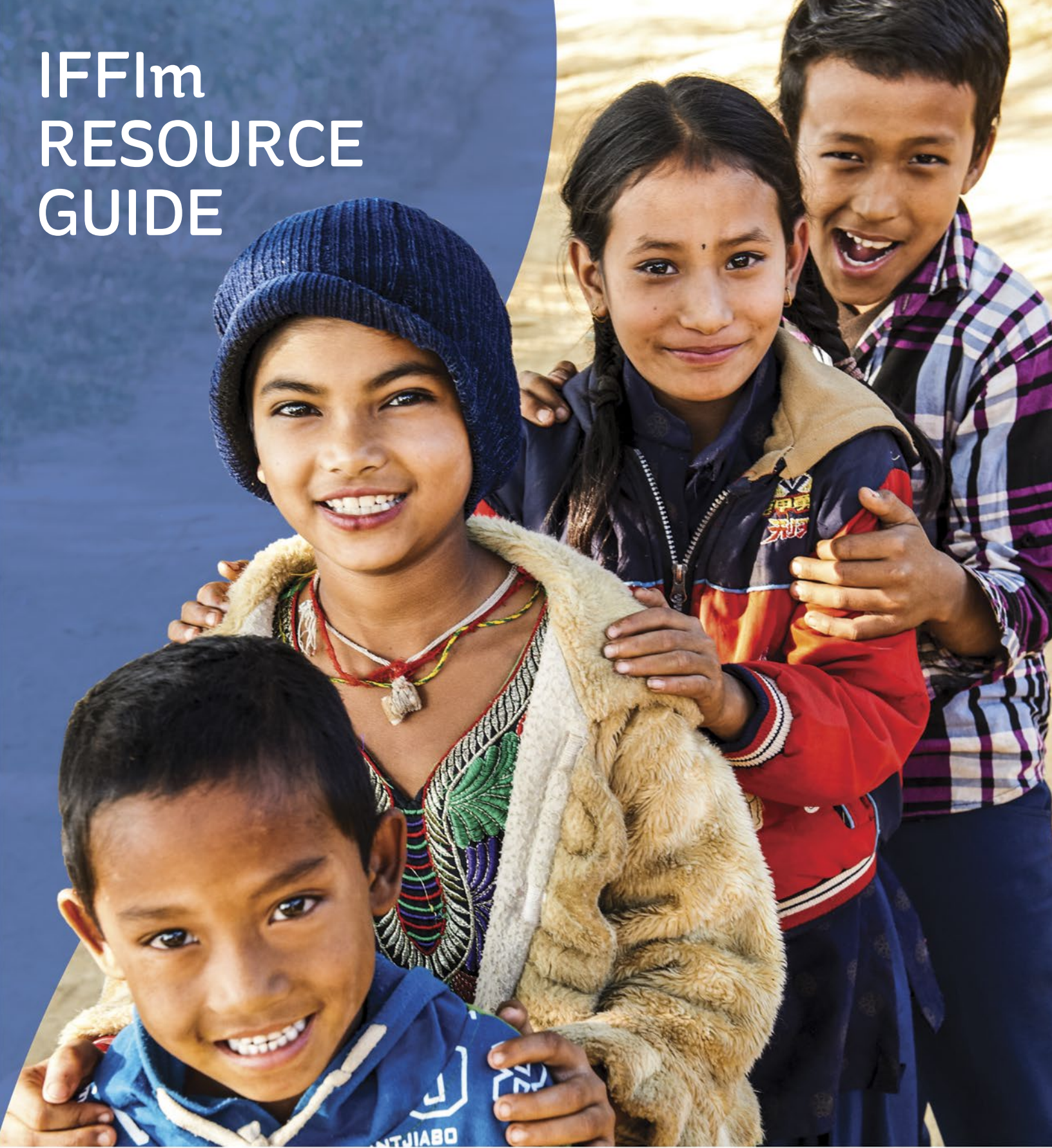


IFFIm RESOURCE GUIDE



IFFIm Resource Guide

CONTENTS

INTRODUCTION	5	2.2.3	What is the impact of the grant payment condition?	15
EXECUTIVE SUMMARY	6	2.2.4	What is the gearing ratio limit?	16
1 AN OVERVIEW OF IFFIm AND ITS IMPACT	9	2.2.5	How does IFFIm make sure it has enough liquidity to meet its liabilities?	16
1.1 What is IFFIm?	9	2.3	CAPITAL MARKET ACTIVITIES	16
1.2 What are IFFIm’s origins?	9	2.3.1	What are IFFIm bonds?	16
1.3 What does IFFIm do?	9	2.3.2	Who invests in IFFIm’s vaccine bonds, and why do they invest with IFFIm?	16
1.4 What are the primary benefits of IFFIm?	10	2.3.3	In how many markets has IFFIm issued vaccine bonds?	17
1.5 What is frontloading?	10	2.3.4	Why does IFFIm issue bonds in different currencies and geographies?	17
1.6 Why is frontloading important?	10	2.4	FUNDING COSTS	18
1.7 Does IFFIm frontloading mean Gavi will have less money available for immunisation in the future?	11	2.4.1	What is the average funding cost for IFFIm, and how does it compare to other funding sources?	18
1.8 What is the structure of IFFIm’s management and operations?	11	2.4.2	Do the administrative costs outweigh some of the benefits of IFFIm’s low funding costs?	18
1.9 What has IFFIm achieved so far?	11	2.5	DISBURSEMENT TO GAVI	18
1.10 How has IFFIm’s work been recognised?	12	2.5.1	How much has IFFIm disbursed to Gavi so far?	18
2 CONVERTING PLEDGES INTO FUNDING	13	2.5.2	How much will IFFIm provide in the future?	18
2.1 DONORS AND PLEDGES	13	2.5.3	Why hasn’t all the money raised by IFFIm gone to Gavi?	18
2.1.1 Who are IFFIm’s donors?	13	2.5.4	How are the funds generated through IFFIm disbursed by Gavi?	19
2.1.2 Why does it make sense for donors to pledge money to IFFIm?	13	2.5.5	Which countries are eligible for support from Gavi?	20
2.1.3 What are the donors’ payments subject to?	13	2.5.6	How does Gavi/IFFIm decide which projects to support?	20
2.1.4 How do donors pledge to IFFIm?	13	2.5.7	What is each donor’s share of IFFIm proceeds to Gavi?	20
2.1.5 How do donors know the impact of their individual pledges?	14	2.5.8	How is each donor’s share of proceeds calculated?	21
2.1.6 Does IFFIm’s frontloading model mean that donors’ future pledges will be used to pay down debt rather than add value to Gavi?	14	2.5.9	What are the benefits of the proceeds calculation methodology?	21
2.2 MECHANICS OF APPLYING PLEDGES TO THE IFFIm MODEL	15	3	MANAGING RISKS	22
2.2.1 How does IFFIm convert future pledges into immediate cash for vaccinations?	15	3.1	HEDGING AND SWAPS	22
2.2.2 What is the grant payment condition?	15	3.1.1	What is the context for IFFIm’s risk management strategy?	22
		3.1.2	Why does IFFIm need to use risk management techniques such as swaps?	22

3.1.3	Who does IFFIm enter into swaps with?	23
3.1.4	How does IFFIm use swaps to manage risks?	23
3.1.5	What is IFFIm’s swap position?	25
3.1.6	What factors drive the swap exposure level?	26
3.1.7	What are the resulting constraints of IFFIm’s current swap position?	26
3.1.8	If the outstanding swap exposure situation is resolved, what would the impact be?	26
3.2	CREDIT RATING	26
3.2.1	What is a credit rating, and why is it important?	26
3.2.2	What is IFFIm’s current credit rating?	26
3.2.3	What has IFFIm’s credit rating been historically?	27
3.2.4	Why was IFFIm downgraded?	27
3.2.5	How often do the credit agencies assess IFFIm’s rating?	27
3.2.6	What are the events that could trigger an action by a rating agency?	27
3.2.7	What are the factors supporting IFFIm’s credit rating?	27
3.2.8	What was the impact of IFFIm’s downgrade?	27
3.2.9	What is a risk management buffer?	28
4	RECENT DEVELOPMENTS AND FUTURE OPPORTUNITIES	29
4.1	REPLENISHMENT	29
4.1.1	What new pledges were made to IFFIm at the 2015 Gavi replenishment?	29
4.2	FUTURE PLANS	29
4.2.1	How can IFFIm continue to play a strategic role in funding Gavi?	29
4.2.2	What is IFFIm doing to ensure its continuing value?	29
4.2.3	Why a discussion on IFFIm’s continued strategic role now?	29
4.2.4	What areas for potential future direction is IFFIm considering?	30

Introduction

The International Finance Facility for Immunisation (IFFIm) and Gavi, the Vaccine Alliance, have prepared this guide in response to donors’ requests for an expanded information note for non-financiers. Its aim is to deepen and broaden understanding of IFFIm and how it works.

The guide is divided into two sections for ease of reference:

The **Executive summary** describes the key aspects of IFFIm and its work.

The **Main section** goes into more detail. Using a question and answer (Q&A) format, it also provides answers to specific questions that the reader may have.

More information is available at www.iffim.org



Executive summary

AN OVERVIEW OF IFFIm AND ITS IMPACT

IFFIm is an independent body, established as a United Kingdom (UK) charity, with no employees. It functions through the partnership of four parties: donors, the IFFIm Board, the World Bank and Gavi, the Vaccine Alliance. Between 2006 and 2016, IFFIm provided more than one fourth of Gavi's programme funding. This has helped Gavi to immunise close to 580 million children and avert more than eight million future deaths.

IFFIm receives long-term, legally binding pledges from donor countries that support Gavi's vaccination programmes. IFFIm then issues bonds, backed by these pledges, on international capital markets. The money raised through the bond issuances, sometimes referred to as vaccine bonds, provides funding to Gavi. This process of transforming long-term donor commitments into immediate cash for Gavi is called frontloading.

Key benefits include:

- increasing the funding immediately available to Gavi for life-saving vaccines and immunisations;
- providing donors with a way to spread contributions over future years, while also having an immediate impact;
- giving Gavi the flexibility to use funds when they are needed most; and
- helping Gavi drive down vaccine prices and secure supply by increasing the long-term predictability of funding.

