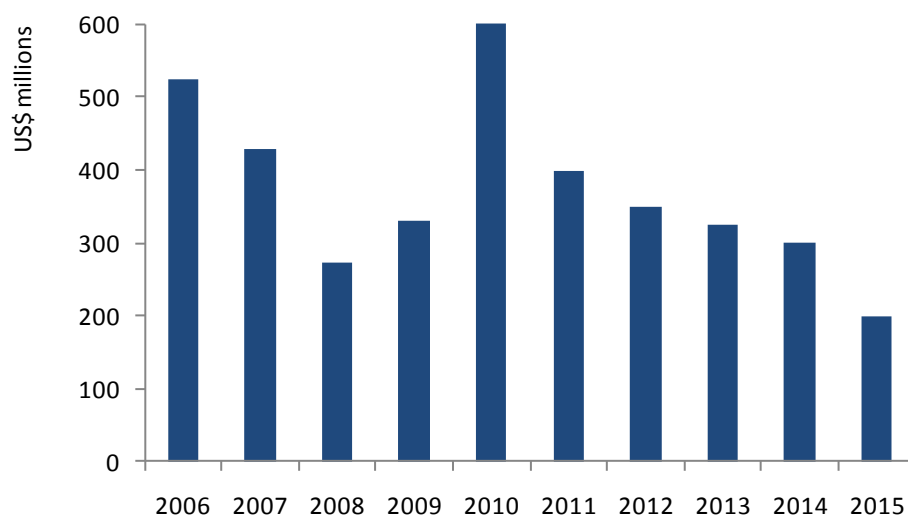
The existence of IFFIm has in the words of one consultee been ‘game changing’ in terms of the period of legally binding commitments – which has supported both predictability and sustainability of funding for immunisation.

To date, six donors have made legally binding commitments to provide funding for periods ranging between 15 to 20 years. In addition two donors, Norway and the Netherlands, have committed resources for five and eight years respectively.

4.5.3. Expected disbursement from IFFIm to GAVI

Figure 4.2 presents the expected disbursements from IFFIm to the GFA, for use by GAVI. A total of \$3.7bn is being made available to the GFA through IFFIm over the period 2006-15.⁷⁵ These disbursements primarily reflect IFFIm’s expected bond issuance. Although there is clearly some element of risk associated with the level and timing of these issues (e.g. such as the disorderly conditions observed during the recent financial crisis or ‘credit crunch’), the expectation is that there is a high probability that these resources will be forthcoming. This gives GAVI a level of funding predictability from bilateral donors that is unprecedented. Indeed it is this commitment that has provided the basis for GAVI’s ability to continue to commit to providing support for all current New and underused Vaccines Support (NVS) grants through to 2015.⁷⁶

Figure 4.2: Disbursements from IFFIm



Source: GAVI Secretariat

In summary then, our basic conclusion is that IFFIm has had a very significant, positive effect on the predictability of donor funding for immunisation – and has provided the basis for a significant element of GAVI’s value add in Phase II (and into Phase III) in terms of its ability to provide long term support for national programs. It has in addition been able to support a

⁷⁵ We note that not all of the disbursement is for direct use by GAVI, although a substantial portion is. GPEI received some funding from the GFA in its initial years.

⁷⁶ GAVI Alliance Board Meeting – 17-18 November 2009, Doc 06b – Graduation procedures.

number of strategic investments in campaigns and stockpiles (referred to by GAVI as the ‘Investment Cases’)

However, in the light of our discussion of the prospects for financial sustainability in low-income GAVI-eligible countries even in the medium term (see Section 5) there are a number of planning and fundraising challenges that arise.

In particular, the case for front-loading donor commitments through IFFIm is that immunising children today has a high development and economic return. But it does present a challenge to GAVI in ensuring that the imperative to immunise children now is not at the expense of predictability – i.e. the expansion of GAVI’s programs that IFFIm has supported can be funded beyond 2015.

In principle this is an issue that GAVI might face at the end of any grant. However, given the nature of IFFIm this problem may be more acute to the extent that:

- front loading has resulted in a level of support for immunisation that is not sustainable when it is competing directly with other priorities; and/ or
- the long ‘tail’ of remaining donor commitments to IFFIm (after IFFIm disbursements to GFA have ceased) acts a drag on new donor commitments beyond 2015.

4.6. Predictability of GAVI funding to countries

4.6.1. Analysis of cMYPs

Country cMYPs present forecasts of planned expenditure and sources of finance for routine immunisation programs.⁷⁷ Information on the forecasted financing is available by: (i) source of financing (i.e. government, GAVI, other donors, etc); and (ii) ‘secure’ and ‘probable’ sources of finance.

This forecast data reflects commitments by funding source to the countries, but also to an extent reflects countries’ own perceptions and expectations. The information is therefore useful to assess the predictability of GAVI funding compared to other sources of finance for routine immunisation.

Our hypothesis is that the sources of finance that are considered most predictable will:

- tend to be stable over time rather than fluctuating or diminishing; and
- tend to be rated as “secure” rather than “probable”.

Table 4.6 below presents statistics for the four main financing sources over the five years of the forecast (Years 2-6 of plans).⁷⁸ These figures are based on average finance per surviving infant across the 42 countries for which we have cMYP⁷⁹ data.

⁷⁷ We have only considered data on routine immunisation, and excluded campaigns from the analysis.

⁷⁸ Year 1 is actual data.

⁷⁹ Comprehensive Multi Year Plans

Table 4.6: Predictability of financing sources

Source	Year 2	Year 3	Year 4	Year 5	Year 6
<i>Amount provided as % of Year 2 amount⁸⁰</i>					
Government		110%	114%	116%	115%
GAVI		122%	137%	127%	118%
Multilaterals		114%	104%	103%	104%
Bilaterals		59%	57%	56%	58%
<i>Proportion rated "secure"</i>					
Government	94%	90%	83%	82%	83%
GAVI	93%	73%	67%	65%	64%
Multilaterals	79%	61%	38%	31%	33%
Bilaterals	69%	42%	10%	9%	7%

Source: Country cMYPs

Our main conclusions based on this are:

- Looking at the amount expected to be provided as a % of the year two funding, government, GAVI and multilateral sources of finance appear to be quite stable. For these three sources, the amount of finance expected is the same, if not higher, in Years 3-6 as in Year 2. Bilateral funding, however, drops significantly from Year 2 to Years 3-6 – mostly reflecting the difficulties that bilateral donors face in making longer-term commitments.
- However, taking account of the proportion that is rated as ‘secure’ GAVI appears to be the most predictable and secure external source. As might be expected, government finance is considered most secure, with 83% of planned finance in Year 6 given this rating. Among the external donors, GAVI is considered more secure, with 64% given this rating in Year 6. Security of both multilateral and in particular bilateral funding, however, tends to fall significantly over time, to 33% and 7% respectively in Year 6.

Overall, this evidence suggests that recipient countries consider GAVI to be a relatively stable and predictable source of finance for routine immunisation expenditure.

4.7. Structured interviews and e-survey feedback

4.7.1. Structured interviews

The relevant structured interview question was:

Has GAVI played a role in increasing the level, predictability and sustainability of global financial resources from donors for immunisation activities? If so how?

Key themes and issues from the interviews that relate to predictability and sustainability are summarised below.

⁸⁰ Includes all finance whether it is rated as secure or probable.

There is a general view that GAVI has played an important role in improving the predictability and sustainability of global resources for immunisation. The drivers for this included its immunisation focus; the existence of the Alliance; and the relatively light touch and flexible structure (as also described in Section 3 as a part of the evaluation of SG3.1). These have contributed to a stronger political support base, and by pooling resources GAVI has increased predictability compared with what would have been achieved from any one donor.

Within this:

- Consultees noted the importance of Gates funding to GAVI (seed funding of \$750m followed by a further amount of \$750m over 10 years⁸¹), in particular in terms of increased predictability.
- GAVI has also benefitted from multi-year grant agreements from a number of donors (particularly the UK and Netherlands). However, donors noted that GAVI has not done any better than other ‘high priority’ areas during the period. For example DFID has pledged support to the Global Fund for a period of 8 years until 2008, providing \$450m in funding.
- There was a strong consensus on the achievement of IFFIm in terms of predictability of funding.

However, there were also some concerns about the predictability of GAVI funding. Consultees referred to the current funding gap that GAVI faces and the uncertainty that this has created for countries – as well as the consequent impact on national immunisation planning and budgeting. There is a general view that the funding gap and the decision to put applications on hold has weakened GAVI’s perceived predictability – one of its key value additions.

Other points to note made by interviewees in relation to fundraising were as follows:

- The success of IFFIm may have reduced the sense of urgency to mobilise traditional funding from a wider range of donors for GAVI’s expanding program.
- Access to predictable funding thus far has led to a greater emphasis by GAVI on ‘fund management’ as against fund mobilisation.⁸²
- Improved demand forecasting and financial planning has led to the identification of this funding gap.
- GAVI has been less successful in raising funds from non-traditional bilateral donors (such as the Middle East, China, etc) and the private sector. The success of the Global Fund in this regard was often highlighted – in terms of the level of funds it has raised, the diversity of its donor profile, and the use of innovative fund raising mechanisms.

Finally, another area of concern on the predictability of GAVI funding that was highlighted was its intention to fund the shortfall for the AMC in the absence of securing resources for the same.⁸³

⁸¹ The Gates Foundation also provided \$13m in contributions between 2003 and 2005.

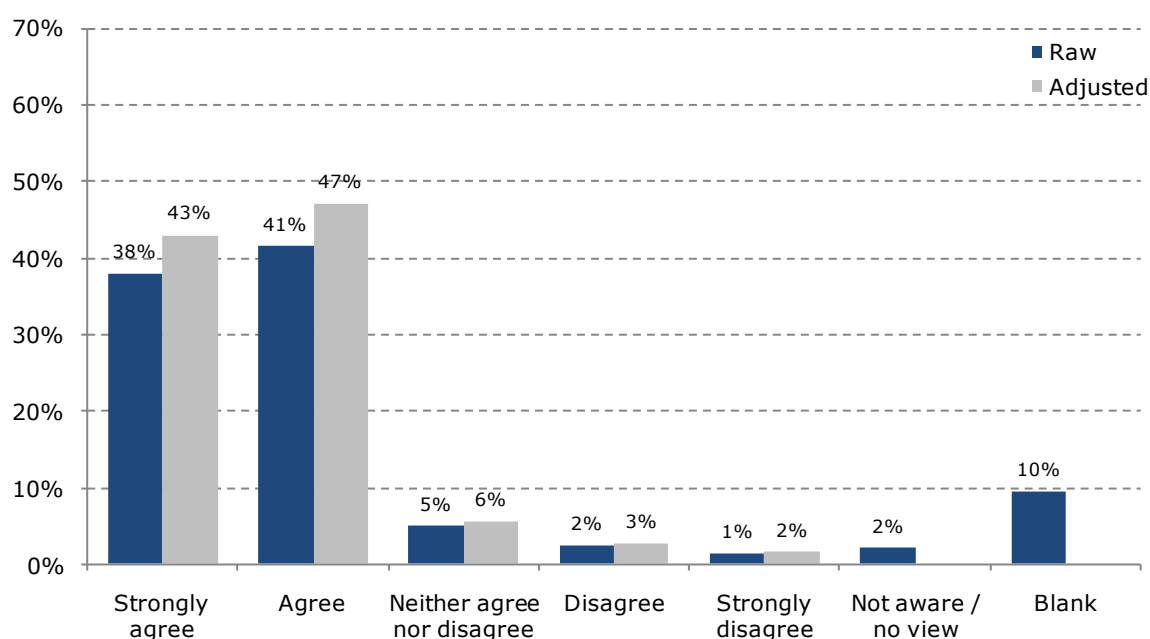
⁸² Note that we have not reviewed the performance of GAVI asset management over the period.

4.7.2. E-survey

The relevant statement included in the e-survey is: “GAVI has added value by mobilising longer-term, more predictable and sustainable donor support for immunisation”.

A majority of respondents ‘strongly agreed’ or ‘agreed’ that GAVI has added value in this area (see Figure 4.3). There was very little disagreement (less than 5% of adjusted respondents). Indeed the variance in scores is 0.67, one of the lowest of all of the e-survey questions. Annex 13 presents an examination of the quantitative responses by stakeholder category.

Figure 4.3: E-survey responses to question 17 – ‘GAVI has added value by mobilising longer-term, more predictable and sustainable donor support for immunisation’ (282 responses, of which 255 were non-blank)⁸⁴



There were several interesting qualitative comments provided in response to this question. A number of responses noted that GAVI has improved the predictability and sustainability of funding for immunisation – some noting explicitly that GAVI provides more predictable finance than other donors and that this is ‘unprecedented’.

However others noted that the recent funding crisis that GAVI faces and the related planned prioritisation of funding has reduced the predictability of GAVI support. It was also noted that GAVI has created high expectations for funding, which may be difficult to sustain when GAVI support ends.

⁸³ We have noted this point. But our view is that the issues here are twofold. First (as discussed in the SG4 report) we believe that this is a case where the messaging around this commitment may not have been clear enough about either the conditionality of these resources or GAVI’s financial capability at the time. Second, there is a legitimate concern that the absence of certainty about the GAVI ‘matched element’ of the pneumococcal price has impacted on the strength of the supply incentives.

⁸⁴ Adjusted % is calculated after taking out the ‘not aware/ no view’ and the blank responses to the statement

4.8. Summary and conclusions on SG3.2

‘To what extent has GAVI increased the predictability and sustainability of global financial resources for immunisation activities?’

4.8.1. Summary of findings

Table 4.7 summarises our main findings and our judgement of the robustness of the evidence that supports the findings.

Table 4.7: SG3.2 – conclusions

Evaluation question SG3.2: To what extent has GAVI increased the predictability and sustainability of global financial resources from donors for immunisation activities?			
Issue/ Theme	Findings	Robustness	
Number and type of donors for GAVI	GAVI has a raised funds from a smaller and less diverse set of donors than GHP comparators like Global Fund and the GPEI. The concentration of donor funding is also marginally higher for GAVI than for the Global Fund.	A	The analysis on donor profile is based on reasonable quality data.
Volatility of funding to GAVI	There is no significant difference in the volatility of direct donors funding to GAVI and the Global Fund.	A	Based on a direct review of available data and is not subject to contention
Length of commitment by donor to GAVI	GAVI has performed reasonably well in accessing long term commitments from donors (direct/ ‘traditional’ funding); although no better than other ‘high priority’ investments (e.g. Global Fund). However through IFFIm, GAVI has managed to secure donor commitments for 5-10 years – which is unprecedented	A	Based on a direct review of available data and confirmed by interview evidence.
Impact of IFFIm on predictability	IFFIm has had a significant positive effect on the predictability of donor funding for immunisation.	A	Based on fact and is not subject to contention
Predictability of GAVI funding to countries	GAVI has improved predictability of donor funding for immunisation to countries, as exhibited by the larger proportion of its future funding being noted as ‘secure’, as compared to other bilateral and multilateral donors. However its current funding gap, has undermined the predictability of its funding.	B	Based on analysis of cMYP data and also structured interviews. Although some limitations in terms quality of cMYP data quality; and interview sample size

4.8.2. Conclusions

Based on the above analysis and summary findings, we conclude that GAVI has performed well in accessing long-term financing from its donors.