As the first development finance entity in history to attract long-term, legally binding commitments from donors, IFFIm has built a strong reputation for innovation. This has been recognised by a number of awards and citations from external organisations. See section 1.10 for details.

To date, IFFIm has disbursed approximately US\$ 2.5 billion to support Gavi's life-saving vaccination programmes. IFFIm is expected to disburse a further US\$ 1.3 billion to Gavi for the 2016 to 2020 strategic period.

CONVERTING PLEDGES INTO FUNDING

DONORS AND PLEDGES

Currently, nine donor countries have pledged a total of US\$ 6.3 billion through IFFIm: Australia, France, Italy, the Netherlands, Norway, South Africa, Spain, Sweden and the UK. Gavi and IFFIm hope to further expand IFFIm's donor base.

Donors, wishing to accelerate the impact of vaccination, donate to Gavi through IFFIm as it provides immediate support to the global health agenda while allowing for contributions to be spread over time.

This donation takes the form of a pledge, which is the basis on which IFFIm raises money on capital markets. Therefore it is critical that donors make irrevocable and legally binding pledges to IFFIm.

Pledges made by donor countries are taken as a whole and support neither a specific IFFIm bond nor a specific Gavi programme. To allow for each donor country to measure the impact of its pledge, IFFIm communicates an estimated breakdown of proceeds from IFFIm to Gavi by country using an agreed-upon methodology.

CAPITAL MARKETS

IFFIm is a pioneer in socially responsible investments (SRI), an asset class that is expanding rapidly. IFFIm bonds, also known as vaccine bonds, are socially responsible, investment-grade bonds supported by sovereign donors' commitments. They can be issued in any currency and have varying maturities, but the average term for IFFIm vaccine bonds is three to five years.

IFFIm issues vaccine bonds in multiple countries around the world in order to seek the most cost-effective markets and to introduce both IFFIm and Gavi to a diverse range of investors – thus raising the profile of both organisations and building new relationships.

Since 2006, IFFIm has successfully raised US\$ 5.7 billion through 32 issuances. IFFIm bonds have been issued in Australia, Japan, the United Kingdom and the United States, and sold to retail and institutional investors worldwide. IFFIm has also issued sukuks (financial instruments compliant with Islamic law) to engage with the fast-developing Islamic financial market, initially with its US\$ 500 million sukuk in 2014, followed by its US\$ 200 million sukuk in 2015. The interest rates on IFFIm's bonds are comparable to those of other similarly rated sovereign or supranational issuers.

To maximise the amount of money it raises from bond issues and minimise the amount it has to pay out in interest to bondholders, IFFIm must ensure it has a high credit rating.

A credit rating reflects the perceived ability of a person, company or country to pay back its debts. Put simply, the higher the credit rating the easier it is to borrow money and the lower the interest rate lenders will demand in return.

The World Bank, as IFFIm's treasury manager, takes every possible step to safeguard IFFIm's credit rating. There are many factors that can influence this, key among them are the strong commitment and high credit ratings of donors to IFFIm, the legally binding nature of highly rated donor pledges and the conservative financial, liquidity and asset/liability management of the World Bank.

Also important is the financial strength of IFFIm itself. To this end, IFFIm carefully balances the amount of money it raises by issuing bonds with the amount of money pledged by its donors. IFFIm therefore only raises bonds against a percentage of overall donor commitments. The remainder creates a "cushion" or reserve to make sure that there will always be more than sufficient funds to pay bondholders or other creditors.

The minimum reserve or difference between the value of donor commitments (assets) and the value of the bonds raised (liabilities) is set by the gearing ratio limit (GRL). For example, under the current GRL of 69.8% as of December 2016, if the present value of donor pledges was US\$ 100 million, IFFIm would be allowed to have only US\$ 69.8 million of debt outstanding, thus leaving US\$ 30.2 million in reserves to protect bondholders against adverse credit events and strengthen their confidence in IFFIm's creditworthiness.

In addition, IFFIm holds enough immediately available cash at all times to meet all projected interest payments to bondholders and repayment of maturing bonds for the 12 months ahead.

MANAGING RISK

CONTEXT

IFFIm successfully uses the financial markets – through the issuance of bonds – to turn long-term pledges by donor countries into current cash for vaccination programmes. But operating on the financial markets means fulfilling market participants' expectations and communicated commitments to investors. This means that IFFIm must satisfy rating agencies to keep borrowing costs low, operating within strict financial limits and managing any risks that could make investors wary of committing their money to IFFIm.



HEDGING AND SWAPS

A large majority of Gavi's vaccine and operating expenditures are in US dollars, so IFFIm's payments to Gavi and its overall balance sheet are denominated in US dollars. IFFIm, however, receives contributions and issues bonds in a variety of currencies, predominantly non-US dollars. As a result, it is exposed to the currency risks, ie risk of loss from fluctuating foreign exchange rates between the cash inflows (contributions and bond proceeds) and the cash outflows (payments to Gavi and bondholders).

In addition, IFFIm is exposed to interest rate risks because each currency attracts different deposit rates and the timing between receipts of donor payments, payments of bond obligations and disbursements to Gavi is different.

To manage all these risks, IFFIm hedges all foreign exchange and interest rate exposures through swaps in accordance with the financial policies and practices of the World Bank, its treasury manager. Under a swap agreement IFFIm can exchange its foreign currency cashflows into US dollar denominated cashflows at a pre-agreed rate with the World Bank. This eliminates all unpredictability that can accompany fluctuating foreign exchange or interest rates.

CREDIT RATING

IFFIm's credit rating is important. With a higher credit rating, IFFIm can raise funds on more attractive terms. The treasury manager therefore monitors IFFIm's rating and can tighten financial policies should the rating fall below a certain level.

From inception until 2011, IFFIm had a triple-A rating from all three main credit rating agencies (Fitch, Moody's and Standard & Poor's).¹ This is the highest possible rating awarded by credit rating agencies, which exist to assess the creditworthiness of companies and institutions. However, in January 2012, IFFIm's credit rating was downgraded for the first time in the wake of the global financial crisis that saw the downgrade of its major donors. IFFIm's current ratings with the three main rating agencies are, as of December 2016, AA, Aa1 and AA by Fitch, Moody's and Standard & Poor's respectively.

The rating agencies cite the strength of donor support and commitment as the main factor behind IFFIm's creditworthiness. They also note that the World Bank's role as treasury manager and prudent financial policies adds institutional strength to IFFIm's credit profile.

A credit downgrade would normally negatively impact an organisation's ability to borrow, as well as the cost of it doing so. Still, IFFIm's financial strength and the attractiveness of its vaccine bonds to socially responsible investors have meant that the impact of the downgrade, in terms of its ability to raise funds, has been minimal.

RECENT REPLENISHMENT AND FUTURE OPPORTUNITIES

GAVI REPLENISHMENT

In Gavi's 2015 replenishment, new donor pledges to IFFIm totalled US\$ 280 million:

- €150 million from France for the 2022 to 2026 period.
- €60 million from the Netherlands for the 2017 to 2020 period.
- AU\$ 37.5 million from Australia for the 2016 to 2020 period.

While Australia's grant agreement has been signed, France and the Netherlands are in process of finalising their respective agreements. In addition, IFFIm is close to finalising a US\$ 20 million pledge with Brazil – a new donor country. Once finalised, these pledges will bring the total amount of donor pledges to IFFIm up to US\$ 6.5 billion.

IFFIm continues to engage with existing donors and with new donors, particularly in the Middle East, to explore prospects for further pledges.

FUTURE PLANS

IFFIm will continue to deliver value to Gavi in the following ways:

- IFFIm's frontloading model will help support the introduction of new, life-saving vaccines.
- By transforming medium- to long-term pledges into immediate cash, IFFIm will continue to provide Gavi with the funding flexibility it needs to prevent disease.
- IFFIm will continue to play an essential role in helping Gavi shape the market for vaccines by increasing the long-term predictability of funding.

Potential future opportunities for IFFIm to align itself and its donors more closely with Gavi's broader strategic goals include:

- enabling vaccine scale-up;
- providing medium- to long-term financial guarantees to support vaccine procurement and broader market shaping activities;
- supporting the Cold Chain Equipment Optimisation Platform to help ensure vaccines are well kept and distributed in good condition; and
- providing the capacity to rapidly raise funding to help Gavi respond to disease outbreaks should Gavi decide to play an active role in this area.

¹ An entity with a triple-A rating indicates an exceptional degree of creditworthiness because it can easily meet all its financial commitments.

1 An overview of IFFIm and its impact

1.1 WHAT IS IFFIm?

IFFIm is a multilateral development institution established in 2006 with the purpose of providing funding to Gavi, the Vaccine Alliance.

Gavi is a public-private partnership set up in 2000 to accelerate access to life-saving vaccines for children in the world's lowest-income countries.

IFFIm is an independent body, established as a United Kingdom (UK) charity, with no employees. It functions through the partnership of four entities: donors, the IFFIm Board, the World Bank and Gavi.

1.2 WHAT ARE IFFIm's ORIGINS?

IFFIm's origins lie in the United Nations members' commitment to meet the Millennium Development Goals. Following a period of strong innovative finance advocacy that included the Monterrey Consensus in 2002, the UK Government proposed an International Finance Facility (IFF) to provide significant additional funds for immediate development needs.

In 2006, the UK and France launched the International Finance Facility for Immunisation (IFFIm), which would apply the principles of the broader IFF concept specifically to the immunisation sector. The UK and France were soon joined by Italy, Norway, South Africa, Spain and Sweden as donors to IFFIm, and later by Australia and the Netherlands.

1.3 WHAT DOES IFFIm DO?

IFFIm receives legally binding, long-term pledges from donor governments. It then issues bonds, backed by these pledges, on international capital markets. These bonds, also known as vaccine bonds, are bought by investors who in return receive interest over a fixed period, at the end of which they are repaid their original investment. The money raised by these bonds provides Gavi with the funding to deliver life-saving vaccination programmes. IFFIm enables more money to be made available to Gavi more quickly. The predictable and flexible nature of this funding means Gavi can plan ahead effectively while also retaining its ability to respond to new developments in disease prevention.

Figure 1 Structure of IFFIm



1.4 WHAT ARE THE PRIMARY BENEFITS OF IFFIm?

IFFIm creates benefits in three key areas:

- IFFIm provides Gavi with **flexibility** either to **frontload resources** over a shorter term, or to **draw down funds** over a longer period, enabling Gavi to use funds when they are needed most.
- **Long-term, predictable funding** from IFFIm helps Gavi support market shaping activities, reinforces Gavi's financial strength, and enhances Gavi's ability to make long-term funding commitments.
- IFFIm offers donors a **cost-effective way** to spread contributions over future years and to have an immediate impact.

1.5 WHAT IS FRONTLOADING?

The process of transforming long-term donor commitments into immediate cash for Gavi is called frontloading. Put simply, it is the process of shifting financial resources from the future to the present.

Let's say a donor country agrees to pledge US\$ 100 million over ten years by paying US\$ 10 million a year. Without IFFIm, Gavi would be limited to spending a

maximum of US\$ 10 million each year from this pledge – and would have to wait 10 years before seeing its full impact. But because IFFIm uses these promises of future payments to issue bonds, Gavi can use today most of the money that will be paid by the donor over the next 10 years.

For example, in 2006, IFFIm successfully issued its inaugural five-year fixed-rate bonds raising US\$ 1 billion. A wide range of investors, especially those attracted to socially responsible investing, bought these bonds. This transaction enabled Gavi to immediately make available almost seven years worth of pledges.

To date, IFFIm has leveraged donor pledges of US\$ 6.5 billion over a 25-year period to raise US\$ 5.7 billion in cash over the 2006 to 2016 period. The frontloading effect can be seen in Figure 2.

1.6 WHY IS FRONTLOADING IMPORTANT?

There is zero value vaccinating a child in 10 years if he or she dies from a vaccine-preventable disease this year.

The majority of Gavi's vaccines need to be given to children within a few years of birth. Withholding or delaying this access can prevent children from leading healthy and productive lives. By frontloading future resources, IFFIm has helped Gavi immunise more children, more rapidly.

Furthermore, the impact of flexibility to frontload goes beyond improving the life chances of each vaccinated child. A healthy child is an asset to his or her family, the wider community and ultimately the national economy.

FRONTLOADING: SAVING LIVES AND CUTTING VACCINE COSTS

The pentavalent vaccine immunises against five infectious diseases* that together kill almost one million people every year.

IFFIm funded an upfront US\$ 191 million payment to vaccine suppliers, encouraging them to step up production of the pentavalent vaccine and reduce its price. An independent evaluation of IFFIm in 2011 found that funding provided by IFFIm led to "greater competition and reduced prices" in the market for pentavalent vaccines.²

Total IFFIm support for pentavalent vaccines now exceeds US\$ 1.3 billion, and Gavi is able to procure the vaccine for as little as US\$ 1.90 per dose, a weighted average price reduction of more than 40% since 2003.

Gavi's pentavalent programme immunised more than 296 million children in 73 countries by the end of 2015.

*Diphtheria, tetanus, pertussis, *Haemophilus influenzae* type b and hepatitis B.

IFFIm's frontloading model was designed to accelerate funding to Gavi in the initial years, then reduce over later years, at a low overall cost. IFFIm will, however, continue to provide funding to Gavi in the future (See Section 2.5.2).

1.7 DOES IFFIm FRONTLOADING MEAN GAVI WILL HAVE LESS MONEY AVAILABLE FOR IMMUNISATION IN THE FUTURE?

No, because IFFIm is only one source of funding for Gavi. Other sources include direct contributions from governments as well as other innovative finance mechanisms such as the [Gavi Matching Fund](#) and the [Advance Market Commitment](#). By providing a high proportion of initial funding, IFFIm helped Gavi to establish its credentials early on by generating significant and rapid impacts and attracting other sources of funding.

² This independent evaluation was done by London-based healthcare consulting firm HLSP in 2011. More information can be found at <http://www.iffim.org/Library/News/Announcements/Independent-evaluation-confirms-iffim-success/>

1.8 WHAT IS THE STRUCTURE OF IFFIm's MANAGEMENT AND OPERATIONS?

IFFIm was established in 2006 as a UK charity, with no employees. It functions through the partnership of donors, the IFFIm Board, the World Bank and Gavi.

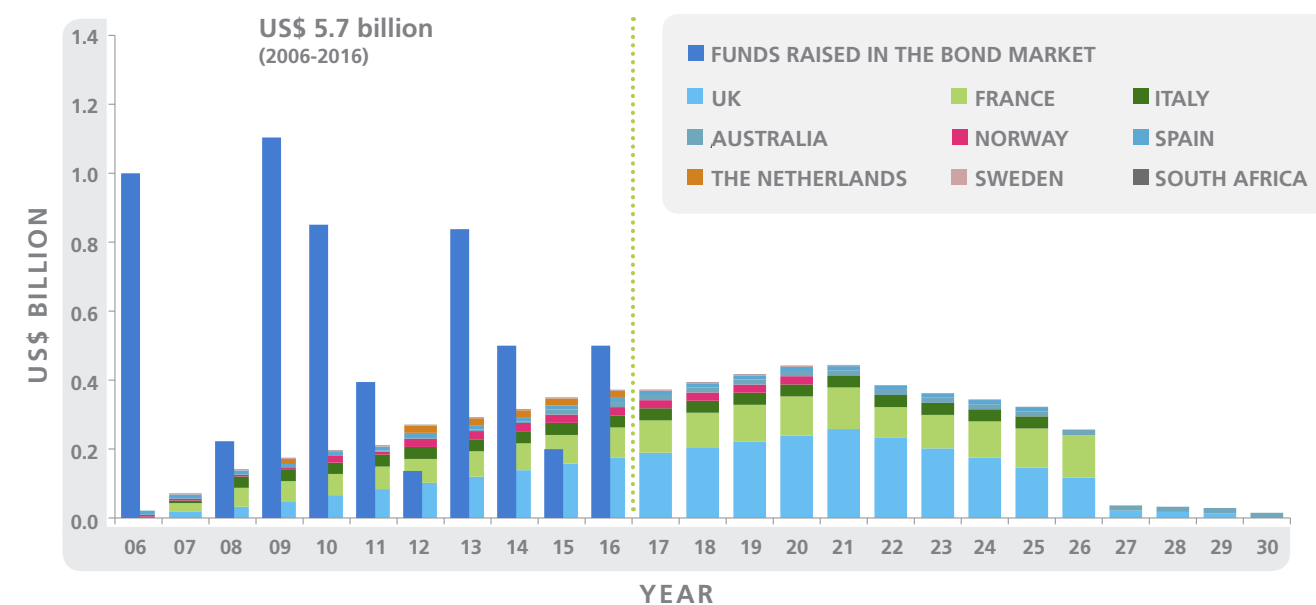
- **Donors** make long-term, irrevocable and legally binding future pledges that enable IFFIm to raise money in the capital markets. They are the primary stakeholders of IFFIm.
- **The IFFIm Board**, currently consisting of seven directors with experience in finance, capital markets and multilateral development banks, is responsible for governing IFFIm. All directors work on a pro bono basis.
- **The World Bank** is IFFIm's treasury manager; it manages IFFIm's finances to the same prudent standards that it manages its own finances. With its strong institutional reputation and financial market expertise, the World Bank enables IFFIm to leverage donor pledges for Gavi's vaccination programmes through the issuance of vaccine bonds on international capital markets.
- **Gavi** is the sole recipient of funds raised by IFFIm in the capital markets; it uses IFFIm funds to accelerate access to immunisation for children in poor countries. Additionally, the Gavi Secretariat donates services towards the management of IFFIm.

1.9 WHAT HAS IFFIm ACHIEVED SO FAR?

To date, IFFIm has provided approximately one fourth of Gavi's funding to support its life-saving vaccination programmes.

IFFIm's funding has helped Gavi immunise close to 580 million children and avert more than eight million future deaths. Gavi has also been responsible for more than 300 vaccine introductions and campaigns, including those protecting against the leading causes of diarrhoea and pneumonia, two of the biggest child killers.

Figure 2 IFFIm frontloading



1.10 HOW HAS IFFIm’s WORK BEEN RECOGNISED?

As the first development finance entity in history to attract long-term, irrevocable and legally binding commitments from donors, IFFIm has built a strong reputation for innovation.

At the UN Third International Conference on Financing for Development in Addis Ababa (July 2015), the success of IFFIm’s model was endorsed by the global community, which also called for possible replication of the IFFIm model to serve other development global goals.

IFFIm has been further recognised for its innovation by a number of organisations:

- IFFIm’s groundbreaking US\$ 500 million sukuk, or Islamic financial certificate transaction, won six industry awards in 2015:
 - *Islamic Finance News* (a leading Islamic finance news provider): Winner, Social Impact Deal of the Year 2014;
 - *Euromoney*: Innovation in Islamic Finance;
 - *EMEA Finance*: Best Supranational Sukuk for 2014;
 - *The Asset*: Triple A Islamic Finance Award for Best Sukuk for Social Good;
 - *Financial Times / IFC*: Achievement in Transformational Finance Award; and
 - *Global Finance*: Islamic Finance Deal of the Year.
- News analytics provider *mtn-i* cited IFFIm as “SRI Innovation of the Decade” in 2013.
- The G8 and the World Health Organization recognised IFFIm in 2012 as an innovative financial solution for catalysing development.
- *EuroWeek* magazine named IFFIm’s inaugural uridashi bond one of the market’s 25 most influential transactions in 2012.

“We encourage consideration of how existing mechanisms, such as the International Finance Facility for Immunisation, might be replicated to address broader development needs.”