The length of commitments made by bilateral donors is largely determined by individual donor government policies and practises – and we note that some donors have been looking at ways to increase lengths of commitment (e.g. DFID’s recent long commitments to both GAVI and the Global Fund, with a rolling three year binding element). GAVI’s success has been in raising its profile and putting itself in a position to benefit from the maximum commitments that bilateral and other donor make available to priority investments.

IFFIm has had a very significant positive effect on the predictability of donor funding for immunisation – and has (together with the long-term support provided by the Gates Foundation) provided the basis for a significant element of GAVI’s value add in Phase II (and into Phase III) in terms of its ability to provide long term support for national programs. There are however advocacy and planning challenges that are likely to be more acute as a result of IFFIm frontloading.

An area where GAVI has not performed that well is in raising funds from a broad base of donors – as other GHPs such as the Global Fund and the GPEI have done.

Overall, it is reasonable to conclude that the access to predictable and sustainable funds by GAVI has contributed to its ability to make longer-term commitments to countries – one of the key aspects of its value add. However, we note that the existence of the current funding gap for new vaccines has diluted this.

5. SG3.3: FINANCIAL SUSTAINABILITY AT THE COUNTRY LEVEL

5.1. Introduction

The third question that we examine as a part of the evaluation of GAVI's achievements on SG3 is: **'To what extent has GAVI promoted and increased the sustainability of immunisation funding at the national level?'**

The ultimate objective of GAVI is to enable countries, over time, to become self-reliant financially for their immunisation needs. At the outset, GAVI's strategy of vaccine introduction in the poorest countries was based on the assumption that five years was a sufficient amount of time for countries to be financially sustainable, facilitated through price reductions (resulting from aggregated procurement, and supplier market entry).⁸⁵ The original definition of financial sustainability agreed by the Financing Task Force (FTF) recognised that this could be achieved (at least in the near-term) through both own resources or other donor funding as follows:

“Although self-sufficiency is the ultimate goal, in the nearer term sustainable financing is the ability of a country to mobilise and efficiently use domestic and supplementary external resources on a reliable basis to achieve current and future target levels of immunisation performance”

We understand that this remains the working definition of sustainability for GAVI.⁸⁶

The first evaluation of GAVI noted that the outlook for financial sustainability of GAVI's NVS support is challenging. They recommended a re-assessment of the strategies for sustainability, noting that the lack of long-range planning and conflicting objectives (promoting new vaccines versus improving sustainability) have limited progress towards financial sustainability.⁸⁷

Financial sustainability is especially important in the context of the planned GAVI eligibility policy/ graduation procedures. Recognising that national financial sustainability is a challenging target for GAVI's support to countries, this question seeks to examine the extent to which GAVI's policies and programs have promoted and added value in this area, from inception to date.

5.1.1. Scope of the evaluation question

There are two key aspects to our evaluation of GAVI's performance in relation to financial sustainability:

- The first relates to GAVI's activities, policies and approaches to supporting countries' financial planning.
- The second is concerned with the overall impact of GAVI's funding of immunisation in eligible countries on financial sustainability.

⁸⁵ Source: GAVI Alliance: Financial sustainability for immunisation in the poorest countries: lessons from GAVI 2000-06.

⁸⁶ Source: 18-19th May 2010 PPC Paper: Co-financing revision

⁸⁷ Abt Associates Inc. (2008): Evaluation of the GAVI Phase I Performance (2000–2005).

5.1.2. Sources of evidence

The key sources of evidence and a description of the various analyses we have carried out is provided in Table 5.1. Each of these sources has provided useful information to support the assessment of this evaluation question.

Table 5.1: Description of evidence sources

Evidence source	Description
Review of documentation	<ul style="list-style-type: none"> • GAVI Board documents describing the developments in its policies • Broader literature on country immunisation funding and sustainability, especially papers by the Financing Task Force (review of Financial Sustainability Plans (FSP) data, amongst others)
Quantitative analysis	<ul style="list-style-type: none"> • Analysis of GAVI disbursements as a share of government health expenditure • Analysis of data included in the comprehensive Multi Year Plans (cMYPs)
Regression analysis	<ul style="list-style-type: none"> • n/a⁸⁸
Structured interviews	<ul style="list-style-type: none"> • Consultations with a range of GAVI stakeholders – both country level stakeholders, but also global stakeholders including the Board, Secretariat, and others.
Electronic surveys	<ul style="list-style-type: none"> • One question in the global e-survey on national level sustainability.
Country studies	<ul style="list-style-type: none"> • Discussions with governments (and other stakeholders) on the issue of financial sustainability in all five field visit countries.
Comparator analysis	<ul style="list-style-type: none"> • Analysis of the approach of the Global Fund and PEPFAR on the financial sustainability of their programs, and comparison with GAVI

5.1.3. Structure of the section

The rest of this section is organised as follows:

- Section 5.2 summarises the responses that we have received as part of the e-survey and through our structured interviews. We start with this section as it provides a useful summary of key issues that follow in the remainder of this section.
- Section 5.3 provides our observations on the first aspect of the evaluation question – which considers the impact of GAVI’s approach/ efforts in supporting financial sustainability of country immunisation programs.

⁸⁸ Note that as per CEPA’s Inception Report we had proposed to carry out regressions analysis to asses GAVI’s value add – regressing national health/ immunisation expenditure on GAVI funding as well as other explanatory variables (GDP growth, political stability index, etc) to test the hypothesis of: ‘Has GAVI funding led to a decline in government funding for immunisation/ health.’ However following the recent publication of a paper which assesses the impact of donor funding on health spending by governments (Chunling Lu, Matthew T Schneider, Paul Gubbins, Katherine Leach-Kemon, Dean Jamison, Christopher J L Murray, Public financing of health in developing countries: a cross-national systematic analysis, Lancet, April 9, 2010), we have decided to draw on their results instead.

- Section 5.4 brings together a wide range of evidence on financial sustainability of immunisation programs at the country level. The evidence includes (i) GAVI vaccine spend by country; (ii) analysis of FSPs and cMYPs for GAVI eligible countries; (iii) country and program case studies.
- Section 5.5 discusses the key question of the impact of GAVI's vaccine choices on financial sustainability.
- Section 5.6 provides a summary and conclusion on both aspects considered in this evaluation question.

5.2. E-survey and structured interviews

In this section we present the e-survey and structured interview findings. As noted above, we start with this section because the findings provide a useful summary of the key messages that emerge in our evaluation of both aspects of GAVI's financial sustainability performance, as outlined in Section 5.1.1. In particular, feedback suggests:

- a broadly positive performance on the first (GAVI's activities, policies and approaches); and
- a weak performance on the second (the more general issue of GAVI's impact on financial sustainability).

5.2.1. E-survey

The e-survey included one statement on national-level sustainability – “The GAVI Alliance has not contributed significantly to promoting financial sustainability of immunisation at the country level” – to which respondents had to indicate if they agreed or disagreed as per our defined scale.

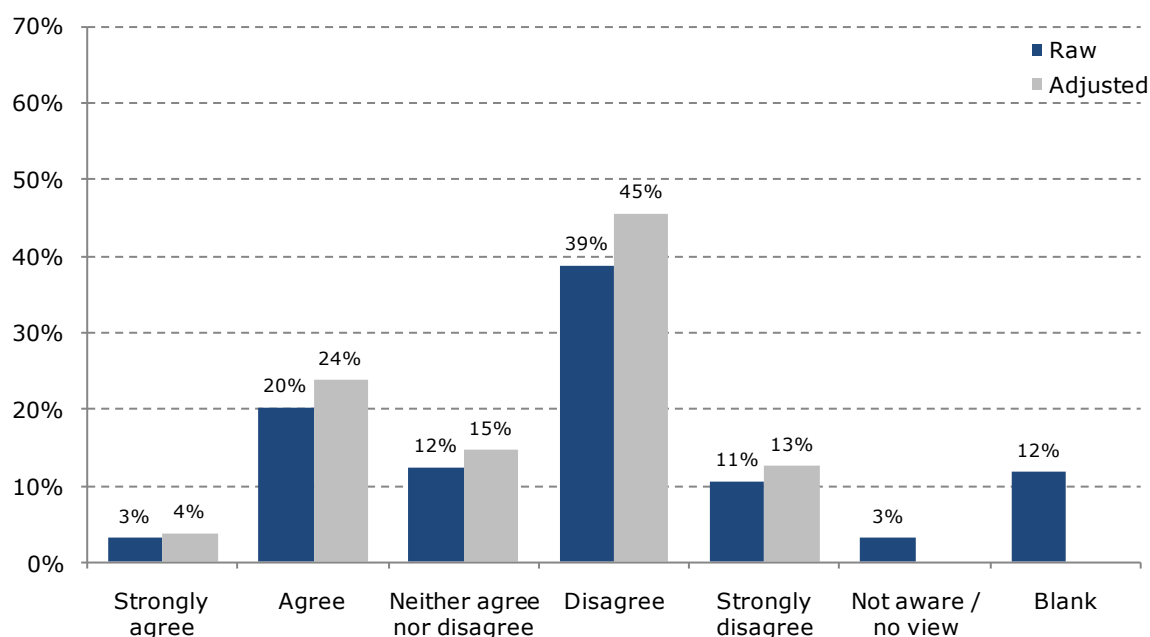
Responses to this statement were mixed (see Figure 5.1 below), albeit leaning more towards ‘disagree’. While the mean score is (-)0.4⁸⁹, there was substantial variance in the responses (with the variance being 1.19, relatively high compared with other e-survey questions).

There is some possibility that the relatively wide variation in responses to this statement is the result of respondents misreading the question (i.e. not clearly noting the negative phrasing of the statement: ‘not contributed’). However our judgement (given response on other ‘negative statements’ in the survey), is that this effect is likely to have been small.

Moreover, we think that the spread of results reflects the two separate aspects of GAVI's performance on financial sustainability – and this is picked up in the qualitative responses.

⁸⁹ Our scale for this calculation is: strongly disagree (-2), disagree (-1), neither agree nor disagree (0), agree (+1) and strongly disagree (+2).

Figure 5.1: E-survey response to question 19 – ‘The GAVI Alliance has not contributed significantly to promoting financial sustainability of immunisation at the country level’ (282 responses, of which 249 were non-blank)



‘Open field’ comments from those that *disagreed* with the e-survey statement, primarily emphasised the view that GAVI has made a positive contribution in its activities and approaches to country financial planning, and included the following:

- Quite a few respondents commented on GAVI’s efforts at improving planning for immunisation through the introduction of the cMYPs (noting that financial planning was also improved through increased interaction between ministries of health and finance).
- An almost equal number of respondents commented that the co-financing policy has played an important role in promoting financial sustainability at the national level.
- Some comments were also made on the impact of the introduction of immunisation budget lines in supporting increased budget allocations.

Those respondents that *agreed* with the statement, and hence had a negative assessment of GAVI’s performance, generally commented on the actual impact of GAVI funding on country level sustainability. The open field comments were as follows:

- Countries are increasingly becoming dependent on GAVI support.
- More work is needed to reduce funding gaps and increase country-level commitments.
- The co-payments under the GAVI co-financing policy are too low to contribute to sustainability.

5.2.2. Structured interviews

The structured interviews also picked up on GAVI’s varied performance with regard to the two aspects of financial sustainability being considered in this evaluation. The general view was that

GAVI has developed innovative and supportive policies and activities for improved country level financial planning, but, in practice, financial sustainability is a key challenge for GAVI. Consultees noted the high price of the vaccines supported by GAVI, and the limited progress thus far in bringing down the prices. There was a unanimous view that at current prices, countries would not be able to take-over the financing of the vaccines currently funded through GAVI support.

Other points of feedback were as follows:

- GAVI funding may have displaced some bilateral government funding in countries. For example, some donors noted that funding that would have traditionally gone to their country offices has now gone through GAVI. (Discussions with the donor country offices during some of the field visits also confirmed that they have reduced their support to immunisation in the country, given GAVI's presence.)⁹⁰
- The 'non-GAVI' related aspects of the immunisation value chain are not being funded adequately. For example, it was suggested that while vaccines are receiving funding from GAVI, cold storage is being under-funded.
- GAVI needs to provide more information to countries in terms of the long-term cost projections and the scale of commitment required.
- Also, GAVI needs to play more of an advocacy role with the finance ministry in countries, sensitising them on the effectiveness of vaccines as an important investment for the progress of their country.
- Finally, it was also suggested that GAVI needs to look at a broader definition of sustainability that extends beyond financial sustainability alone. Building capacity for financial management, procurement, etc. are also key drivers to ensure sustainability of national immunisation programs.

5.3. Review of GAVI's approach, activities and policies

We have conducted a desk-based review of relevant reports, supplemented by feedback from structured interviews and country visits, of the key policies, tools and approaches supported by GAVI that have aimed to promote financial sustainability at the country level. In particular, we have looked at:

- FSPs in Phase I and comprehensive Multi-Year Plans (cMYPs) in Phase II; and
- the current Co-financing policy, also within the context of the previous Bridge Financing concept.

The timeline of the development of these policies and related events is described in Annex 6. The timeline also maps the establishment of the three main task forces that have led GAVI's work on financing since its inception: the FTF, Immunisation Financing and Sustainability (IF&S) Task Team, and the more recent Co-financing Policy Revision (CFPR) Task Team (also referred to as the Co-financing Task Team (CTT)).

⁹⁰ As is discussed further below, analysis of cMYP data also shows this trend.

We have also reviewed the approaches to financial sustainability of some comparator organisations. The details of our analyses on each of these are presented in Annex 8, and here we only summarise the main thrust of the analysis and provide conclusions.

The impact of GAVI financing on country level sustainability, as well as the prospects for financial sustainability as a whole, which are more amenable to quantification are covered thereafter in Section 5.4.

5.3.1. Conclusions

We present our conclusions on GAVI's key policies and tools, followed by an overall summary of GAVI's approach.

FSPs/ cMYPs

Based on a desk-based review, structured interviews and country visits, our view is that the introduction of FSPs was an important innovation of GAVI (and of the FTF in particular). The process generated an important focus on immunisation costs and financing at the national level; and contributed to a greater understanding within countries and beyond of the financial implications for countries when introducing new vaccines. This is especially important in the context of the limited involvement of government immunisation departments in the issues of immunisation financing at that time.

However, since the FSP was a separate document from the national multi-year plan, it did not allow for integration with the broader strategic planning and budgeting of the health sector – which was the main reason for the transition to the cMYPs.

The use of the cMYPs represent an improvement over the FSPs, and have sought to tackle some of the earlier issues with the FSPs. The requirement to complete a cMYP as a prerequisite to apply for new vaccine support has helped improve countries' preparedness to introduce these new vaccines. However some countries have noted that while the cMYPs have facilitated better planning, implementation of these plans remains an issue.

Bridge Financing concept

We understand that although the Bridge Financing concept was developed, it was never implemented – even though letters were sent to the 26 countries requesting them to comply with Bridge Financing if they wanted to continue receiving support (which was even accepted by several of the countries). Instead, the GAVI Board approved the principle of co-financing in December 2005 and this caused uncertainty about whether Bridge Financing was the overall aim. Stakeholders have expressed concern at this revision of approach, and the consequent implications in terms of uncertainty and unpredictability for countries.

Co-financing policy

Our general sense from structured interviews (and especially from country-level government consultees) is that the co-financing policy is a step in the right direction in terms of financial sustainability. In addition, our review of the approaches followed by other health sector initiatives (e.g. Global Fund and the (US) President's Emergency Plan for AIDS Relief

(PEPFAR)) suggests that GAVI's introduction of co-financing has been an innovation in development practice. Although the Global Fund approach is based on different levels of grant entitlement depending on country GDP – which is a similar concept – we understand that in practice, it does not track funding from other sources in a consistent and sustained manner: monitoring of country contributions has been poor.⁹¹

Less positive points to note are as follows:

- The policy took a number of years to be defined and approved by the Board, and required six Board papers over the period 2005-08. Moreover GAVI is now looking to revise the policy again to integrate more closely with its eligibility policy/ graduation procedures. The policy has therefore been a source of considerable uncertainty amongst country governments.
- Stakeholders have identified a series of *design* issues that we understand are being considered as part of the review. These include:
 - *whether co-financing levels should be linked to vaccine prices.* There is no distinction on the co-financing level per dose based on the specific vaccine procured by the country. The Board's view initially was to introduce different co-financing levels based on the different vaccines. The decision to introduce a general (not vaccine specific co-payments) was intended to minimise competition between different vaccines. Stakeholder views on this issue remain divided.
 - *that the scope of the policy extends to vaccines only.* The Co-financing policy extends to vaccines only. 'Cash-based' programs do not have 'matched funding' requirements. Consultations and our document review suggest that some countries have experienced issues with sustaining funding for GAVI's non-vaccine support, once terminated or completed, and hence it has been suggested that GAVI's approach might be extended to its non-vaccine support as well.
 - *perverse incentives created by 'penalising' countries that pay greater than the required co-financing amounts.* We understand that GAVI's approach in Phase I meant that if countries provided national financing for GAVI-supported vaccines, the funding available to these countries could be used in subsequent years (i.e. the period of funding from GAVI could be stretched). In contrast, under the Co-financing policy, if a country voluntarily provides greater than the co-financed amount, GAVI funding to that country would be correspondingly reduced in the following year (and with GAVI expanding the period of its commitments to countries for NVS until 2015, countries have limited incentive to step up their contributions). This feature means that there is no incentive for countries to contribute in excess of amounts stipulated in cMYP or the required co-financing amount over the grant period.
 - *co-financing levels viewed as being too small to impact materially on financial sustainability.* Although there appears to be a recognition of the reasons for keeping co-

⁹¹ Note however that we cannot comment on whether GAVI's approach is 'preferred' to that of these other comparator organisations.

financing levels low in relation to the vaccine prices, the general view is that this is at the expense of any material impact on financial sustainability.

- Some *implementation* issues have also been noted, including higher transactions costs (as the physical supply of the co-financed doses is not timed with the doses funded through GAVI⁹²).

We have not found significant evidence of displacement resulting specifically from the co-financing policy. However, discussions with UNICEF suggest that some countries have ordered their co-financing doses at the expense of traditional vaccines (although they have not provided data to corroborate this and we have not been able to verify this directly with countries).

In addition, feedback from country stakeholders in Mali indicated that the government does not have sufficient funds to procure its traditional (Bacillus Calmette-Guérin (BCG), Oral Polio Vaccine (OPV), measles and Tetanus Toxoid (TT)) and co-financed vaccine doses, and may have to replace some funding for its traditional vaccines for the co-financed doses as it does not want to lose access to GAVI support.

We note that, in the context of the fixed budgets at country or Ministry of Health (MOH) level, there will inevitably be choices to be made in prioritisation. To the extent that countries are 'surprised' by new requirements, this may result in poor planning/ prioritisation. However, in general we see no reason why co-financing requirements should cause any greater difficulties in country budgeting than other required expenditures.

Conclusions

Our conclusions are therefore as follows:

- GAVI has been innovative with regards to financial sustainability, and has done a lot of intellectual work on the issue, in close consultation with countries. GAVI Phase I, in particular, saw a lot of innovation, thinking and development of approaches, and these approaches have been implemented in Phase II. Its requirement for countries to prepare FSPs/ cMYPs has clearly helped improve the planning and budgeting process in countries – which is an important area of value add.
- However, in Phase II the overall message with regard to financial sustainability has not been clear: there have been frequent revisions and updates to key policies. This has been the case particularly for Bridge Financing and the current co-financing policies. The result has been a degree of confusion for countries.

We will return to these issues more generally in the overall conclusions under this evaluation question. However, what is clear (including from the next section of the report) is that, despite its innovation in tools and approaches, financial sustainability remains one of GAVI's greatest fundamental challenges. Part of this challenge though appears to have related to a failure to articulate explicitly that the ability of many low income countries to achieve financial sustainability is not realistic in GAVI planning periods.

⁹² This is particularly the case for countries that procure through UNICEF – as UNICEF requires funds 60 days in advance of the shipment, it is not possible to plan for the co-financed shipment to take place at the same time as the GAVI funded shipment.

5.4. Prospects for sustainability

In this section we bring together evidence on prospects for financial sustainability for GAVI support (both vaccine and non-vaccine).

In order to do this we look at historic and planned (future) levels of government financing of immunisation. We have not conducted any independent analysis of benchmark levels of Gross Domestic Product (GDP) or public health expenditure that are consistent with country self financing of immunisation (including new vaccines). However, we note that the recent work conducted by the CTT points to a benchmark of 1% of public health expenditure. This reflects preliminary data on non-GAVI eligible countries in Latin America who have been early adopters of new vaccines, where vaccines generally account for less than 1% of public health expenditure.

In addition, we also examine FSP and cMYP data for estimates on the forecasted funding gap, sources of financing for routine immunisation, etc. as further evidence on the prospects for financial sustainability. (Note that the FSP and cMYP analysis examines forecasted funding and expenditure for routine immunisation only i.e. it excludes funding/ expenditure on campaigns)

The evidence includes:

- GAVI support for low and low-middle income GAVI-eligible countries (Section 5.4.1);
- Analysis of FSP data (conducted by Lydon et al) (Section 5.4.2);
- CEPA's analysis of cMYP data (Section 5.4.3);
- Forecasts of vaccine expenditure as a proportion of government health expenditure (Section 5.4.4); and
- Country and program case studies on countries ability to continue to finance vaccine (and other immunisation expenditure) (Section 5.4.5).

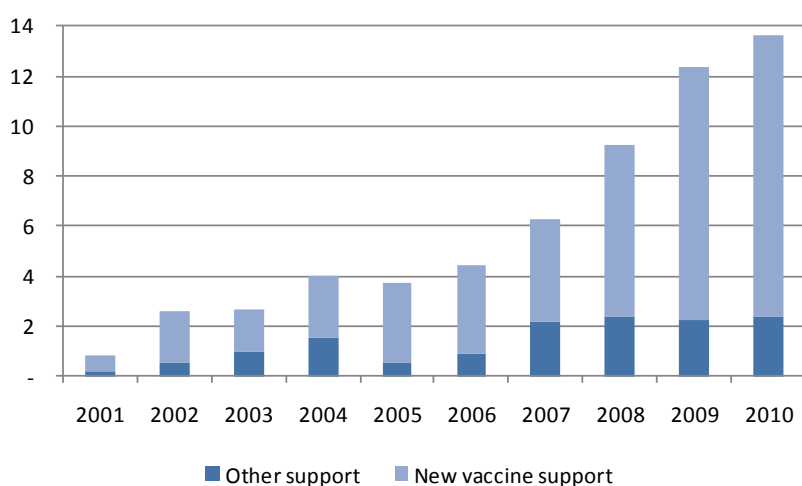
Section 5.4.6 summarises the evidence.

5.4.1. GAVI support as a proportion of government health expenditure

The trend in absolute levels of GAVI vaccine support per surviving infant, on an average for all GAVI countries, is shown in Figure 5.2. The main point to note is that GAVI support for vaccines increased from an average of \$2 per surviving infant in 2002 to \$11.24 per surviving infant in 2010⁹³, and that the increase since 2007 relates to the introduction of pentavalent vaccine.

⁹³ The average value of total GAVI support increased from \$2.57 per surviving infant in 2002 to \$13.65 per surviving infant in 2010.

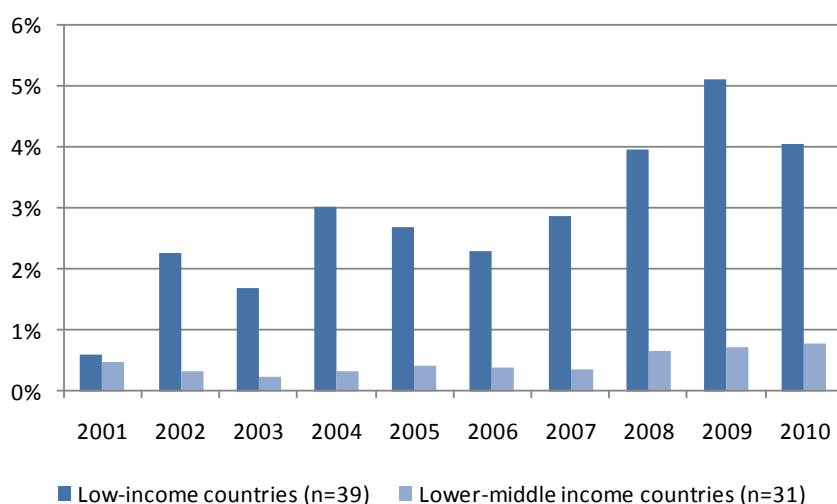
Figure 5.2: Trend in average GAVI support per surviving infant in all GAVI countries (\$) (2001-10)



Source: GAVI Secretariat; UN Population Division

In order to get a sense of how this support compares with national level resources available to health, Figure 5.3 presents the total value of GAVI vaccine support as a percentage of total government expenditure on health for both low income and low-middle income countries, on an average for GAVI countries.^{94 95} Details of data sources and methodological issues are set out in Annex 9.

Figure 5.3: Average GAVI disbursement for vaccines as a percentage of total government expenditure on health (2001-10)



Source: GAVI Secretariat; WHO NHA; World Bank

⁹⁴ Government expenditures on health are more relevant than total expenditures on health because vaccines are viewed as a public good which should be provided by the government free of charge. WHO has for instance issued a statement discouraging user fees for vaccines (England, S., Kaddar, M. Nigam, A., and Pinto, M. (2001). Practice and policies on user fees for immunisation in developing countries (WHO/V&B/01.07), World Health Organization, Geneva.

⁹⁵ We categorise GAVI-eligible countries into low and low-middle income countries based on the World Bank country classification by income group: low income, \$975 or less; and lower middle income, \$976 - \$3,855. <http://data.worldbank.org/about/country-classifications>

Key points to note:

- Average GAVI disbursements for vaccines as a proportion of total government expenditure on health have risen in Phase II for both low and low-middle income countries.
- The average proportion in Phase II for low-income countries is 3.7% with a peak of 5.1% in 2009.
- The average proportion for low-middle income countries, although rising, remains below 1% throughout Phase II.

Although these estimates are not comparable with the 1% benchmark for all vaccines (since the figures only include GAVI-financed vaccine expenditure), they provide an indication of the order of magnitude of the challenge to reach this benchmark. (Details of the average proportion of total GAVI support as compared to total government health expenditure are set out in Annex 9)

Within the low-income country group there is considerable variation. In eleven countries, GAVI support has consistently been a very high percentage of their government health expenditure (taken to be above 5%). These countries are presented in Table 5.2. Many are classified as “fragile states” and almost all are in Sub-Saharan Africa (the exception being Afghanistan). Note that adjusting for these outliers in the above analysis results in a lower percentage of GAVI vaccine support of total government expenditure (the peak in 2009 is 3.2% instead), but still remains well over the 1% benchmark for low-income countries. Annex 9 provides more details.

Table 5.2: High GAVI support countries (fragile states are marked in grey)

Countries	Total GAVI funding as a % of govt. health expenditure			GAVI vaccine funding as a % of govt. health expenditure		
	2007	2008	2009	2007	2008	2009
Congo DR	35%	41%	31%	11%	18%	24%
Guinea	6%	7%	13%	3%	7%	13%
Sierra Leone	15%	17%	12%	13%	12%	11%
Liberia	10%	17%	12%	1%	11%	8%
Gambia	6%	6%	12%	6%	5%	12%
Afghanistan	10%	7%	12%	4%	2%	7%
Burundi	15%	14%	11%	7%	8%	7%
Guinea-Bissau	6%	19%	10%	4%	12%	6%
Eritrea	2%	8%	9%	2%	4%	6%
Central African Rep	5%	13%	9%	0%	5%	7%
Ethiopia	33%	9%	9%	12%	8%	7%

Source: GAVI Secretariat; WHO NHA

The main conclusion from this analysis is that there has been quite a bit of variation in the level of GAVI support between Phase I and Phase II – with a significantly higher level of support going to low-income countries (as might be expected).

From a financial sustainability perspective, the analysis suggests that GAVI support for low-income countries is at a level (relative to a 1% benchmark) that means that self-financing is likely to be a significant challenge (even before the introduction of the rotavirus and pneumococcal vaccines).

In the low-middle income countries, the challenge appears much less marked – given that GAVI support is less than 1% of government health expenditure on average.