The Action Agenda, the Financing for Development Conference, 2015

2 Converting pledges into funding

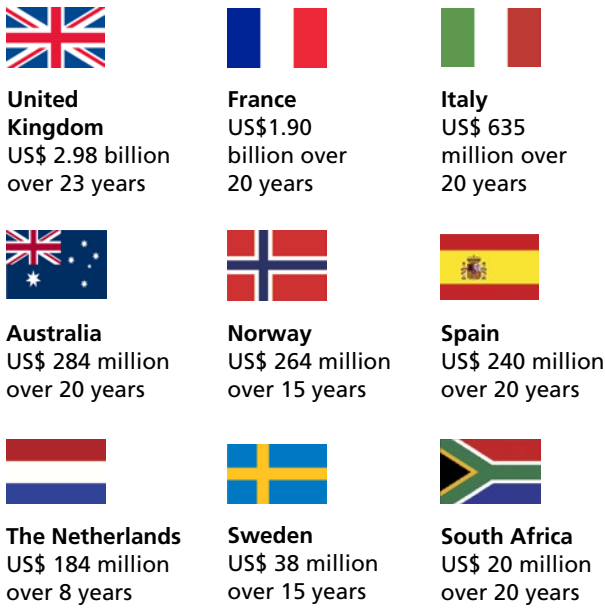
This section explains how IFFIm transforms pledges from sovereign donors into funding for Gavi’s life-saving vaccination programmes.

2.1 DONORS AND PLEDGES

2.1.1 WHO ARE IFFIm DONORS?

IFFIm’s donors are sovereigns that want to accelerate the impact of vaccination through a flexible funding mechanism. Currently there are nine donor countries: Australia, France, Italy, the Netherlands, Norway, South Africa, Spain, Sweden and the United Kingdom. Brazil is in the process of becoming a donor. Gavi and IFFIm are looking to expand IFFIm’s donor base, notably in the Middle East.

Figure 3 Donor pledges to IFFIm*



* As of December 2016.

- Includes new pledges made to IFFIm by France, the Netherlands, and Australia at the Berlin pledging conference in January 2015.
- IFFIm pledges are expressed in US\$ equivalent amounts of national currency calculated using prevailing exchange rates around the time each grant agreement is signed.
- Brazil pledged the equivalent of US\$ 20 million. A grant agreement is pending.

2.1.2 WHY DOES IT MAKE SENSE FOR DONORS TO PLEDGE MONEY TO IFFIm?

The IFFIm model provides sovereign donors with a way to spread their contributions over time, yet still provide immediate support to Gavi’s vaccination programmes. This allows donors to “act today but pay later” and make an immediate impact on children’s lives globally.

Eurostat, the statistical office of the European Union, has ruled that: (1) borrowings on the capital markets are not recorded as borrowing or debt obligations by donor governments; and (2) government pledges to IFFIm should only be recorded as government expenditure once the payments are made to IFFIm. Because of the latter ruling, a long-term pledge to IFFIm does not add to a Eurostat-regulated government’s debt.

2.1.3 WHAT ARE THE DONORS’ PAYMENTS SUBJECT TO?

Donors’ payments to IFFIm, while legally binding, are conditional and subject to the grant payment condition (see Section 2.2.2).

2.1.4 HOW DO DONORS PLEDGE TO IFFIm?

Donors make irrevocable and legally binding commitments to Gavi under a grant agreement, which Gavi then assigns to IFFIm. As these commitments are the basis on which IFFIm raises money on the capital markets, they are subject to a strict validation process.

NEW DONORS

As part of the accession process to IFFIm, each new donor must enter into a number of agreements:

- **Accession Letter to Finance Framework Agreement** between the donor, IFFIm, Gavi and the World Bank laying out the roles and obligations of each party in a formal agreement.

- **New Grant Agreement** between the donor and Gavi under which the donor will commit to making grant payments to Gavi in accordance with the agreed grant payment schedule, which Gavi then assigns to IFFIm.
- **Deed of Assignment** between IFFIm and Gavi to assign the rights, benefits, title and interest in and under the new grant agreement to IFFIm.
- **Notice of Assignment and Acknowledgement** to perfect the deed of assignment between the donor and Gavi.
- **Grant Payment Administration Agreement** between the donor, IFFIm and the World Bank to set out the procedural and administrative matters governing the making of the grant payments.

Once these are agreed, the new donor's accession to IFFIm must be formally approved by all existing donors.

EXISTING DONORS

Existing donors have already undertaken accession to IFFIm, so they undergo a simplified process to make additional pledges. Upon the signing of a new pledge, existing donors must enter into several agreements, including:

- **Grant Agreement** between the donor and Gavi under which the donor will commit to making grant payments to Gavi in accordance with the agreed grant payment schedule.
- **Deed of Assignment** between IFFIm and Gavi to assign the rights, benefits, title and interest in and under the new grant agreement to IFFIm.
- **Notice of Assignment** to perfect the deed of assignment between the donor and Gavi.
- **Grant Payment Administration Agreement** between the donor, IFFIm and the World Bank to set out the procedural and administrative matters governing the making of the grant payments.

For both new and existing donors, Gavi and the World Bank prepare first drafts of the above documents for the donor to review and comment. The donor needs to engage external legal counsel to review the documents and obtain a legal opinion from its legal counsel that it has the capacity, authority and the necessary approvals to enter into the documents. Separately, IFFIm will request legal opinions from its lawyers that the documents are binding and enforceable.

2.1.5 HOW DO DONORS KNOW THE IMPACT OF THEIR INDIVIDUAL PLEDGES?

IFFIm leverages the combined value of all donor pledges to raise money in the capital markets and then funds Gavi from the proceeds. This means that the pledges of individual countries support neither a specific IFFIm bond nor a specific Gavi programme. However, IFFIm does provide each donor with an estimated measure of the proceeds they generate for Gavi, based on an agreed-upon methodology. Details of this methodology appear in Section 2.5.

2.1.6 DOES IFFIm's FRONTLOADING MODEL MEAN THAT DONORS' FUTURE PLEDGES WILL BE USED TO PAY DOWN DEBT RATHER THAN ADD VALUE TO GAVI?

Donors' current and future pledges have created value through IFFIm by providing significant upfront funding for Gavi's life-saving vaccination programmes.

Since 2015, IFFIm has entered into a phase where donor contributions to IFFIm exceed the proceeds that IFFIm provides to Gavi. This is in line with how IFFIm was designed, ie to provide maximum funds upfront to Gavi. This means there are fewer proceeds from IFFIm to be drawn in later years, although IFFIm will still have obligations to pay off bondholders.

2.2 MECHANICS OF APPLYING PLEDGES TO THE IFFIm MODEL

2.2.1 HOW DOES IFFIm CONVERT FUTURE PLEDGES INTO IMMEDIATE CASH FOR VACCINATIONS?

IFFIm's assets are legally binding and irrevocable pledges made by donor countries. It leverages these assets to issue bonds on the capital markets where investors provide funds up front in exchange for future repayment of the principle amount along with interest. For example, IFFIm's first bond issuance in 2006 raised US\$ 1 billion to be repaid after five years at an interest rate of 5% (a competitive rate at the time of a high interest rate environment).

To maximise the amount of money it raises from bond issues and to minimise the amount it has to pay out in interest to bond buyers, IFFIm must ensure it has a high credit rating.

A higher credit rating gives investors greater confidence that the bond issuer is creditworthy – that is, IFFIm will make interest payments on time and return capital in full when the bond matures. Thus, the higher the credit rating, the safer the investment is perceived to be and the more willing bondholders will be to accept lower interest rates (see also Section 3.2).

The World Bank, as IFFIm's treasury manager, takes every possible step to ensure that its credit rating is high. Key to a high rating is the highly rated base of donors, their strong commitment to IFFIm, the irrevocable and legally binding nature of their pledges and the conservative financial management of IFFIm by the World Bank.

An additional component considered by rating agencies is the **grant payment condition**.

2.2.2 WHAT IS THE GRANT PAYMENT CONDITION?

Although donors agree to irrevocable and legally binding payments of pre-agreed amounts over a number of years, their annual payments are conditional and governed by the grant payment condition (GPC). The GPC stipulates that donors' payments to IFFIm are reduced in the event that a programme country (ie one that is part of the initial group of Gavi implementing countries) enters into protracted arrears with the International Monetary Fund (IMF).³

2.2.3 WHAT IS THE IMPACT OF THE GRANT PAYMENT CONDITION?

If a country falls into protracted arrears with the IMF, the amount of donor pledges paid to IFFIm will be reduced by the percentage that the country represents in the Reference Portfolio.⁴ There are currently two countries in protracted arrears with the IMF – Somalia and Sudan – representing a total portfolio weighting of 1.5%. Until this situation changes, donor annual payments on their IFFIm pledges will be 98.5% of the pre-agreed amount.

Since IFFIm issues bonds on the basis of donor pledges, the fact that donor payments can be reduced because of the grant payment condition presents a risk to bondholders; a risk that is beside IFFIm's control. To mitigate this risk, IFFIm only issues bonds against part of overall donor commitments to provide a "cushion" between income from donor commitments and payments to bondholders. The greater the cushion, the lower the perceived risk to bondholders and therefore the lower the borrowing cost but also the less capital IFFIm can raise.

The size of this cushion is set by the **gearing ratio limit**.

³ Countries are considered to be in protracted arrears when payments on IMF financial obligations have not been met for six months.

⁴ The Reference Portfolio contains all Gavi eligible countries that are also members of the IMF (ie 71 countries).

2.2.4 WHAT IS THE GEARING RATIO LIMIT?

To mitigate the risk of the grant payment condition and help maintain IFFIm’s credit rating, IFFIm only issues bonds against a portion of overall donor commitments. The remainder, which is still available to IFFIm over time, creates a cushion or reserve to protect bondholders against adverse credit events.

The size of this reserve is set by the gearing ratio limit (GRL). Historically, in order to support a strong credit rating, the aggregate amount of IFFIm’s net debt (bonds outstanding less cash) has been limited to approximately two thirds of the present value of the pledges. This limit leaves a significant amount of the future grant funding as the cushion.

The GRL is currently set so that the value of outstanding borrowings, less cash held by IFFIm, does not exceed 69.8% of the present value of outstanding pledges (as of December 2016). Setting the GRL at this level indicates that IFFIm can withstand donor payments to be reduced by up to 30.2% and still be able to repay bondholders in full. This policy satisfies the expectations of the credit rating agencies to award IFFIm with a strong credit rating, which is critical to its ability to raise funds at a low cost.

Please note that currently the World Bank applies a risk management buffer in addition to the GRL as a result of IFFIm’s downgrading by the credit agencies and its current swap exposure level. This further increases the size of the cushion IFFIm maintains. See Section 3.2 for more details about the risk management buffer.