5.4.2. Review of Lydon et al's analysis of FSP data

In a paper published in the *Vaccine* journal in 2008, Lydon and colleagues presented an analysis of data from 50 different FSPs. (Although the data in FSPs was forward looking, the periods covered are now all historic; in addition the focus of Lydon et al's analysis was on performance in Phase I). The analysis focused on funding for routine immunisation only (i.e. campaigns were not included).

The objective of the analysis was to evaluate financial sustainability of GAVI support. In particular, three initial assumptions of the GAVI approach (referred to in the introduction) were tested: (i) that five years were sufficient for countries to transition away from GAVI support and take over the full financing of the new vaccines; (ii) that the GAVI push for immunisation would catalyze additional resources from Government and other donors; and (iii) that stimulating greater demand for vaccines would lead to a price reduction.

The main conclusions of the analysis were:

- Routine immunisation expenditure has been on the rise since 2000, with baseline expenditures before GAVI support averaging \$6 per infant, increasing to an average of \$17.5 per infant in the period 2005-10. The increase is mainly attributed to the introduction of new vaccines, but also to funding required to increase immunisation coverage.
- Average immunisation expenditure per infant varied greatly depending on which new vaccine and/ or presentation was introduced.
 - Average costs per infant in countries with Hepatitis B monovalent vaccine, Diphtheria, Tetanus and Pertussis (DTP)-HepB vaccine and pentavalent vaccine were \$12.7, \$14.6 and \$20.1, respectively.
 - Introduction of pentavalent increased immunisation costs 4.5 times on average, compared to only 1.6 times if monovalent Hepatitis B was introduced. Hence, it is particularly Hib vaccine introduction that challenges financial sustainability.
 - In countries using pentavalent vaccine, total immunisation costs amount to an average of 9.2% of total government health expenditures.
- Evidence on the existence of displacement of national finance for immunisation is mixed:
 - There have been increases in both domestic and external sources of total immunisation financing – national government immunisation financing has increased from \$3.4 to \$4 per infant on an average between the baseline and the

year with GAVI, and is projected to increase to an average of \$5.6 per infant in 2005-10; financing from bilaterals and multilaterals has also increased, although the trend for the future is less certain for bilaterals given their inability to make multi-year commitments.

- However examination of country specific data shows that five countries (Albania, Haiti, Cote d'Ivoire, DPR Korea and Myanmar) saw a drop in their total immunisation support despite an infusion of funding from GAVI, and seventeen countries saw a drop in financing for routine immunisation.⁹⁶
- While government funding is expected to account for 42% of overall funding during 2005-10, funds from GAVI represent the second largest source at 37%. Thus almost 80% of all funding for routine immunisation will rely on these two sources until 2010. In the poorest countries, GAVI is the single largest source of immunisation financing, exceeding the government contribution.
- Considerable financing gaps would exist if GAVI withdrew its funding, and financial sustainability is far from assured.

The overall conclusion from the analysis was thus that *financial sustainability is not likely to be achieved in the short term*.

In a related, but unpublished paper by Lydon⁹⁷, the following additional conclusions on the FSP data are noted:

- Overall, non-vaccine recurrent expenditures have risen by 22%⁹⁸, with the average increase being the lowest in countries that introduced monovalent HepB vaccine as compared to the average in the group of countries that expanded their schedules with the pentavalent vaccine.
- Relative to the total needs for vaccines however, the share of government financing drops steadily over time. Estimated at 43% of overall vaccine needs in the baseline, it dropped to 21% in the year with GAVI and is expected to be approximately 13% in the 2005-10 period when full scale up of new vaccines will be reached. The paper notes that government funding for vaccines dipped slightly between the baseline year and the year with GAVI (from \$0.84 to \$0.82 per infant), and suggests that this may or may not, reflect the fact that the switch to combination vaccines supported by GAVI has replaced existing national funding for DTP vaccine.

⁹⁶ Note that while the authors state that it is difficult to conclude on displacement of resources due to GAVI, five countries do attribute reduction in funding to GAVI in their FSPs.

⁹⁷ Patrick Lydon (2006): "Immunisation financing analysis- A look across 50 GAVI countries", WHO (IVB), unpublished.

⁹⁸ Mainly attributable to increases in cold chain equipment and maintenance, training, additional human resources, vehicles, transportation, and surveillance activities.

5.4.3. CEPA analysis of cMYP data

We have analysed data from 42 country cMYPs to assess the potential prospects for financial sustainability.

Trends over time are analysed by plan year rather than calendar year.⁹⁹ Each country's cMYP covers six years. This means that plan Year 1 is the baseline, or actual data. Plan Years 2-6 represent each subsequent year's projected data. The correspondence between plan year and calendar year varies by country. For most countries, Year 1 is 2005 and Years 2-6 cover 2007-11. The range for Year 1 is 2004-06, for Year 2 2006-08, and for Year 6 2010-12.

We have focused our analysis on routine immunisation (i.e. excluded data on campaigns) in order to be consistent with the Lydon analysis of FSPs. Also, GAVI funding has been mostly focused on routine immunisation.¹⁰⁰

There are some caveats regarding the data:

- costs are expressed in nominal terms taking into account a rate of inflation selected by the countries themselves; and
- the data has almost certainly not been recorded consistently across countries.

In addition, there are some caveats to note in relation to our methodology:

- trends over time need to be interpreted with caution, given the lag of about 2-3 years for some countries between their actual data (i.e. Year 1 data) and first year of forecast data (i.e. Year 2 data); and
- we calculate average expenditure and finance per surviving infant, without excluding outliers. This implicitly weights our figures by the number of infants, so that our results are representative of an average infant rather than an average country. More details on our approach and further results are presented in full in Annex 10. We summarise below the main conclusions only.

Expenditure per surviving infant on routine immunisation is rising. Across all countries, actual expenditure in Year 1 is \$14.14; by Year 6 it is forecast to have reached \$26.46¹⁰¹ (see Figure 5.4). Substantial increases are planned across all country income groups. Note that this represents a further increase on the average expenditure of \$17.50 based on Lydon et al's analysis of 50 countries' FSPs.¹⁰²

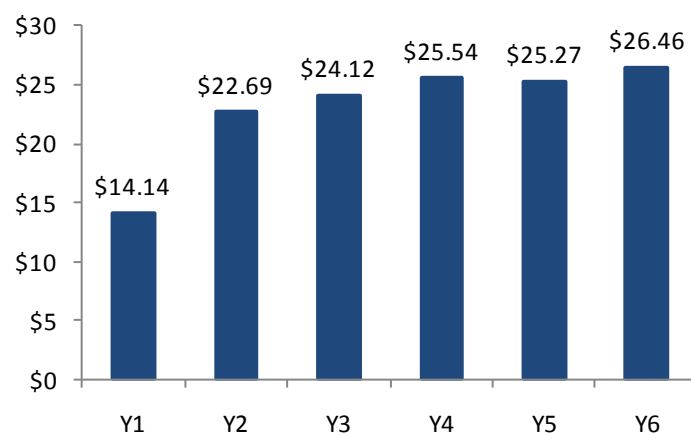
⁹⁹ The baseline year, first forecast year and final year all varied. Baseline years spanned 2004-06; first forecast years spanned 2005-08; and final years spanned 2010-12. Analysis by calendar year would mean: (a) analysing data for a much smaller group of countries which share a sample period; or (b) allowing sample composition to differ from year to year, and mixing actual and forecast data within some years; or (c) analysing data for a shorter time period for which data is available for all countries.

¹⁰⁰ Nearly all (97%) of GAVI finance recorded in the cMYPs relates to routine immunisation. The remaining 3% relates to campaigns, and is almost entirely accounted for by Yellow Fever campaigns. In addition, negligible amounts are accounted for by finance for Measles, MNT and Polio campaigns.

¹⁰¹ Average expenditure per surviving infant across all countries rises from \$14.14 in Year 1 to \$22.69 in Year 2, a jump of 61%. It then grows at an annual rate of 3.9%, reaching \$26.46 by Year 6.

¹⁰² Note that Lydon et al's figure of \$17.50 is the average for the period 2005-10.

Figure 5.4: Planned routine immunisation expenditure per surviving infant, all countries



Source: Country cMYPs

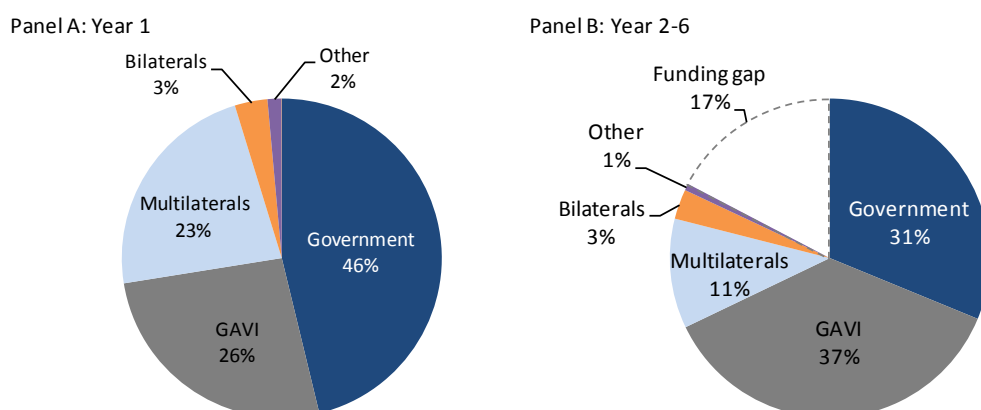
Growth in expenditure is driven primarily by new vaccines. Of the \$12.32 additional planned expenditure per surviving infant around half (\$6.19) is accounted for by new vaccines. This represents an initial increase of 133% from Year 1 to Year 2 followed by average yearly growth of 7.2% - growing faster than all other expenditure categories. Systems-related expenditure accounts for an increase of \$5.25, and remains the single largest category despite its share of total expenditure falling from 65% in Year 1 to 55% in Year 6.

There are small declines in planned expenditure per surviving infant on traditional vaccines. Average planned expenditure per surviving infant on traditional vaccines falls from \$1.73 in Year 2 to \$1.69 in Year 6 (albeit after initial rising from \$1.39 in Year 1). Following Lydon et al's conclusion on the FSP data, this may suggest some reduction in spending on DTP by governments, given GAVI funding of pentavalent – however we note that it is not possible to confirm/ verify this with the available data, and also the decline in the level of spend is not very significant.

There is a widening funding gap for routine immunisation, as sources of finance as a whole do not keep pace with expenditure growth. While average expenditure per surviving infant rises by \$12.32, average finance rises by only \$6.33. This results in a funding gap of 23% of expenditure in Year 6 – 49% if only secure finance is included. The growing funding gap may be due to the slow rise in government financing as well as some declines in multilateral/ bilateral funding.

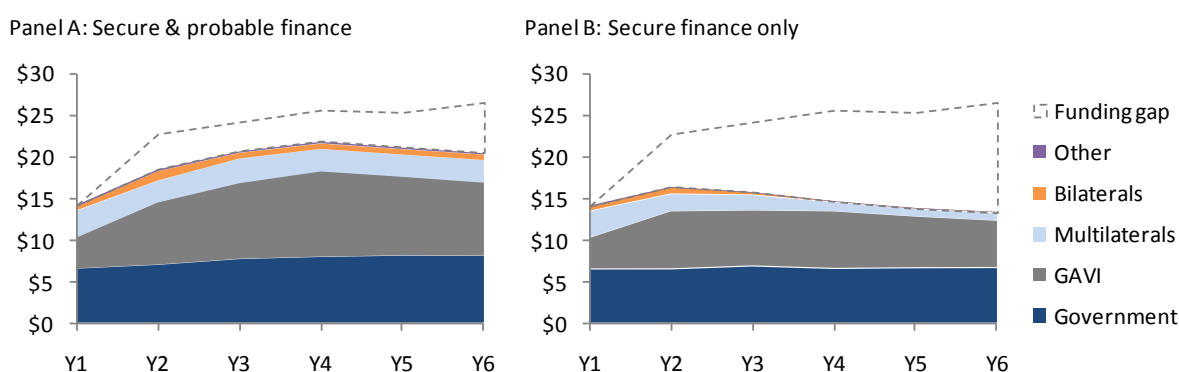
Figures 5.5 and 5.6 presents a summary of sources of finance.

Figure 5.5: Summary of financing of total planned expenditure per surviving infant on routine immunisation



Source: Country cMYPs

Figure 5.6: Financing of total planned expenditure per surviving infant on routine immunisation



Source: Country cMYPs

Government finance for routine immunisation is rising slowly. Average government finance per surviving infant rises from \$6.53 in Year 1 to \$8.06 in Year 6. To maintain its share of expenditure at 46% as in Year 1 however, it would have had to rise to \$12.22. Although levels of government finance are higher in the richest group of countries, the overall rate of increase is actually smaller. Although most countries see an increase in government finance over the cMYP period, eight do not.^{103 104}

Some evidence of declining multilateral and bilateral finance for routine immunisation. Average finance per surviving infant from both multilateral and bilateral donors as a whole is projected to fall over

¹⁰³ These are: Cameroon, Lesotho, Madagascar, Mozambique, Nigeria, Rwanda, Senegal and Tanzania.

¹⁰⁴ Lu et al's 2010 paper analyses data on total government expenditure on health as an agent and DAH. They investigate whether government spending is supplanted, rather than supplemented, by donor funding. To do this, they: (a) infer the amount of domestically-financed government expenditure by subtracting DAH from total government expenditure; and (b) analyse the relationship between domestic government expenditure and DAH, controlling for other influences. They find that although total public finance for health increased dramatically (by 100% on average), there was some evidence of a negative and significant effect of DAH to governments on domestic government expenditure. On average, they estimate that to increase government health spending by \$1 donors would have to provide governments with \$1.75 of DAH. However, when DAH was provided to the non-government sector, this opposite effect was identified.

the cMYP period, from \$3.69 in Year 1 to \$3.40 in Year 6 (including both secure and probable finance). Finance from bilateral donors alone rises from \$0.47 in Year 1 to \$1.14 in Year 2, before falling to \$0.66 in Year 6. This may, however, reflect the inability of bilateral donors to make multi-year commitments rather than their withdrawal from immunisation funding. Finance from multilateral donors also falls from \$3.22 in Year 1 to \$2.62 in Year 2, then remains relatively flat, reaching \$2.73 in Year 6.¹⁰⁵ Overall, we conclude that it is likely that the trend in bilateral finance from Year 2 onwards is driven by their inability to make multi-year commitments. However, the falling multilateral finance from Year 1 to Year 2 suggests there may be some degree of withdrawal from the sector.

GAVI represents the largest source of immunisation finance and all countries are dependent on GAVI finance for new vaccines expenditure. Across all countries and expenditure types, GAVI finance rises as a proportion of total immunisation expenditure, from 26% in Year 1 to 34% in Year 6, becoming the largest source of finance in the process (Lydon et al's analysis of FSPs suggested that GAVI represented the second largest source during 2005-10, after government financing). This increase is mainly due to funding for new vaccines. GAVI is almost the sole source of finance in this area, comprising 84% of expenditure overall and 78% even in the highest income group. Although government finance per surviving infant for new vaccines does rise over the period, there is little prospect of it reaching the level required for sustainability.

Financial sustainability of new vaccines appears better for relatively higher income countries, however is not clearly assured. Government finance in the richest countries is higher than is the case for low-income countries, but still remains low as a proportion of new vaccine expenditure. This suggests that even the richest GAVI-eligible countries may not be able to sustain funding for new vaccines.

Finally, limited financing of routine immunisation systems expenditure may also pose a challenge to sustainable delivery of vaccines. Across all countries, funding gaps for systems expenditure are larger than for other expenditure types, reaching an average of 39% of expenditure in Year 6. To the extent that systems expenditure is necessary for vaccine delivery this is suggestive of a further sustainability problems, since continuing delivery of new vaccines may require additional finance both for the vaccines themselves and for immunisation systems.

Overall, the above results suggest that sustainability presents a major challenge for all countries. In particular:

- For new vaccines, there seems little prospect of replacing the average finance provided by GAVI to countries in Year 6 (\$7.70 per surviving infant), given that government finance in that year is forecast to be just \$1.14 (which represents 12% of planned expenditure on new vaccines)
- For the poorest countries, government finance covers only 17% of total planned Year 6 expenditure on routine immunisation (and only 7% of planned expenditure on new vaccines), and hence donor support is likely to play a significant role for the foreseeable future.

¹⁰⁵ If only secure finance is included, finance from these sources falls to \$0.95 per surviving infant in Year 6, of which only \$0.05 comes from bilateral donors.

5.4.4. Forecast fiscal space for GAVI eligible countries

As noted above, the CCT has recently conducted an analysis of ‘fiscal space’ in order to assess the potential for countries to graduate from GAVI support¹⁰⁶. This analysis looks at GAVI vaccine costs as a proportion of total public expenditure on health.

Public expenditure is based on actual data up to 2008 and then projections to 2020 based on analysis of the relationship between GDP growth and public expenditure. Vaccine costs as a proportion of public expenditure on health are estimated in two scenarios: (1) public expenditure on health grows in line with GDP; and (2) public expenditure on health rises to at least 15% of total public expenditure in all countries (if it has not reached that level already).

Table 5.3 below summarises the main results by income group.¹⁰⁷

Table 5.3: Projected vaccine costs as a proportion of projected public expenditure on health

2008 GNI per capita	No. of countries	Vaccine costs as % public exp. on health (2010)		Vaccine costs as % public exp. on health (2015)	
		Scenario 1	Scenario 2	Scenario 1	Scenario 2
<\$500	21	5.1%	4.8%	10.2%	8.1%
\$500-\$999	20	1.7%	1.5%	3.2%	2.3%
\$1,000-\$1,499	12	1.0%	1.0%	1.4%	1.2%
<i>Likely to graduate</i>					
\$1,500+ ¹⁰⁸	14	0.5%	0.5%	0.5%	0.4%

Source: CCT fiscal space analysis

Points to note are as follows:

- For the poorest countries (<\$500) sustainability is far out of reach (and remains so in projections to 2020).
- For countries with GNI per capita in the range \$500-\$999 the percentages rises between 2010 and 2015, and ends at between 2-3% depending on the scenario.
- For countries with GNI per capita between \$1,000-\$1,499, even under the more optimistic Scenario 2 the 1% benchmark (referred to above) is not met in 2015. However, the levels are relatively close.
- For the countries likely to graduate¹⁰⁹ vaccine costs do fall under the notional benchmark in the CCT analysis. However, it is not completely clear from the analysis presented in the Board paper, if this estimate includes costs for the new vaccines such as

¹⁰⁶ GAVI Alliance Program & Policy Committee meeting 18-19 May 2010 (Doc #5 – Co-financing revision, Annex 5).

¹⁰⁷ This replicates the main results from the authors’ Table 3. Note that Eritrea, Korea DPR, India, Somalia and Zimbabwe are excluded from the analysis.

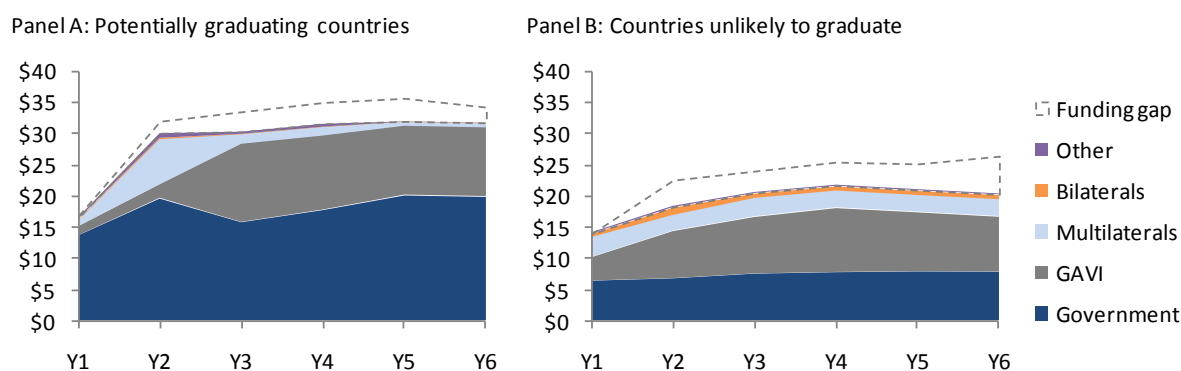
¹⁰⁸ While we do not have access to the base data, we assume that the constant/ marginally declining percentage is on account of faster GDP growth.

¹⁰⁹ The revised eligibility policy suggests two thresholds for country eligibility – GDP per capita of \$1,500 or \$2,000.

pneumococcal or rotavirus, or only includes costs for vaccines currently being funded by GAVI in these countries. If the former, then it should be noted that adoption of these additional vaccines (which are relatively more expensive) will impose a further burden on government spending.

As a check on this, we have reviewed the cMYPs for four potentially graduating (based on availability of data in the cMYPs): Armenia, Bhutan, Moldova and Sri Lanka.¹¹⁰ Figure 5.7 shows the forecasted funding gap, as well as sources of finance for the immunisation programs for these four countries, along with the average for the remaining countries for which we have cMYP data.

Figure 5.7: Financing of total planned expenditure per surviving infant on routine immunisation by likelihood of graduation (potentially graduating countries considered: Armenia, Bhutan, Moldova and Sri Lanka)



Source: Country cMYPs

Key points to note from the figure are:

- The average size of the anticipated funding gap appears to be smaller for these potential graduating countries than that for the remaining countries.
- Also, the average level of government finance is significantly higher for the potentially graduating countries.

Based on both the CCT analysis and our own analysis of cMYPs we can conclude that the prospects for financial sustainability of countries likely to graduate appears relatively strong. Nevertheless, it is important to note that as per our analysis of the four cMYPs, by Year 6 the potentially graduating countries expect to fund only 58% of planned routine immunisation expenditure from government sources.

¹¹⁰ We have selected these countries as their GNI per capita is in excess of \$1,500 based on 2008 data from the World Bank.

5.4.5. Case studies

In this section, we review the available evidence on the extent to which vaccines and activities previously funded by GAVI are continuing to be supported by governments and/ or other partners. We look at GAVI support for vaccines as well as its support for injection safety supplies (Injection Safety Support; INS) and immunisation systems (Immunisation Services Support; ISS).

Funding of HepB-containing vaccine¹¹¹

We understand that GAVI ceased offering support for the hepatitis B monovalent and DTP-HepB vaccines in Phase II. The intention was that countries would either switch to pentavalent or take over financing of the monovalent vaccine. We have assessed how countries have funded their hepatitis B containing vaccines after this change, and find that of a total of 34 countries receiving support for hepatitis B monovalent in Phase I:

- Twenty six have switched to GAVI supported pentavalent vaccine;
- One country – Korea DPR – has switched to GAVI supported DTP-HepB vaccine in 2006 and this funding is not scheduled to end until 2015; and
- The remaining seven countries are no longer receiving GAVI support for hepatitis B vaccine (see Table 5.4).
 - Six of these are lower-middle income countries and here the Government has taken over financing of the vaccine.
 - The only low-income country is Myanmar, where we understand that the Government has not yet identified a funding source for hepatitis B vaccine.¹¹² We understand that at present the country is using left over stock from the GAVI funded supply (anticipated to last for about a year), but it is uncertain where the funding will come from once this stock runs out.

¹¹¹ While still being eligible for GAVI support, Guyana is the only country that has started funding its requirement of the pentavalent vaccine i.e. GAVI support has been financially sustainable. The Guyanese Government took over financing of this vaccine in 2006 after only two years of GAVI support. According to PAHO, it was a political decision within the country to take over the financing. Guyana is the only South American country that has received pentavalent vaccine, as the other eligible countries in that region had already introduced the vaccine before GAVI started (with the exception of Haiti which has still not introduced Hib vaccine).

¹¹² Based on consultations with the WHO SEARO new vaccine officer.

Table 5.4: Funding for hepatitis B monovalent vaccine

Country	Last year of HepB support	Financing source post GAVI	Details
Bosnia and Herzegovina	2009	Government	BiH self finances HepB monovalent vaccine from 2009. The country is currently receiving GAVI support for Hib mono. The MoH has been discussing switching to combined vaccine but it would not be easy as one of the entities (Federation of Bosnia and Herzegovina) uses D'TaP, which would make the switch difficult (as GAVI does not support the hexavalent vaccine).
China	2006	Government	In 2007 the vaccination schedule was expanded. In addition to fully funding HepB mono vaccine nationwide, hepatitis A, meningococcal, Japanese encephalitis, mumps and rubella vaccines were introduced with Government funding.
Indonesia	2008	Government	HepB was introduced during the 1990s with Government funding. GAVI provided support for HepB between 2002-08, which was limited to the supply of birth doses in uninject syringes. ¹¹³
Moldova	2008	Government	Receives DTP-Hib vaccine from GAVI. Preferred to keep monovalent hepatitis B as introduction of pentavalent would require a major change in the vaccination schedule
Myanmar	2009	Currently using stock funded by GAVI as is still remaining	Myanmar has stocks for about a year's supply. In the meantime, the government is looking for a donor to finance future procurement; thus far they have been unsuccessful.
Turkmenistan	2006	Government	Not GAVI eligible in phase II; HepB vaccine being funded by the government.
Ukraine	2009	Government	Even though Ukraine has been eligible for GAVI support, the country has introduced Hib, MMR and IPV with Government funding.

Injection safety supplies (INS related funding)

The SG1 evaluation document presents our review of: (i) 56 of the 59 countries that received INS support in Phase II; and (ii) 6 of the 13 countries that received INS support in Phase II¹¹⁴. This analysis indicates that **all** of these countries have been able to sustain funding for injection safety material after the termination of GAVI support. This is an important result, with more than half of INS countries examined (Phase I and II) transitioning to full government funding, 77% being partially government funded, and 23% remaining wholly reliant on donor support.

¹¹³ Indonesia uses HepB mono through uninject syringes produced locally.

¹¹⁴ Of the Phase I countries, insufficient data was available for Azerbaijan, Kyrgyzstan and Turkmenistan. Seven of the Phase II countries (Bosnia & Herzegovina, Cote d'Ivoire, Cuba, Liberia, Madagascar, Malawi and Nigeria) were due to complete INS support in 2008 or later, and are excluded from this analysis.

However, these results need to be viewed in light of the fact that the financial sustainability of Auto Disable (AD) syringes and safety boxes is somewhat less of a challenge for countries than financing of new vaccines. In particular:

- The overall budget needed for AD syringes and safety boxes is considerably less than that for new vaccines. In countries with pentavalent vaccine support, the annual value of INS support amounted to only around 4% of new vaccine support.
- The price of AD syringes has declined, being fairly close to the price of disposable syringes – implying that it is not difficult for countries to continue to use AD syringes after GAVI support.

Activities funded for immunisation systems (ISS related funding)

The analysis of the cMYP data suggests that:

- In general, countries have planned large increases in immunisation systems expenditure over the period of cMYPs.
- However, in terms of finance per surviving infant, average secure and probable finance is projected to remain broadly flat.

The average funding gap for immunisation systems expenditure therefore reaches 39% by the final plan year, far higher than funding gaps for vaccines (1% for new vaccines and 8% for traditional) or injection supplies (10%). Thus funding for immunisation systems appears to be an important issue in the short to medium term.

While we have not been able to assess the sustainability of funding for all countries where GAVI ISS support has been completed or temporarily suspended (mainly due to data quality issues), feedback suggests that some countries have found it difficult to fund activities that were previously supported through GAVI ISS. The experience of Mali and Uganda is discussed below:

- Discussions with government stakeholders in Mali suggested that following the temporary suspension of GAVI ISS due to data quality issues, activities previously funded through ISS are no longer receiving support. Interviewees indicated that government had not sourced alternative finance because it was awaiting confirmation from GAVI on whether it could use the balance of unspent ISS funds¹¹⁵. However, it is now over two years since the last disbursement of ISS funds from GAVI.
- In the case of Uganda¹¹⁶ we understand that: (i) the introduction of GAVI ISS funding in 2002 displaced existing government funding for immunisation systems; and (ii) following the suspension of GAVI activities in 2006 (due to the issue of misuse of funds), all activities supported came to a halt, resulting in reduced coverage. The Ugandan

¹¹⁵ Mali has an unspent balance of \$1m from previous GAVI ISS disbursements to the country. However there has been some miscommunication/ misunderstanding between Mali and the GAVI Secretariat, which has prevented them from using these funds.

¹¹⁶ Presentation by Dr. Possy Mugenyi at the EPI Managers Meeting for Eastern and Southern Africa, 10-12 March 2010, Maputo.

Government is now looking to find alternative sources of funding, with \$0.7m p.a. being allocated from the MOH by the government to strengthen immunisation systems.

Country visits

With the exception of Bolivia, countries were generally of the view that sustainability of GAVI-funded expenditure in the short- and medium-term would be challenging. This was a particular concern for vaccine expenditure, although there was more optimism for INS-related expenditure.