2.2.5 HOW DOES IFFIm MAKE SURE IT HAS ENOUGH LIQUIDITY TO MEET ITS LIABILITIES?

Maintaining an adequate level of liquidity is critical for the credit rating agencies’ assessment of the financial strength of IFFIm. IFFIm’s liquidity policy requires it to maintain a minimum liquidity balance equivalent to 12 months’ projected debt service (the amount of interest payments to bondholders plus repayment of principal for maturing bonds).

2.3 CAPITAL MARKET ACTIVITIES

2.3.1 WHAT ARE IFFIm BONDS?

IFFIm bonds, also known as vaccine bonds, are socially responsible, investment-grade⁵ bonds supported by sovereign donors’ commitments. They can be issued in any currency and have varying maturities, but the average term of IFFIm vaccine bonds is three to five years. The interest rates on IFFIm’s bonds are similar to those of other similarly rated sovereign or supranational issuers.

2.3.2 WHO INVESTS IN IFFIm’s VACCINE BONDS, AND WHY DO THEY INVEST WITH IFFIm?

IFFIm bonds attract a wide range of investors worldwide, in both institutional and retail markets. IFFIm provides investors with a portfolio diversification opportunity and attractive returns in an award-winning socially responsible investment (SRI). IFFIm vaccine bonds are among the very first highly rated SRI bonds, an asset class that is expanding rapidly. By accessing such a wide range of investors, IFFIm is able to achieve efficient costs.

INVESTOR DIVERSIFICATION: IFFIm’s INNOVATIVE SUKUK

IFFIm has raised a total funding of US\$ 700 million in the Islamic financial market with its inaugural US\$ 500 million sukuk in 2014 and US\$ 200 million sukuk in 2015. Sukuks are financial certificates that comply with Islamic financing principles.

These sukuku attracted both traditional sukuk investors and conventional investors with a strong environmental, social and governance (ESG) focus, some of whom were purchasing a sukuk for the first time. With participation of about 65% of investors from the Middle East and 18% in Asia, these issuances greatly helped IFFIm diversify its investor base.

⁵ An investment grade is a rating that indicates that a bond has a relatively low risk of default allowing financial institutions (eg banks) to invest in them. More specifically, market convention defines investment grade as having a rating of BBB- (or its equivalent) or higher.

2.3.3 IN HOW MANY MARKETS HAS IFFIm ISSUED VACCINE BONDS?

Since 2006, IFFIm has successfully raised US\$ 5.7 billion through 32 issuances in six currencies, attracting investors from all over the world. IFFIm bonds have been issued in Australia, Japan, the United Kingdom, and the United States. IFFIm has also issued sukuku in the Islamic financial markets, initially with its 2014 US\$ 500 million sukuk, followed by its 2015 US\$ 200 million sukuk issuance.

Table 1 Timeline / list of issuances

DATE	TRANSACTION	CURRENCY*	LEAD MANAGER	AMOUNT (US\$ eq)
2006	Inaugural benchmark	USD	Deutsche Bank, Goldman Sachs	1,000 million
2008	Uridashi	ZAR	Daiwa Securities	223 million
2009	Uridashi	AUD, NZD, ZAR	Daiwa Securities	429 million
2009	Sterling	GBP	HSBC, Royal Bank of Scotland	400 million
2009	Uridashi	USD, AUD	Mitsubishi UFJ Securiies	143 million
2009	Uridashi	AUD, ZAR	HSBC	130 million
2010	Uridashi	ZAR	Daiwa Securities	320 million
2010	Uridashi	AUD, BRL, ZAR	HSBC	101 million
2010	Eurobond	AUD	Commonwealth Bank of Australia, RBC Capital Markets	395 million
2010	Kangaroo	AUD	TD Securities	34 million
2011	Uridashi	BRL	Daiwa Securities	225 million
2011	Uridashi	AUD, BRL, ZAR	J.P. Morgan	169 million
2012	Uridashi	AUD, ZAR	HSBC	98 million
2012	Uridashi	AUD	J.P. Morgan	38 million
2013	Uridashi	TRY, ZAR	Daiwa Securities	139 million
2013	Global benchmark	USD	Daiwa Securities, Deutsche Bank	700 million
2014	Sukuk	USD	Standard Chartered	500 million
2015	Sukuk	USD	Standard Chartered	200 million
2016	Global benchmark	USD	Citi, Deutsche Bank, J.P. Morgan	500 million
TOTAL US\$				5,744 million

* Currency note: AUD (Australian Dollar), BRL (Brazilian Real),GBP (British Pound), NZD (New Zealand Dollar), TRY (Turkish Lira), USD (US Dollar), ZAR (South African Rand).

2.3.4 WHY DOES IFFIm ISSUE BONDS IN DIFFERENT CURRENCIES AND GEOGRAPHIES?

IFFIm issues bonds in the currency and geography that is most beneficial in terms of overall cost, demand and investor diversification.

Issuing bonds in different currencies and regions enables IFFIm to attract new investors and broaden its

geographical reach. The recent sukuk issuances, for example, have seen a strong response from Middle Eastern investors.

In addition to financial markets benefits, diversification provides an opportunity to introduce both IFFIm and Gavi to markets in new countries, raising the profile of both organisations and building new relationships.

2.4 FUNDING COSTS

2.4.1 WHAT IS THE AVERAGE FUNDING COST FOR IFFIm, AND HOW DOES IT COMPARE TO OTHER FUNDING SOURCES?

The current average IFFIm funding cost for all outstanding bond issues is US\$ 3-month LIBOR +18.6 bps – slightly higher than the donors’ weighted average funding cost of US\$ 3-month LIBOR +13.4 bps (figures as of November 2016).^{6,7} However, IFFIm’s weighted average cost of funding on all bond issues since its inception is US\$ 3-month LIBOR +1.2 bps, compared to the weighted average funding cost of its donors of US\$ 3-month LIBOR +10.0 bps.

It was originally expected that IFFIm, on average, would have to pay a higher rate of interest than its donors, but this would be outweighed by the value of IFFIm’s structure, which enabled it to “frontload” funding. However, in the past years, IFFIm was able to borrow at lower average rates than the donors’ composite cost because of behaviour in financial markets. This was considered an added benefit.

2.4.2 DO THE ADMINISTRATIVE COSTS OUTWEIGH SOME OF THE BENEFITS OF IFFIm’s LOW FUNDING COSTS?

Historically, administrative costs have been lower than the investment income IFFIm earns from its assets. IFFIm earns investment income from its available cash that is invested in high-grade fixed-income instruments under a conservative investment policy. Over the period 2006 to 2016, IFFIm’s investment income was approximately US\$ 74 million compared to the administrative costs of approximately US\$ 61 million.

⁶ **LIBOR** is an abbreviation of the London Interbank Offered Rate. It is the rate of interest at which banks offer to lend money to one another in the wholesale money markets in London and is a standard financial index used in capital markets. The 3-month LIBOR is the rate of interest paid for a 3-month deposit. For example, on 4 January 2016, the 3-month US\$ LIBOR was 0.61%.

⁷ **Bps** is an abbreviation for basis points. One basis point is equal to 1/100th of 1%, or 0.01%. This means that if the 3-month LIBOR rate is 0.61%, the 3-month LIBOR +10 bps would be 0.71%.

More information on the above terms can be found at <http://www.investopedia.com/>

2.5 DISBURSEMENT TO GAVI

2.5.1 HOW MUCH HAS IFFIm DISBURSED TO GAVI SO FAR?

In total IFFIm has disbursed approximately US\$ 2.5 billion to support Gavi’s life-saving vaccination programmes.

- Between 2006 and 2010, IFFIm provided US\$ 1.9 billion to Gavi.
- Between 2011 and 2015, IFFIm provided US\$ 600 million to Gavi.

2.5.2 HOW MUCH WILL IFFIm PROVIDE IN THE FUTURE?

IFFIm expects to generate about US\$ 1.3 billion of proceeds to Gavi during the 2016-20 period. This would represent approximately 15% of Gavi’s overall resources in that period.

2.5.3 WHY HASN’T ALL THE MONEY RAISED BY IFFIm GONE TO GAVI?

IFFIm needs to retain a proportion of the money it raises to service interest payments, repay capital when bonds mature and maintain its liquidity cushion. The table below shows the use of IFFIm resources from inception until December 2016.

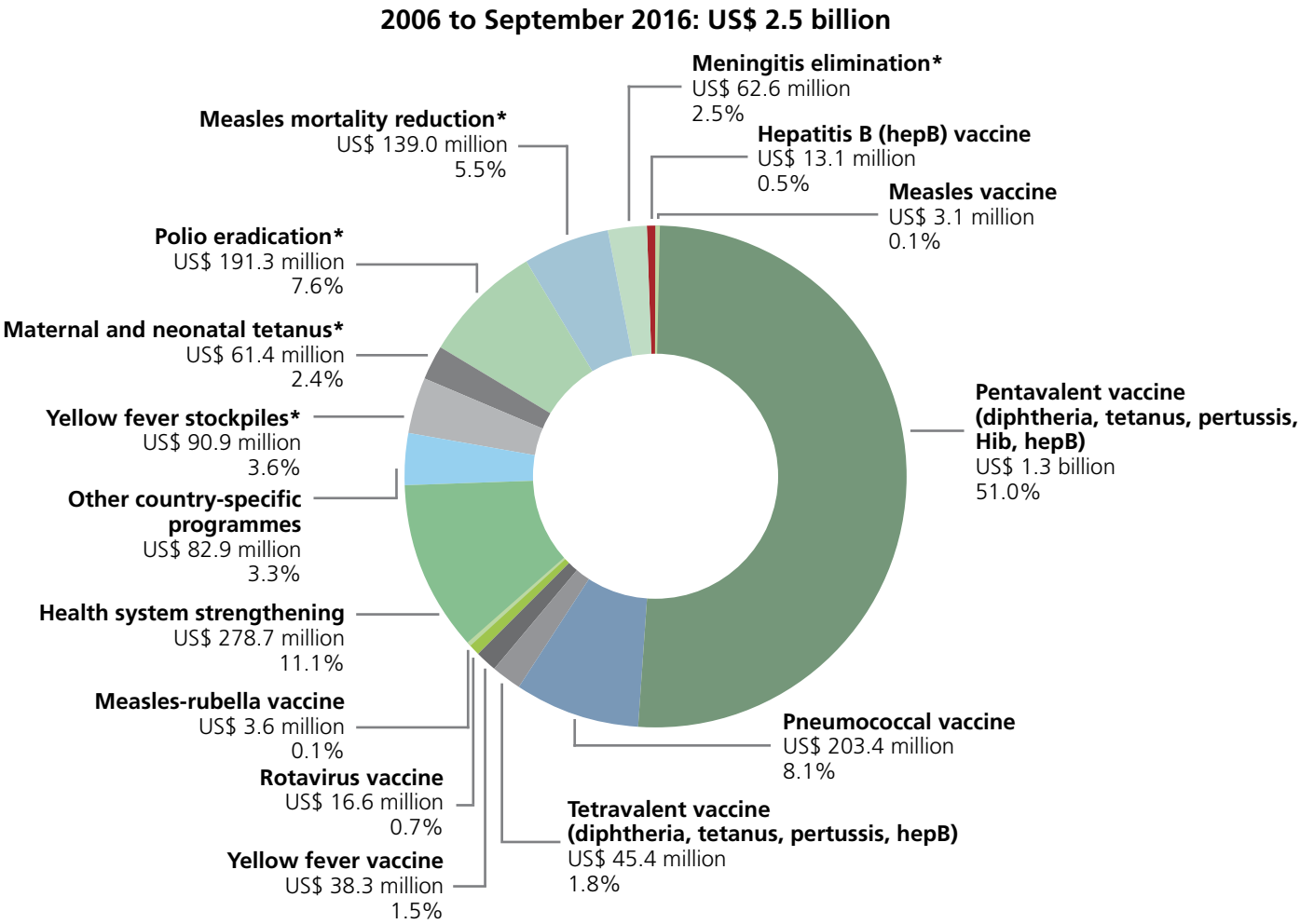
Table 2
Use of IFFIm resources between 2006–2016 (in US\$ billion)