Specific points relating to each country include:

- *Nigeria*. Federal officials were positive on the financial sustainability of existing GAVI support, which represents a relatively small proportion of the total government health budget. However, the prospects for new vaccines are considered weak: given their high prices, it is unlikely that Nigeria could currently fund these vaccines without GAVI support. Additionally, state-level officials expressed significantly less optimism.
- *Bangladesh*. Bangladesh's overall health budget is mostly donor-funded, and the expectation is that other donors would need to step in after GAVI ends its support to ensure financial sustainability. Expenditure on new and underused vaccines is considered particularly unsustainable given their high cost compared with per capita expenditure on essential health services. Reductions in price are therefore crucial. However, expenditure on the INS program is likely to be more sustainable given local manufacture of safety kit.
- *Mali*. Officials in Mali, too, expressed the view that government financial capacity alone would be too low to fund continued use of new vaccines, given current prices. Indeed, the problem is perhaps even more acute, with stock-outs experienced in traditional vaccines as a result of funding shortages. Additionally, the Malian government has not been able to continue funding activities previously supported under ISS.
- *Bolivia*. There is an established tradition of prioritising child and maternal health – including immunisation – in Bolivia. Existing routine immunisation has been funded by the government's public health insurance fund. The degree of commitment has been demonstrated in the recent GAVI-supported introduction of rotavirus vaccine, where Bolivia is financing 50% of the vaccine cost. Government officials believe rotavirus vaccine will be financially sustainable even when GAVI funding ends. They noted that the introduction of rotavirus vaccine resulted in the implementation of a National Vaccination Law. This guarantees public financial support for all vaccines in the country through the creation of a national fund for vaccine purchase and support of vaccination activities.
- *Uzbekistan*. The country has faced financing challenges more recently due to the financial crisis. But more generally, it was noted that the country would not be able to fund pentavalent vaccine in the absence of GAVI support.

Overall, feedback from the country visits supports the conclusions from the FSP/ cMYP analysis, indicating that the target of sustainability is presently out of reach for a number of GAVI-eligible countries.

5.4.6. Summary of evidence on the prospects for financial sustainability

In summary:

- The main conclusion from our analysis of GAVI support as a proportion of country public health expenditure is that over Phase I and Phase II there has been quite a bit of variation in the level of GAVI support to GAVI eligible countries – with a significantly greater level of support going to low-income countries (as might be expected). From a financial sustainability perspective, the analysis suggests that levels of GAVI support for most low income countries are at levels (relative to a 1% benchmark) that mean that self-financing is likely to be a significant challenge (even before the introduction of rotavirus and pneumococcal). For lower-middle income countries the challenge appears much less marked – given that GAVI support is less than 1% of government health expenditure on average.
- Analysis of FSP/ cMYP data suggests weak prospects for financial sustainability for most low-income GAVI-eligible countries in the short to medium term at least, given: rising expenditures; increasing funding gaps; greater reliance on GAVI (particularly for new vaccines); and limited rises in financing by government (and other non-GAVI donors).
- However, the CCT fiscal space analysis and our analysis of a subset of potentially graduating countries (based on cMYP data) both suggest better prospects for these countries (as compared to the average). Although, on average, government finance for these countries is still less than two-thirds of the forecasted expenditure on routine immunisation, and hence it is not clear if financial sustainability can be assured.
- There is not much experience of countries having to fund vaccines previously supported by GAVI, as most countries have switched to the pentavalent combination and hence continue to receive GAVI support. The few countries that have continued to use the HepB monovalent vaccine are mostly lower-middle income countries.
- In addition, there have been problems with sustaining ISS funded activities in some countries, however, sustainability of INS support has been a success (although we note that AD syringe costs are low compared with GAVI supported vaccines).

5.5. Implications of the choice of vaccine on country level financial sustainability

In the context of the second aspect of this evaluation question (the more general impact of GAVI financing of vaccines on financial sustainability) perhaps the biggest question relates to whether GAVI's choice of vaccines, while targeted at some diseases with incidence of mortality (particularly amongst children), has had an impact on financial sustainability. The discussion in this section is based on a desk-review of available documentation as well as consultations with GAVI stakeholders, including country level stakeholders.

We discuss the implications of the combination vaccine formulation first, followed by the pneumococcal and rotavirus vaccines.

Combination vaccine formulation

During Phase I, GAVI offered three types of combination vaccines: DTP-HepB, DTP-Hib and the pentavalent (DTP-HepB-Hib) vaccine. While there is no doubt that both parents and health care providers generally prefer combination vaccines due to the reduced number of injections needed, these vaccines are generally more expensive than vaccines in separate vials.

For example, in a cost-effectiveness analysis of GAVI-supported Hepatitis B vaccine in Mozambique, the introduction of the DTP-HepB vaccine was estimated to have increased total vaccine and injection supply costs by 56%, while introduction of Hepatitis B vaccine in monovalent form would only have increased the costs by 25%.¹¹⁷ Hence, at the 2001 vaccine prices, the monovalent vaccine was more cost-effective than the combination vaccine, with a stronger likelihood of being financially sustainable. In addition, introduction of DTP-HepB vaccine discouraged financial sustainability in countries that were paying for DTP vaccine from government sources before the introduction of the GAVI supported vaccine – i.e. funding from GAVI replaced government funding.

In Phase II, the majority of GAVI countries have now moved to the pentavalent vaccine, which has further challenged financial sustainability for a number of reasons:

- First, as has been illustrated above through the FSP data analysis, the Hib vaccine is considerably more expensive than the traditional vaccines and the Hepatitis B vaccine, i.e. it is the Hib vaccine in particular which presents a challenge to financial sustainability. (Note that the price differences between the pentavalent vaccine and DTP-Hib combination vaccine and Hib monovalent are not particularly large, so it is more the Hib vaccine that is a challenge than the combination vaccine per se.)
- Second, introduction of the pentavalent vaccine has resulted in the replacement of previously government (or bilateral donor) funded DTP vaccine by GAVI (similar to the case for GAVI funding for the tetravalent combination discussed above).¹¹⁸ Analysis of data from the cMYPs (and also from the FSPs) also indicates some decline in government funding for traditional vaccines, suggesting the ‘replacement effect’ by GAVI funding of the pentavalent vaccine. In addition, following the switch from HepB mono to pentavalent, GAVI is also replacing government funding for the HepB mono vaccine. Feedback from country stakeholders in both Nigeria and Uzbekistan indicated that one of the reasons for the planned introduction of the pentavalent vaccine in the country was that GAVI could take-over financing of the HepB vaccine as well.^{119 120}

¹¹⁷ Source: Griffiths UK, Hutton G, Das Dores Pascoal E. Cost-effectiveness of introducing hepatitis B vaccine into routine immunisation services in Mozambique, Health Policy and Planning 2005, 20.

¹¹⁸ With the introduction of the co-financing policy, countries pay for the DTP component through their co-financed contributions. However this policy was introduced in 2008 only i.e. much after the introduction of pentavalent in countries through GAVI funding.

¹¹⁹ In Nigeria, the country has been paying for HepB itself (i.e. has not received GAVI support). However consultees indicated that they were keen to apply for pentavalent as this would imply that GAVI could take-over the financing for HepB.

¹²⁰ In Uzbekistan, GAVI provided funding for HepB mono from 2001, until 2007/08 after which the Government took over funding. However the country stakeholders suggested that obtaining funding for HepB was very difficult and hence one of the reasons for their application for GAVI support for pentavalent was so that GAVI could take-over the financing for HepB.

Another example is that of some of the Regional Office for Europe (EURO) countries, where government/ bilateral donors were funding HepB mono in the interim period between the termination of GAVI HepB mono support and the start of GAVI pentavalent support. However we understand that these countries did struggle to put together the required funding in the interim period – which was one of the key reasons for their application to GAVI for pentavalent support.

Pneumococcal and rotavirus vaccines

We understand that the pneumococcal and rotavirus vaccines were added to the GAVI NVS portfolio without knowledge of the final vaccine price that could be obtained. While the price of the pneumococcal vaccine is now determined through the AMC, for the rotavirus vaccine there is still no official UNICEF price. These two vaccines will pose great challenges in terms of financial sustainability both because they are likely to be relatively expensive and because the supply situation is uncertain so that the price can easily fluctuate (notwithstanding the existence of AMCs).

5.6. Overall conclusions on SG3.3

To what extent has GAVI promoted and increased the sustainability of immunisation funding at the national level?

As noted above, there are two key aspects to the evaluation of GAVI's performance in relation to financial sustainability:

- The first relates to GAVI's activities, policies and approaches to supporting country financial planning.
- The second is concerned with the overall impact of GAVI's funding of immunisation in eligible countries of financial sustainability.

We present here a summary of the findings from the analyses and our overall conclusions on this evaluation question.

5.6.1. Summary

The key findings together with our robustness assessment are presented in Table 5.5

Table 5.5: SG3.3 – conclusions

Evaluation question SG3.3: To what extent has GAVI promoted and increased the sustainability of immunisation funding at the national level?			
Issue/ Theme	Findings	Robustness	
GAVI's approach/ efforts at improving financial sustainability for countries, in terms of the supporting institutions and policies.	<p>GAVI has been innovative with regards to financial sustainability through its support of tools and policies such as the FSPs/ cMYPs and the Co-financing policy that have helped countries' in their financial planning/ budgeting for immunisation.</p> <p>However, in Phase II the overall message with regard to financial sustainability has not be clear – given frequent revisions / updates to key policies. This has been the case particularly for Bridge Financing and the current co-financing policies.</p>	B	Based on a review of available documentation, supplemented by discussions with global and national level stakeholders (both through direct consultations and the e-survey)
Prospects for financial sustainability	<p>The prospects for financial sustainability of GAVI funding for low-income countries is a significant challenge, as exhibited by:</p> <ul style="list-style-type: none"> • the relatively high share of GAVI vaccine funding as a proportion of total government health expenditure (in comparison with a 1% notional benchmark, the average proportion for low-income countries in Phase II is 3.7%, with a peak of 5.1% in 2009); • FSP and cMYP data on country immunisation financing and expenditures exhibit rising expenditures on routine immunisation; increasing funding gaps; greater reliance on GAVI (particularly for new vaccines); and limited rises in financing by government (and other non-GAVI donors). • While there is not much experience of countries having to fund vaccines previously supported by GAVI, there have been problems sustaining ISS funded activities in some countries. Sustainability of INS has been a success. • The challenge for lower-middle income/ potentially graduating countries is much less marked, although it is still not clearly assured as is exhibited by for example, on average, government finance for these countries being less than two-thirds of their forecasted expenditure on routine immunisation. 	B	Multiple sources of evidence support this conclusion, although some caveats with the data are noted.

Evaluation question SG3.3: To what extent has GAVI promoted and increased the sustainability of immunisation funding at the national level?

Issue/ Theme	Findings	Robustness	
Implications of the choice of vaccine on country level financial sustainability	GAVI's choice of vaccines, including the combination vaccine formulations and the new vaccines of pneumococcal and rotavirus, present a challenge for financial sustainability at the country level.	A	Conclusion borne out by facts, as against subjective opinion

5.6.2. Conclusions

Our conclusions on the two aspects of GAVI's performance in relation to financial sustainability are summarised below.

GAVI's activities, policies and approaches

Our conclusions are as follows:

- GAVI has been innovative in terms of its approach and the development of tools that support countries in planning the financing of their immunisation programs. Its requirement for countries to prepare FSPs/ cMYPs have clearly helped improve the planning and budgeting process in countries – which is an important area of value add. Criticisms of FSPs (including the fact it was separate from the national multi-year plan and did not allow for integration with the broader strategic planning and budgeting of the health sector) appear to have largely been tackled in cMYPs.
- There is also a general view that the introduction of co-financing has been an important development supporting country ownership of immunisation decisions (even if the levels are probably too low in the overall context of financial sustainability). But our assessment is that the process of the development of the policy, as well as its coverage, have been areas of poor performance:
 - The time taken to introduce the policy and then frequent revisions and updates to the policy have caused confusion, both within the organisation and at the country level. In addition, with further work ongoing in this area, the overall message with regard to financial sustainability is still not clear.
 - It is surprising (albeit with the benefit of hindsight) that the policies introduced during Phase II (such as those relating to country eligibility (and graduation), as well as vaccine support) have not done more to integrate the issues of financial sustainability.
- Our view is that the poorer performance in Phase II with regards to country-level financial sustainability reflects a relative failure of the organisation in terms of clarity of objectives in this area (discussed below).

Contribution of GAVI funding to financial sustainability

Despite its innovation in tools and approaches, financial sustainability remains one of GAVI's greatest fundamental challenges (as was also noted in the GAVI Phase I evaluation). Key points to note from our analysis are as follows:

- The quantitative analysis in this report suggests that prospects for financial sustainability for vaccine purchase for low-income GAVI-eligible countries continue to be weak, even in the medium term.
- The sustainability of GAVI's non-vaccine support, as well as financing of immunisation systems more broadly, also appears to be weak – as exemplified by the largest funding gap forecasted for immunisation systems-related expenditure. This poses a challenge to the efficient introduction of vaccines in countries and the ability to reach targeted immunisation coverage rates.
- In addition, GAVI's choice of vaccines, including combination vaccine formulations, have been made with relatively little weight given to the potential for low-income countries' to take on financing of these vaccines (whether through their own or other donor resources).

The question of course is whether this should be regarded as a failure given that funding of comparatively expensive vaccines unambiguously 'saves lives' even if there is little prospect of financial sustainability for low-income countries at least.

In our view, in the narrow context of this aspect of this evaluation question, the evidence clearly points to the fact that GAVI's funding has not supported the achievement of financial sustainability. This relates in part to the (perhaps naïve) assumption at the outset that GAVI would be able to reduce prices (see our evaluation of SG2). But perhaps more important are GAVI's decisions to provide support for 'new' life-saving vaccines, which were not part of the original portfolio. In Phase II this has been as much a feature of GAVI's success (in funding routine immunisation), as also presenting a significant challenge for financial sustainability.

In our view the main issue that arises from our review is whether there has been sufficient clarity within the organisation (and in its external communication) on the issue of financial sustainability. As noted above, our judgement is that part of the uncertainty in Phase II on co-financing relates to a failure to recognise explicitly, or communicate clearly, that financial sustainability (for low-income countries at least) would not be achievable in the medium term for the vaccines that GAVI supports. In our view, clarity on this point might have made it easier to define the co-financing policy in a way that distinguishes between the objectives of the policy for different categories of countries (in terms of income and eligibility) and potentially different vaccines. This is a similar conclusion to that reached by the authors of the Phase I evaluation report.

We understand that the CCT is looking to address some of these issues in their revision of the co-financing policy – although this is not within the time frame of our evaluation.

6. SG3.4: INNOVATIVE FINANCING MECHANISMS

6.1. Introduction

The final evaluation question under SG3 is: **‘To what extent is the existence of innovative financing mechanisms – IFFIm and AMC – dependent on the existence of GAVI in its current structure and form?’**

Phase II of GAVI’s operations marks the development/ implementation of the innovative financing mechanisms of IFFIm and AMC, in addition to GAVI beginning to mobilise funds from private individuals and institutions. In the context of scarce donor resources and the present financial crisis, the IFFIm and AMC contribute significantly to the ability of GAVI to fund its mandate.

A full description of each mechanism can be found in Annex 11 and 12. We have taken this description as read. However, to put the mechanisms in context:

- IFFIm is an innovative financing mechanism that uses long-term pledges from donor governments to issue bonds in the capital markets. The resources raised through the bonds are used to fund activities today i.e. IFFIm frontloads future commitments to make available funding today. IFFIm is supported by the governments of UK, France, Italy, Norway, Spain, Sweden, South Africa and the Netherlands, and together these donors have pledged to contribute \$5.3bn to IFFIm over 20 years.¹²¹ A total of \$3.7bn is being made available to the GFA through IFFIm over the period 2006-15.
- AMCs are designed to stimulate the development and manufacture of vaccines for developing countries, through a forward commitment to industry enhancing market viability (size and/or certainty). AMC donors are the Governments of Italy, the United Kingdom, Canada, the Russian Federation, Norway and the Bill and Melinda Gates Foundation, which collectively pledged a total of \$1.5 billion to fund the program.

6.1.1. Scope of the evaluation question

This evaluation does not seek to assess the overall results/ impact of these innovative financing mechanisms.¹²² Given that this is an evaluation of the extent to which GAVI has met its Strategic Goals, the focus is instead on GAVI’s role in helping progress these mechanisms, to support its objective of increasing predictable and sustainable financing for immunisation (i.e. SG3).

Our analysis therefore focuses on GAVI’s role in:

- the design of these mechanisms, i.e. in terms of helping develop the rationale, concept and structure of these mechanisms; and

¹²¹ United Kingdom has committed a total of £1,380,000,000 over 20 years; France has committed €372,800,000 over 15 years and an additional €867,160,000 over 19 years; Italy has committed a total of €473,450,000 over 20 years; Spain has committed a total of €189,500,000 over 20 years; Sweden has committed a total of SEK 276,150,000 over 15 years; Norway has committed a total of \$27,000,000 over 5 years; South Africa has committed a total of \$20,000,000 over 20 years; The Netherlands has committed a total of €80 million over eight years

¹²² We understand that an evaluation of IFFIm is ongoing/ planned in 2010 and the M&E baseline study for the AMC is being conducted at present.

- the implementation of the mechanisms.

Within this, we seek to answer whether GAVI's role/ involvement was essential/ unique in achieving progress to date, or if GAVI has generally played a positive role in achieving progress. The first of these would suggest a strong 'value added' role of GAVI, while the second, a relatively weaker but nevertheless an important role.

6.1.2. Sources of evidence

The key source of evidence that has informed our assessment of this evaluation questions are structured interviews. In particular, we have consulted with:

- GAVI Board members, both current and past.
- Independent experts that have been involved in the design/ implementation of these mechanisms.
- Representatives of GAVI partner organisations who have been involved with, and are responsible for, different aspects of these mechanisms (in particular, the World Bank).
- GAVI Secretariat, including members of the Executive team/ senior management as well as personnel involved in the direct management of these initiatives.
- In the case of IFFIm in particular, we have consulted with the Board Chair as well.

Information from structured interviews has been supplemented by desk review of available GAVI Board documents and reports.

In addition, the e-survey included a question on this issue and the summary responses are included below.

Quantitative analysis, country studies, benchmarking/ case studies of comparators and regression analysis have no role in this evaluation question.

6.1.3. Structure

The rest of this section is structured as follows:

- Section 6.2 examines GAVI's role in relation to the design and implementation of IFFIm.
- Section 6.3 examines GAVI's role in relation to the design and implementation of AMC.
- Section 6.4 presents the e-survey results.
- Section 6.5 concludes.

6.2. GAVI's role in the design and implementation of IFFIm

Our interviews (with a limited number of GAVI stakeholders) focused on several aspects of GAVI's role in the design and implementation of IFFIm, which are presented below. We have also consulted relevant GAVI documents to support the information obtained from consultations. The key contributions of GAVI are summarised in a concluding section.

6.2.1. Structured interviews and review of documentation

Concept development

IFFIm has its roots in the 2001 Monterrey conference, where governments and the international development community (UN organisations, civil society, etc) agreed on the urgent need to raise substantial resources to support the achievement of the Millennium Development Goals (MDGs). The outcome of the meeting – the ‘Monterrey Consensus’ – re-affirmed the target ODA of 0.7% of their GDP, and recommended a holistic approach to development finance.

In response to this, the UK government initiated and developed the concept of the International Finance Facility (IFF) to raise the additional \$50bn thought necessary to bridge the gap between the target and actual levels of ODA. Goldman Sachs were appointed as advisers to support the UK government in developing the detailed concept of this IFF mechanism.¹²³ As far as we are aware, GAVI was not involved in the initial concept development of the IFF mechanism.

In November 2004, the governments of the United Kingdom and France announced their commitment to launch IFFIm, an effort to apply the principles of the IFF on a smaller scale.

The choice of immunisation reflected the combination of:

- The underlying characteristics of immunisation as a health investment that: (i) offers high economic and development returns that allow a case to be made for the costs associated with front loading of donor resources; and (ii) is relatively easy to measure compared with other forms of health sector/ systems support.
- GAVI’s existence as a platform that was capable of supporting the implementation of a complex and innovative financing structure. We discuss this below as it relates to different aspects of structuring and delivering IFFIm.
- Donor confidence in GAVI as a focused and reasonably effective mechanism for provided immunisation grants directly to governments. It is also important to note:
 - the role of the Gates Foundation here. Gates funding of GAVI (both the initial support of \$750m in 1999-2000 and then the second tranche of \$750m in 2005) supported this sense of confidence in GAVI amongst the international donor community. (We also understand that the announcement of the second, 10 year tranche of Gates support was important in making the link between IFF and immunisation - as a way for IFF-supporting donors to ‘match’ the Gates investment).
 - a recognition of the value of the Partnership as a ‘new’ way of doing development business. i.e. GAVI as a relative lean entity that brought the key immunisation partners together creating focus, but attempted to avoid duplication of roles (Although there was a recognition amongst donors at the time of issues with GAVI’s governance / decision making and tensions about underlying roles).

¹²³ CEPA advised DFID/ UK HM Treasury on financial aspects of IFFIm in 2005-06, reviewing the work carried out by Goldman Sachs.

IFFIm structuring and implementation

The key features of GAVI that supported its ability to be the platform for IFFIm are as follows:

- *Structural flexibility.* The existence of the GAVI Fund as a not-for-profit ‘corporate’ entity¹²⁴ allowed it the legal flexibility to establish IFFIm (i.e. the special purpose vehicle that is the recipient of donor pledges and the issuer of the bonds). Our understanding is that the existing multilaterals would have struggled to support the setting up of an entity like IFFIm Co (given legal concerns about liability and other issues). But it would in principle have been possible to do this through other GHPs (such as the Global Fund).
- *Availability of financial / legal expertise.* The particular set of expertise and skills of the GAVI Board and senior staff at the Secretariat were very important in supporting the development and implementation of IFFIm. In addition to key Secretariat staff, the GAVI Fund Board had several unaffiliated members from the private sector with strong financial/ commercial background.
- *Governance flexibility.* The size of GAVI Fund and the engagement of Board members with the detail of IFFIm supported the organisation’s ability to understand and eventually approve the proposed structure.
- *Organisation and co-ordination of activities.* Although a significant amount of input on the structuring and development of IFFIm came from GAVI partners (e.g. the World Bank, UK Government) and GAVI’s advisers (e.g. Goldman Sachs and Linklaters), the GAVI Secretariat played a very important role as ‘the client’ in (i) the adaptation of the IFF concept to immunisation; (ii) the coalescing of donors around the structure; and (iii) the day to management of the project more generally (which should not be underestimated).

The role of GAVI in the operation of IFFIm

IFFIm is managed by its Board of Directors and does not have any employees. Its principal activities are outsourced to two main organisations:

- GAVI, which provides administrative and operational support. GAVI’s functions include, but are not limited to: (i) providing general secretariat services to the Board¹²⁵ (including supporting IFFIm governance by helping to prepare Board papers, take minutes of meetings, etc.); (ii) use of the GAVI structures for country application, approval and disbursement; and (iii) involvement in fund raising (both from donors for the pledges and investor road shows for the bonds)
- World Bank, which is the Treasury Manager (see Annex 11 for details) – and draws on its existing financial management expertise with donor trust funds and contributions.¹²⁶

A number of interviewees note that GAVI’s role in providing administrative and operational support has been important in ensuring high uptake of the bonds. Investors have wanted to be part of the ‘GAVI story’ in terms of its contribution to saving lives through immunisation.

¹²⁴ US 501(c)3

¹²⁵ However the GAVI Secretariat has no role in the governance of IFFIm, which is independent.

¹²⁶ We understand that proposals from the World Bank and the European Investment Bank were considered.

6.2.2. Conclusions

Based on the above, our basic conclusion is that GAVI has played a very important role in the development of IFFIm. Although it was not part of the initial concept development / design of the IFF, it provided a suitable and attractive partner for its application to immunisation. In particular its suitability reflected:

- Donor confidence in GAVI as a focused and reasonably effective mechanism for provided immunisation grants directly to governments; and
- GAVI's existence as a platform that was capable of supporting the implementation of a complex and innovative financing structure. This related in particular to its relative legal and governance flexibility compared with alternative channels (including multilaterals) and key personnel.

In terms of implementation we also conclude that GAVI played an important role. It was the principal with ultimate responsibility for establishing the IFFIm entities and for managing the process and the inputs of diverse stakeholders and advisers.

6.3. GAVI's role in the design and implementation of AMC¹²⁷

6.3.1. Review of documentation and structured interviews

Whilst GAVI was not involved as such in developing the AMC concept, feedback suggests that it played an important role in designing and implementing the pneumococcal pilot AMC, with many noting important areas of value add.

AMC concept development

The initial rationale and concept of an AMC for vaccines was developed by academia, and then the Center for Global Development (CGD).¹²⁸ Its publication entitled "Making markets for vaccines: Ideas to Action" stimulated the interest of donors and the AMC was discussed by the G7 Finance Ministers in June 2005. In December 2005, the Government of Italy, with the support of the World Bank, presented a report to the G7 Finance Ministers outlining how such a scheme could move forward.

GAVI did not play a lead role in undertaking this ground work for the AMC concept and initial framework of how the market mechanism would work. However, the CGD Working Group was co-chaired by GAVI's Chief Finance Officer; and GAVI remained involved in the key stakeholder group meetings through to 2005.

¹²⁷ For the avoidance of doubt, we do not comment on the relative merits of AMCs, their structure/ design, or their application in this context

¹²⁸ A CGD Working Group was convened between March 2003 to April 2005 to examine the real-world feasibility of an advance commitment to purchase a future vaccine product. The Group assessed whether a mechanism to increase incentives could be designed, and how it might work in practice in terms of an economic and legal framework.

Selection of pneumococcal vaccine for the AMC pilot

Following the December 2005 meeting, the G7 Ministers tasked the World Bank and the GAVI Alliance to convene experts and perform the necessary analytical work to develop a proposal for a pilot AMC for their consideration. An Independent/ Disease Expert Committee with members from developing and industrialised countries was established, which examined six disease vaccines as candidates for the AMC pilot.¹²⁹

We understand that the World Bank took a lead in this phase, with GAVI playing a supporting role (for example, through supporting consultations with vaccine industry and biotechnology companies).

Selection of a host for the AMC pilot

In early January 2006, the G7 Deputies asked the World Bank to assess the capacity of existing institutions to administer and support an AMC. Six organisations were considered to host, or play a role in hosting, an AMC pilot: GAVI, Gates Foundation, Global Fund, UNICEF, the World Bank, and the WHO¹³⁰:

- The Gates Foundation and the Global Fund noted that administering an AMC would not fit within their mandates.
- UNICEF and WHO noted that their institutions were best suited to provide specific, limited functions for the AMC.
- The World Bank stated its willingness to provide financial management functions for an AMC, but did not believe it would be the most appropriate institution to undertake implementation of immunisation programs financed by AMCs.
- GAVI stated that it had the willingness as well as the institutional mandate and structure to assume responsibility for the full range of functions of the AMC pilot, but its ability to provide the required functions would depend on out-sourcing or partnering some functions with the World Bank and others.

Based on this work, it was decided that GAVI would undertake the core programmatic and administrative functions of the AMC; and that the World Bank would be responsible for core financial management functions¹³¹. The donors also decided that there would be no legal entity for the AMC and it would be a virtual company with GAVI providing the AMC Secretariat support¹³².

Drawing on the above analysis and stakeholder consultations on this evaluation, we can conclude that GAVI had certain unique characteristics that enabled it to take on the responsibility of an AMC administrator:

¹²⁹ The decision to target pneumococcus disease was made by this committee. The six candidate disease vaccines named in the Italian Minister's report to the G8 were HIV/AIDS, human papilloma virus, malaria, pneumococcus, rotavirus, and tuberculosis. Refer http://www.vaccineamc.org/files/iec_rec_pilot.pdf for further details on the selection of pneumococcus.

¹³⁰ Source: "AMC pilot proposal: AMC Administration"

¹³¹ The Bank was also responsible for issues related to drafting/ finalising legal agreements related to the AMC.

¹³² GAVI hosts a four member AMC team, together with broader Secretariat support.

- Its Public Private Partnership (PPP)/ Alliance characteristic that allows it to draw on the expertise/ skills of each of its individual partners and helped agree the design for the pneumococcal pilot¹³³.
- The Alliance’s track record in introducing/ financing, purchasing and delivering new vaccines across developing countries (‘programmatic expertise’) – which fit well with the AMC vaccine pilot mandate.
- GAVI’s established systems for country application, review, approval, and disbursement – which were expected to reduce lead time in implementation once the vaccine supply was ready.
- Demonstration of capacity and experience in dealing with issues and taking forward new ideas related to innovative finance / development assistance (for example, the lessons that GAVI learnt through the IFFIm process were thought to be invaluable for the implementation of the AMCs).
- Flexibility in terms of organisational structure and governance that allowed it to find ways to get around issues faced by multilateral and bilateral donors in their involvement (for example, GAVI could better manage issues related to liability in relation to the AMC; and could be audited and ensure transparency in use of funds. Other examples include GAVI’s ability to convene and support committees of experts such as the AMC Independent Assessment Committee created by virtue of a GAVI by-law.)