IFFIm FINANCIAL INFORMATION AS OF DEC 31, 2016	
Bond proceeds	5.74
Bond redemptions	(4.26)
Interest and related expenses	(0.12)
Donor payments received	2.05
Gavi disbursements	(2.58)
other (investment income net of admin exp etc.)	0.03
Cash on hand	0.86

2.5.4 HOW ARE THE FUNDS GENERATED THROUGH IFFIm DISBURSED BY GAVI?

The figure shows how Gavi has spent the money provided by IFFIm since inception, as of September 2016.

Figure 4 Gavi disbursement of IFFIm funds



*One-time tactical investments in disease prevention and control (“Investment cases”).

2.5.5 WHICH COUNTRIES ARE ELIGIBLE FOR SUPPORT FROM GAVI?

Gavi focuses its support on the world’s poorest countries, so eligibility is determined by national income. Countries with a Gross National Income (GNI) per capita below or equal to US\$ 1,580 (based on the World Bank data for the latest available year) on average over the past three years qualify for support. In total, [54 countries are eligible to apply for new Gavi support in 2016](#).

2.5.6 HOW DOES GAVI/IFFIm DECIDE WHICH PROJECTS TO SUPPORT?

[Eligible countries submit programme applications to Gavi](#). An Independent Review Committee studies the applications and makes recommendations on funding decisions to Gavi. These then go to the Gavi Board, Executive Committee or Gavi’s CEO and, if approved, Gavi may request IFFIm to fund a portion of these programmes. This request would then need to be approved by the IFFIm Board.⁸

2.5.7 WHAT IS EACH DONOR’S SHARE OF IFFIm PROCEEDS TO GAVI?

The table below shows each donor’s contribution to the proceeds that Gavi received from IFFIm in the 2006 to 2015 period. Funds paid into IFFIm by donors are considered IFFIm contributions. Funds disbursed to Gavi are considered IFFIm proceeds or “donor proceeds”.

Table 3 Donors’ share of proceeds*

DONOR COUNTRY	2006-2010		2011-2015		2006-2015	
	US\$ million	% of total	US\$ million	% of total	US\$ million	% of total
United Kingdom	876	46.7%	278	46.3%	1,154	46.6%
France	531	28.3%	152	25.3%	683	27.6%
Italy	209	11.1%	63	10.5%	272	11.0%
Norway	106	5.7%	30	5.0%	136	5.5%
Spain	85	4.5%	20	3.3%	105	4.2%
The Netherlands	47	2.5%	14	2.3%	61	2.5%
Australia	-	0.0%	38	6.3%	38	1.5%
Sweden	14	0.7%	3	0.5%	17	0.7%
South Africa	7	0.4%	2	0.3%	9	0.4%
Total	1,875	100%	600	100%	2,475	100%

* Note: includes only pledges that have been finalised and signed.

⁸ Countries that are not members of the IMF will not benefit from IFFIm funds; this restriction currently applies to Cuba and the Democratic People’s Republic of Korea.

2.5.8 HOW IS EACH DONOR’S SHARE OF PROCEEDS CALCULATED?

One of IFFIm’s main strengths is its ability to transform the long-term pledges made by donors into immediate cash for Gavi. However, this also means that the amount a donor contributes each year may differ substantially from the amount that Gavi actually receives from IFFIm in that year.

In order for donors to measure and communicate the impact of their pledges, Gavi, IFFIm and donors have developed a method of measuring each donor country’s share of the funding Gavi receives, as outlined below.

- 1 Gavi sums the present value (PV) of each donor’s available future funds (ie those that have not already been borrowed against) over a given period to get the total available future funds.
- 2 Gavi uses this figure to calculate each country’s pro rata share of total available future funds in that same period.
- 3 The pro rata share is applied to the funds IFFIm provides to Gavi over the given time period to represent each donor’s contribution.

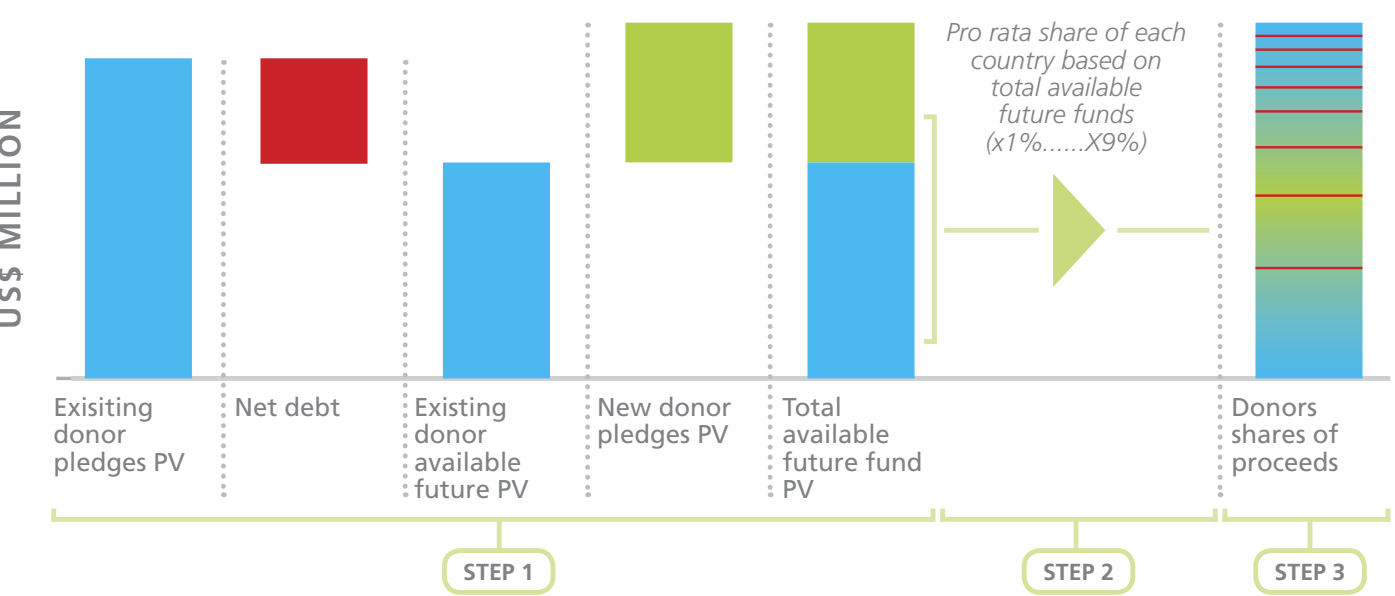
This method is also applied to new donors. As none of their pledges have been borrowed against yet, they would have the full value of their pledges included in their future available funds.

2.5.9 WHAT ARE THE BENEFITS OF THE PROCEEDS CALCULATION METHODOLOGY?

This method offers several benefits:

- **Flexibility to accommodate new donors:** New donors joining IFFIm at different times can easily be incorporated.
- **Consistency of treatment:** Both past and future allocations are calculated with a similar method for new and existing donors.
- **Short reporting intervals:** Proceeds are calculated for discrete time periods, coinciding with Gavi’s five-year business cycles.
- **No need for retroactive adjustments:** Historical proceeds are not revised going forward.

Figure 5 Donors’ share of proceeds calculation methodology



3 Managing risks

As IFFIm is active in capital markets, it must carefully manage its credit rating and the risks associated with financial transactions. This section looks at the market risks that IFFIm faces and how it addresses them.

3.1 HEDGING AND SWAPS

3.1.1 WHAT IS THE CONTEXT FOR IFFIm's RISK MANAGEMENT STRATEGY?

A large majority of Gavi's vaccine and operating expenditures are in US dollars, so IFFIm's payments to Gavi and its overall balance sheet are denominated in US dollars. IFFIm, however, receives contributions and issues bonds in a variety of currencies, predominantly non-US dollars. As a result, it is exposed to currency risks; that is, the risk of loss from fluctuating foreign exchange rates between the cash inflows (contributions and bond proceeds) and the cash outflows (payments to Gavi and bondholders).

In addition, IFFIm is exposed to interest rate risks because each currency attracts different deposit rates and the timing between receipts of donor payments, payment of bond obligations and disbursement to Gavi is different.

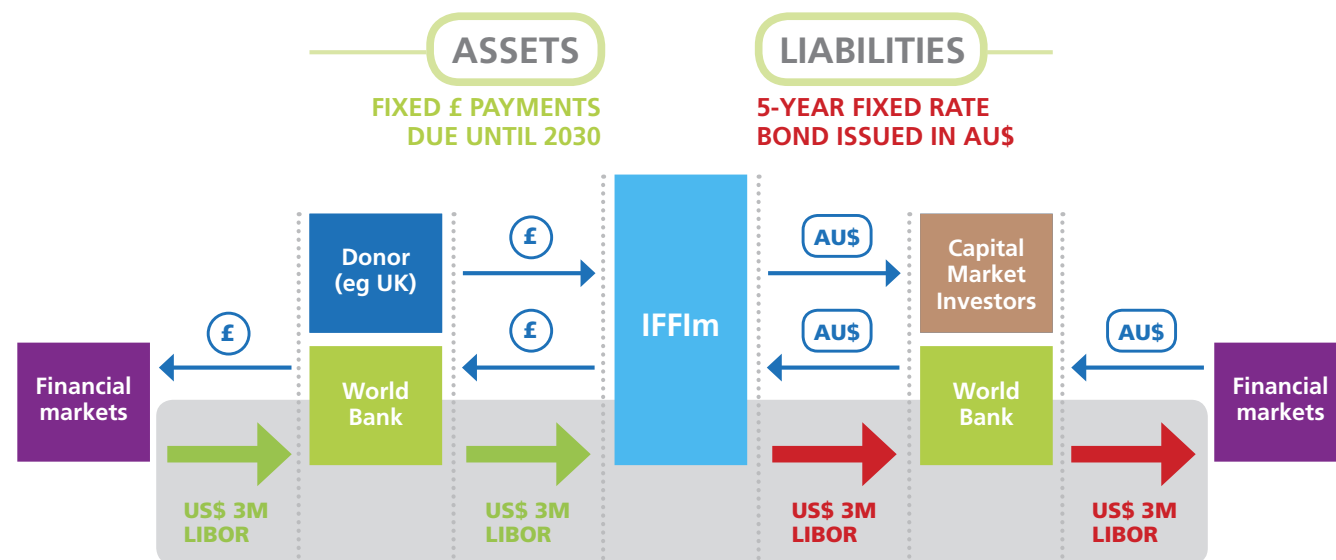
To manage all these risks, IFFIm hedges all foreign exchange and interest rate exposures through swaps with the World Bank. Under swap agreements IFFIm can exchange its foreign currency cashflows into US dollar denominated cashflows at a pre-agreed rate with the World Bank. Thus, IFFIm eliminates all unpredictability of fluctuating foreign exchange and interest rates.

3.1.2 WHY DOES IFFIm NEED TO USE RISK MANAGEMENT TECHNIQUES SUCH AS SWAPS?

IFFIm uses swaps to protect both its assets (donor pledges made in different currencies) and its outstanding debt (IFFIm bonds in different currencies at fixed interest rates) from movements in foreign exchange and interest rates. The World Bank accomplishes this for IFFIm by swapping all its assets and liabilities into **US dollars based on 3-month (3M) LIBOR**. This ensures that IFFIm maintains the right proportion of debt to its assets, as set by the GRL, regardless of market movements, while disbursing to Gavi in US dollars. This is the same risk management mechanism that the World Bank applies to its own assets and liabilities.

Figure 6 below illustrates the overall swap mechanism of IFFIm to hedge donor pledges and bonds proceeds:

Figure 6 Hedging donor pledges and bonds



Donor pledge swaps: Once IFFIm signs a grant agreement with a donor to receive a pledge in non-US dollars, it enters into a currency swap agreement with the World Bank (its swap counterparty) where it swaps a non-US dollar denominated donor pledge (say £ in Figure 6) into floating rate US dollar based on 3-month LIBOR.

Bond swaps: When IFFIm raises funding through a fixed-rate bond issuance in non-US dollars of certain maturity (AU\$ in Figure 6), IFFIm enters into currency and interest rate swap agreements with the World Bank where the bond proceeds are exchanged with the equivalent US dollar amount and the fixed-rate interest of the bond is swapped to US dollar 3-month LIBOR. By doing so, IFFIm pays borrowing costs pegged to US dollar 3-month LIBOR to the World Bank and receives a fixed rate in return to pay to the bond investors.

3.1.3 WHO DOES IFFIm ENTER INTO SWAPS WITH?

IFFIm's swaps are not executed in the market but with the World Bank, in order to limit counterparty credit risk. Counterparty credit risk is the risk that the counterparty defaults on the amounts owned on a derivative transaction, such as a swap. In other words, IFFIm is only exposed to the credit risk of the World Bank, which is rated triple-A, on its swap transactions and does not need to manage the credit risk of any market counterparty.

On the other hand, the World Bank executes "mirror swaps" with the market. "Mirror swaps" are swaps with essentially the same terms as those the World Bank provides to IFFIm, but they are entered into with market counterparties, usually a major bank.

3.1.4 HOW DOES IFFIm USE SWAPS TO MANAGE RISKS?

The following sections illustrate how currency and interest swap transactions are executed for both donor pledges and bond proceeds:

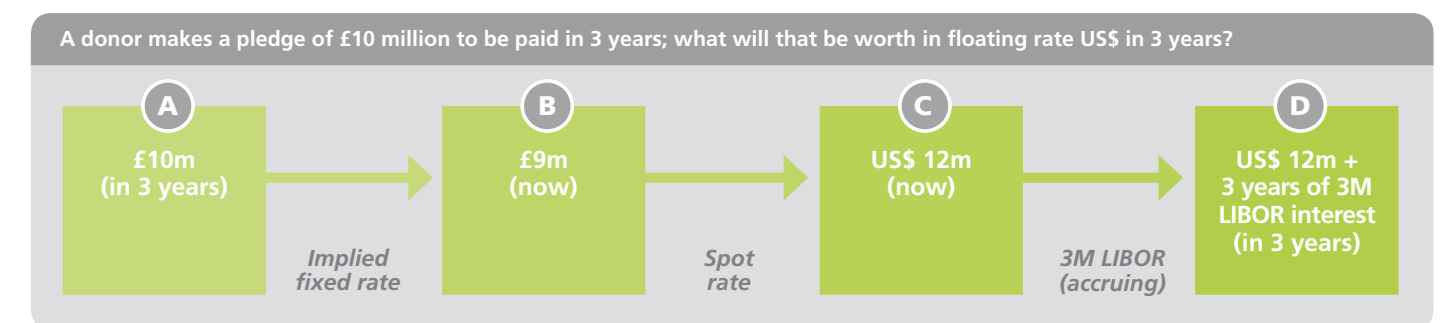
IFFIm donor payments – currency swaps

When IFFIm signs a grant agreement with a donor in non-US dollars, each payment under the schedule of the total pledge is swapped.

Let us assume a total pledge amount is £100 million to be paid in equal annual payments of £10 million over 10 years. For swap illustration purposes, we will take the first payment of £10 million, which is due in three years. At the date of the swap agreement for this payment, IFFIm calculates what this payment is worth now – ie the present value of £10 million to be received in three years (say £9 million). It then converts the payment into US\$ at the prevailing £/US\$ spot rate (say US\$ 12 million). This base US dollar amount accrues a floating interest rate of 3-month LIBOR over time. At the grant payment date (or swap maturity date), IFFIm receives £10 million from the donor and passes that amount to the World Bank (the swap counterparty). In exchange, IFFIm receives US\$ 12 million from the World Bank with the accrued interest rate based on 3-month LIBOR.

Figure 7.1 shows an illustration of the value of (A) pound sterling (£) 10 million payment to be made in three years in (B) pound sterling now, (C) US dollar now and (D) US dollar in three years. Note that all are equivalent in value.⁹

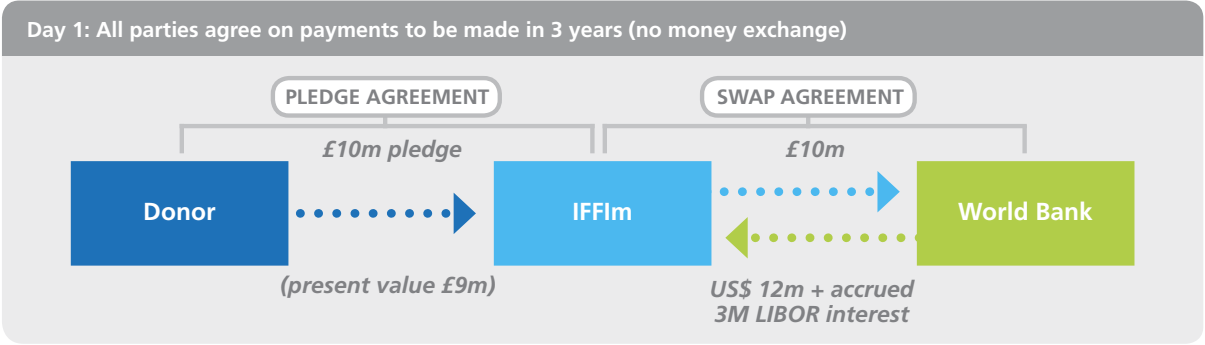
Figure 7.1 Donor payments – currency swaps: time value of money



⁹ The implied fixed rate of any future pledge is due to the fact that the amount to be paid does not fluctuate with interest rate and currency exchange rate fluctuations.

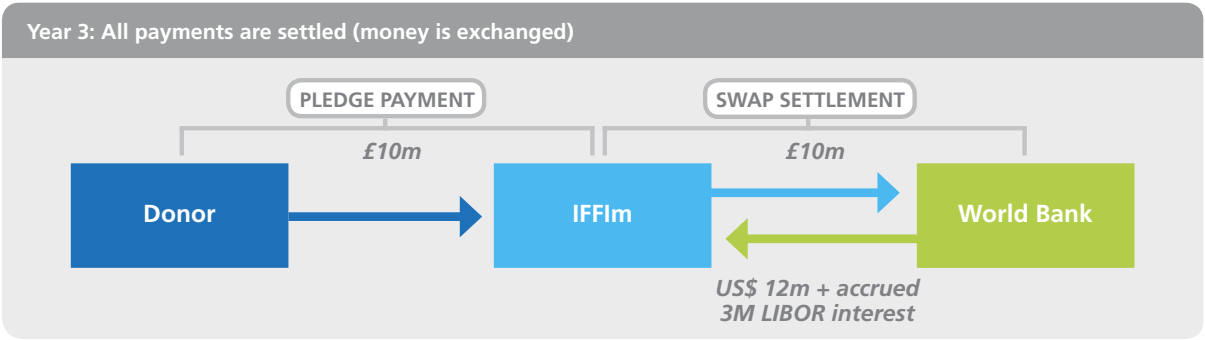
Figures 7.2 and 7.3 break down the steps of the transaction that takes place when a donor payment is swapped.