Ground work for structuring/ operationalisation of the pneumococcal pilot

In February 2007, the pneumococcal AMC pilot was announced by the donors, who collectively pledged a total of \$1.5 billion to fund the program. Subsequent to this announcement, we understand that the GAVI Secretariat played a lead role in the detailed specification and operationalisation of the AMC pilot, supported by the Alliance partners¹³⁴.

The GAVI Secretariat’s role included, amongst other things,:

- establishing the Independent Assessment Committee (IAC) and its membership;
- assisting in the work of the economic expert group and the implementation working group work (both groups defined the detailed terms of the pilot)¹³⁵;
- supporting the process of creating the Target Product Profiles (TPPs)¹³⁶;
- creating an administrative support structure/AMC secretariat;
- developing a Monitoring and Evaluation (M&E) framework to track progress;

¹³³ The World Bank is also an Alliance partner which facilitated their working together to implement the AMC.

¹³⁴ For example, UNICEF was chosen as the procurement agent for the vaccine; and WHO would provide expertise on regulatory/ technical aspects of the product. More details on the role of different partners in implementation of the AMC is described in Annex 12.

¹³⁵ We understand that some members of the GAVI Secretariat were also part of the implementation working group.

¹³⁶ The IAC would determine the TPPs and ensure that the decision of whether a product meets the TPP (and is eligible for AMC funding) is fair and transparent.

- managing donor relations
- supporting ongoing work to ensure country demand – collecting and aggregating vaccine demand information, improving the quality, timeliness and transparency of the demand forecasting process;
- leading the communication and advocacy work; and
- leading consultations with industry, developing countries and Civil Society Organisations (CSOs).

Whilst some of these tasks might have been undertaken by any appointed AMC administrator, GAVI was well placed to deliver certain vaccine related functions such as vaccine demand forecasts, aggregating country demand, interacting with industry (a key GAVI partner), etc.

Implementation of the AMC (ongoing)

In June 2009, the AMC pneumococcal pilot was officially launched by the GAVI Alliance partners, the World Bank, WHO and UNICEF, five donor governments, and the Gates Foundation, by the signature of the AMC legal documents.

In implementing the pilot, the GAVI Alliance indicated its intention to allocate \$1.3 billion through to 2015 to pay the remainder of the AMC \$7 price (implementing countries will provide a small co-payment to contribute towards the cost of the vaccines). Although this is a challenging target (and is a potential problem for GAVI in the face of the global financial crisis and potential cuts in donor support), GAVI's funding commitment was critical to establishing the AMC. However, as part of our evaluation some consultees commented on the fact that GAVI's financial planning/ management capacity with respect to the AMC commitment has been relatively weak – in particular the time taken to establish the financial implications of its commitment for the balance AMC price.

The GAVI Secretariat (which hosts the AMC Secretariat) has provided a range of operational support to manage all phases of the AMC pilot life cycle. For example, this includes:

- liaising with UNICEF, entering into supply agreements, and the procurement of vaccines and other associated supplies;
- supporting the IAC in its work;
- reporting to donors regularly on the progress of the AMC pilot (including preparation of AMC annual reports);
- managing country applications,
- tracking country co-pay (when applicable);
- advocacy and communications, risk management, fund raising, etc.

As is evident from the consultations, GAVI's Partnership structure and vaccine financing model enable it to provide these services, arguably better than any other single immunisation stakeholder.

6.3.2. Conclusions

Based on the discussion presented above, we might conclude that GAVI's role and contribution have varied through different stages of the AMC development process. GAVI's major involvement commenced on selection of the pneumococcal vaccine as the AMC pilot as well as the appointment of the Alliance for administering the AMC (working closely with the World Bank that would manage the financial function).

Its particular suitability for these roles include:

- Leverage of its Alliance structure and the strengths of its partners.
- Proven experience in introducing new vaccines in developing countries.
- Related to the above, its ability to aggregate country vaccine demand and forecast supply volumes.
- Flexible/ agile organisation and governance structure conducive to innovate both financially and programmatically.

These factors distinguish it from other donors, both bilateral and multilateral. The evaluation of the suitability of existing organisations for the AMC Secretariat function also clearly underscored GAVI's ability to fulfil this role. This is *a priori* evidence of GAVI's additionality or added value in terms of operationalising the AMC.

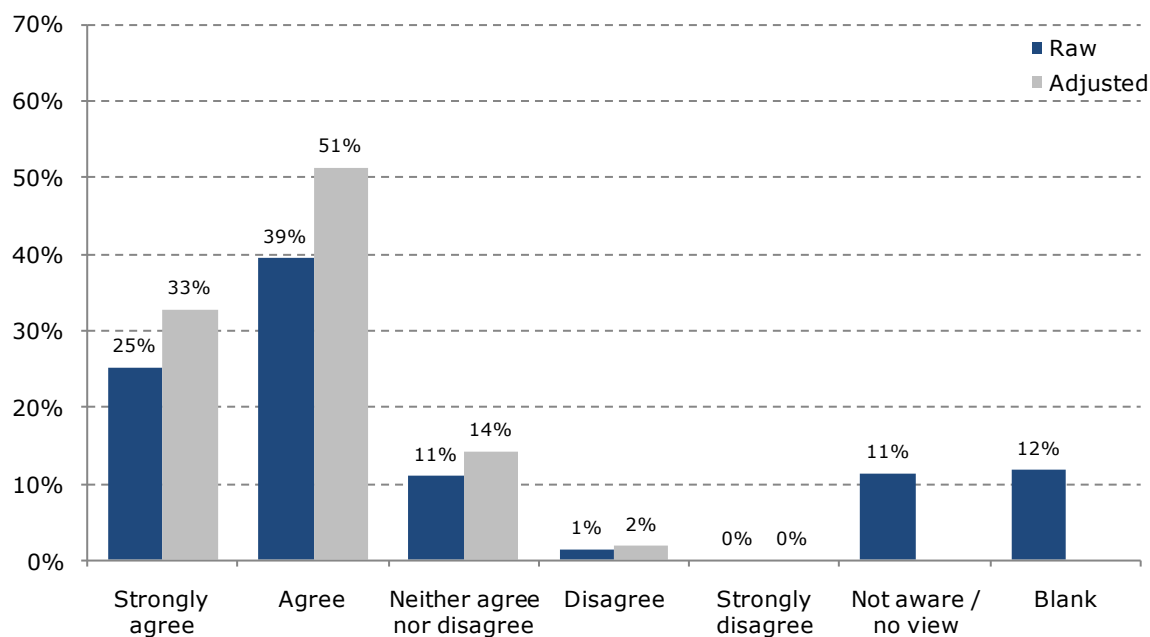
It is noted that there is increasing interest in AMC-type mechanisms in other fields of development aid (such as climate change), and other institutions are considering implementing this market based mechanism (although to date an AMC has not been piloted/ implemented in any other field). Therefore, GAVI may not be unique in its ability to deliver the AMC instrument.

6.4. E-survey

A summary of the respondents' views on the e-survey statement: "GAVI has been instrumental in designing and implementing innovative financing mechanisms such as IFFIm and AMC" is presented in Figure 6.1. As can be seen from the figure, most of the respondents were very positive, either 'agreeing' or 'strongly agreeing' (and no one 'strongly disagreeing) that GAVI has played an instrumental role. Annex 13 presents an examination of the quantitative responses by stakeholder category.

Relatively few respondents provided additional comments on this question, with the most common qualitative responses confirming that GAVI and its partners have played important technical and leadership roles. A small number of comments addressed the limitations of innovative financing mechanisms: for example, IFFIm and AMCs are not necessarily acceptable to all donor countries. Annex 13 also presents the detailed qualitative comments.

Figure 6.1: E-survey responses to question 20 – ‘GAVI has been instrumental in designing and implementing innovative financing mechanisms such as IFFIm and AMC’ (282 responses, of which 249 were non-blank)¹³⁷



6.5. Summary and conclusions of SG3.4

The SG3.4 evaluation question is: ‘To what extent is the existence of innovative financing mechanisms – IFFIm and AMC – dependent on the existence of GAVI in its current structure and form?’

Our main findings are summarised below, along with our overall conclusions.

6.5.1. Summary

Based on the analysis presented above, Table 6.1 summarises our main conclusions.

¹³⁷ Adjusted % is calculated after taking out the ‘not aware/ no view’ and the blank responses to the statement

Table 6.1: SG3.4 – conclusions

Evaluation question SG3.4: To what extent is the existence of innovative financing mechanisms – IFFIm and AMC – dependent on the existence of GAVI in its current structure and form?				
Issue/ theme	Findings	Robustness		
GAVI's role in the design and implementation of IFFIm	GAVI has played a unique and very important role in the development and implementation of IFFIm – demonstrating strong value add	B	Based on review of documentation, interview feedback from relevant stakeholders and e-survey responses	
GAVI's role in the design and implementation of AMC	GAVI's role in the design and implementation of the pneumococcal pilot AMC has been instrumental in facilitating its operationalisation and implementation	B	Based on review of documentation, interview feedback from relevant stakeholders and e-survey responses	

6.5.2. Conclusions

Our evaluation suggests that GAVI has played a very important role in the development of IFFIm – demonstrating strong value add. While GAVI was not involved in the initial concept development/ design of the IFF, it made a suitable and attractive partner for its application to immunisation. Its suitability reflected donor confidence in GAVI as a focused and reasonably effective mechanism for providing immunisation grants to developing country governments; and its capability to support the implementation of a complex and innovative financing structure. This related in particular to its relative legal and governance flexibility compared with alternative channels (including multilaterals) and availability of financial/ legal expertise in key GAVI Secretariat staff and GAVI Fund Board. GAVI has also played an important role in implementation, through its principal role, with ultimate responsibility for establishing the IFFIm entities, and for managing the process and the inputs of diverse stakeholders and advisers.

In the case of AMC as well, GAVI has played an important value add role. GAVI's major involvement commenced on selection of the pneumococcal vaccine as the AMC pilot as well as the appointment of the Alliance for administering the AMC. In particular, its suitability for these roles was brought about through its Alliance structure and strengths of its partners; proven experience in introducing new vaccines in developing countries, and related to this, its ability to aggregate country vaccine demand and forecast supply volumes; and flexible/ agile organisation and governance structure. GAVI's successful experience with implementing IFFIm also provided confidence to the international donor/ development community of its capacity to implement the AMC.

In the absence of a ready counterfactual, it is difficult to conclude on whether these mechanisms would have gone ahead without GAVI – although majority of the feedback suggests that it would have been more difficult to structure these mechanisms through the traditional multilateral aid architecture, and that GAVI's PPP structure and immunisation focus made it a particularly suitable platform for these instruments.

7. SUMMARY AND CONCLUSIONS FOR SG3

The previous sections presented our findings by evaluation question. In this section, we summarise the main findings and bring together the evidence across the SG3 evaluation questions to assess the extent to which the goal has been met.

7.1. Introduction

GAVI's SG3 is: **'to increase the predictability and sustainability of long-term financing for national immunisation programs'**.

In order to assess GAVI's performance against this goal, we have organised our analysis around four key evaluation questions, namely:

- SG3.1: To what extent has GAVI increased the level of global financial resources from donors for immunisation activities?
- SG3.2: To what extent has GAVI increased the predictability and sustainability of global financial resources from donors for immunisation activities?
- SG3.3: To what extent has GAVI promoted and increased the sustainability of immunisation funding at the national level?
- SG3.4: To what extent is the existence of innovative financing mechanisms – IFFIm and AMC – dependent on the existence of GAVI in its current structure and form?

The analysis carried out under each of these evaluation questions has supported our overall assessment of GAVI's performance on this goal.

We present below the summary findings and conclusions by evaluation question, followed by an overall assessment of the extent to which the goal has been met.

7.2. SG3.1: Level of global donor immunisation finance

Our evaluation suggests the following:

- Considerable increases in funding for immunisation should be seen against the backdrop of large annual increases in total ODA and even higher annual increases in health ODA. However, there is good evidence to suggest that GAVI (i) has been important in capturing increases for immunisation; and (ii) has made a contribution to driving the overall increases.
- The evidence suggests that WHO non-polio immunisation expenditure has increased – indicating that GAVI's funding has been additional (in respect of WHO). However, it has become more difficult for WHO to access bilateral funding for non-GAVI related immunisation priorities – although it is not clear whether this can be attributed to GAVI.
- The evidence indicates that there has not been a decline in total funding of UNICEF immunisation – indicating that GAVI funding has been additional (in respect of UNICEF). GAVI is now the largest customer for UNICEF procurement services for immunisation.

7.3. SG3.2: Predictability and sustainability of donor immunisation finance

Our evaluation suggests the following:

- GAVI has performed well in accessing longer-term direct or ‘traditional’ contributions from its donors, similar to other GHPs such as the Global Fund. GAVI’s success has been in raising its profile and putting itself in a position to benefit from the maximum commitments that bilateral and other donors make available to priority investments.
- Through IFFIm, GAVI has secured considerably longer periods of donor commitments, which have improved predictability of donor funding for immunisation. However, there are advocacy and planning challenges that are likely to be more acute as a result of IFFIm frontloading.
- GAVI has performed less well in terms of the number and diversity of donors as compared to other GHPs such as the Global Fund and GPEI.
- There is evidence to suggest that GAVI has increased country-level predictability of donor immunisation finance, however, its current funding gap, has undermined this achievement and its reputation.

7.4. SG3.3: Financial sustainability at the country level

Our evaluation suggests the following:

- GAVI has been innovative with regards to developing tools and policies that have supported country financial planning for routine immunisation, however, frequent revisions or updates to key policies suggests that the overall message with regards to financial sustainability is still not clear.
- The prospects for financial sustainability of GAVI funding for low-income countries is a significant challenge. The challenge for low-middle income countries however is much less marked, but is still not clearly assured.
- GAVI’s choice of vaccines to support presents a challenge for financial sustainability at the country level.

Thus our evaluation has highlighted an important area of weak performance by GAVI (as was also noted by the first evaluation). The key issue, in our view, is that GAVI has not sufficiently clarified its financial sustainability objectives, both within the organisation and to countries.

7.5. SG3.4: Innovative financing mechanisms

Our evaluation suggests the following:

- GAVI has played an important and value added role in the development and implementation of IFFIm.
- GAVI's active contributions to the design and implementation/ hosting of the pneumococcal AMC have been instrumental in taking the concept to market.

7.6. Overall assessment of GAVI's performance on SG3

Based on the analysis conducted for the four evaluation questions under SG3 ('to increase the predictability and sustainability of long-term financing for national immunisation programs'), our assessment is that:

- GAVI has overall been successful in increasing the *predictability* of funding for national immunisation programs, although this has been undermined more recently;
- but supporting *sustainability* of its financing has been an area of weaker performance.