Figure 7.2 Donor payments – currency swaps: transaction agreement



As per the swap agreement, all payments are made at the grant payment date in Year 3:

Figure 7.3 Donor payments – currency swaps: payment settlement



IFFIm has hereby exchanged a non-US dollar asset (£10 million to be received in three years) into a floating rate 3-month LIBOR US dollar asset (US\$ 12 million + three-year accrued interest of 3M LIBOR).

Each and every payment amount of the donor pledges is swapped until all payments are complete.

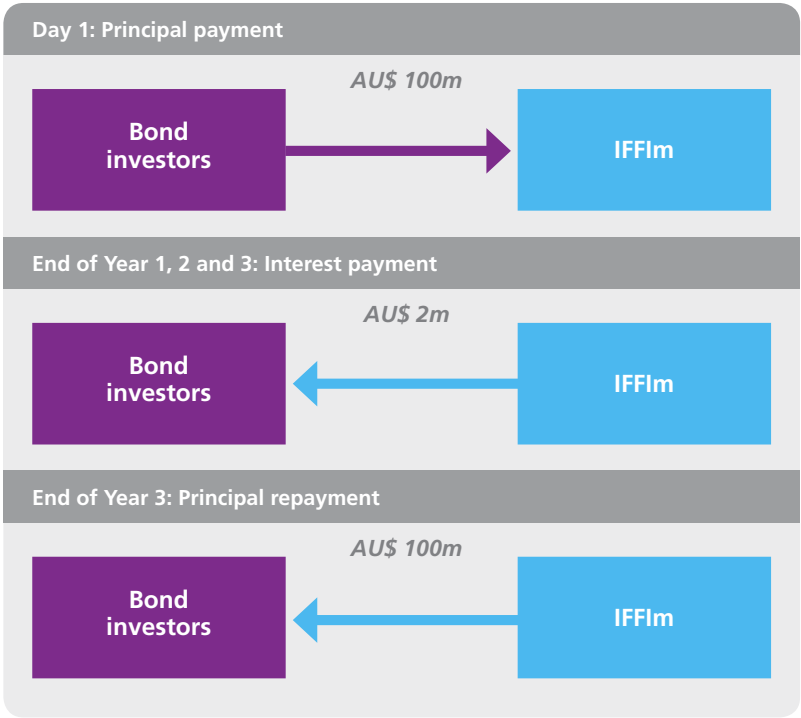
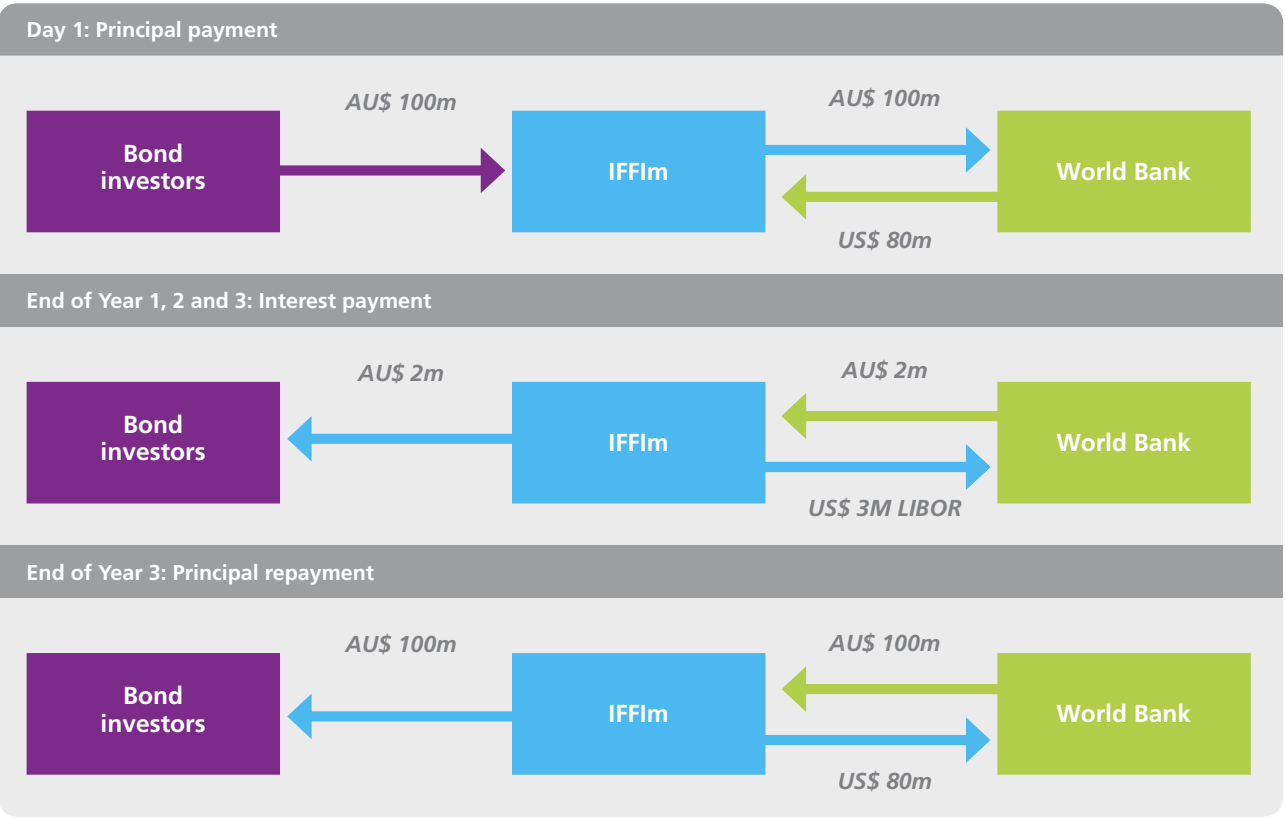


Figure 8.1 IFFIm bonds – currency and interest rate swaps: bond transaction

IFFIm bonds – currency and interest swaps

Let us assume that IFFIm issues a three-year AU\$ 100 million bond that pays a fixed interest rate of 2%. The transaction would thus have the cash flows as shown in Figure 8.1.

Figure 8.2 IFFIm bonds – currency and interest rate swaps: corresponding swap transaction



However, IFFIm would like to swap the AU\$ 100 million for the equivalent US dollar amount and the 2% fixed interest rate for a US dollar 3-month LIBOR floating rate to match its other assets and liabilities. As illustrated in Figure 8.2, it enters into a swap agreement with the World Bank whereby it exchanges the AU\$ 100 million on Day 1 at the prevailing AU\$/US\$ spot rate (let us assume US\$ 80 million) and pay a US dollar 3-month LIBOR floating rate over three years. At the bond maturity, IFFIm returns US\$ 80 million to the World Bank and receives the bond principle of AU\$ 100 million, which it passes as repayment to the bond investors.

This swap mechanism allows IFFIm to make transactions in a variety of currencies and interest rates but always operate in US dollars with a US dollar 3-month LIBOR floating rate.

3.1.5 WHAT IS IFFIm's SWAP POSITION?

The value of IFFIm's swap position is the current market value of all swaps it has entered into with the World Bank. It is derived by calculating the cost to the World Bank if it had to hypothetically unwind (terminate and

then cash in based on the current market value) every single one of these swaps or replace them by the same swaps with a market counterparty.

The value of the swaps IFFIm entered into with the World Bank is minus US\$ 605 million, as of November 2016. This means that in the hypothetical case in which IFFIm went into default (ie should its donors be unable to honor their pledges), and the World Bank had to unwind all swaps, the World Bank would incur a loss of US\$ 605 million.

It is important to note that swaps are time-limited, zero-sum instruments, meaning that their value will diminish over time ultimately converging to zero as pledges are paid in and bonds mature.

In the meantime, the value of the swap position may vary as foreign exchange rates and interest rates change. The value of IFFIm's swap position will improve as the US dollar strengthens and interest rates rise and can increase further if long-term interest rates in US dollars, pound sterling and euros continue to fall. It is, however, important to understand that the World Bank would only ever be liable (to its counterparties) for this amount in the unlikely event of a default by IFFIm. Equally, if interest rates rise in the future, this number can go to zero or turn positive.

3.1.6 WHAT FACTORS DRIVE THE SWAP EXPOSURE LEVEL?

Three drivers increase the exposure: (1) a fall in the swap rates of the currencies of donors' pledges (mostly euro and pound sterling); (2) a fall in the US dollar against donors' currencies; (3) a fall in 3-month LIBOR.

Most of the exposure relates to the depreciation of donor currencies against the US dollar and a decrease in interest rates. The exposure is magnified by the long-term nature of the pledges. If market conditions remain constant, this swap exposure is expected to decline over time, as the swaps mature.

3.1.7 WHAT ARE THE RESULTING CONSTRAINTS OF THE IFFIm's CURRENT SWAP POSITION?

The resulting constraints for IFFIm are that:

- IFFIm must set aside more money to mitigate risk, which could in theory reduce the funding available to Gavi during a given time period, decreasing IFFIm's ability to frontload funds.
- IFFIm is unable to borrow in anything other than floating rate US dollars.
- IFFIm is unable to hedge any currency risks on new donor pledges in foreign currencies and therefore, ideally, new pledges need to be made in US dollars so that IFFIm can borrow against them.

It is important to note that, despite these constraints, IFFIm would still be able to issue bonds at favourable rates and will be able to meet all its currently agreed future funding commitments to Gavi.

3.1.8 IF THE OUTSTANDING SWAP EXPOSURE SITUATION IS RESOLVED, WHAT WOULD THE IMPACT BE?

There would be three impacts:

- IFFIm would no longer need to apply a risk management buffer, resulting in up to US\$ 300 million in additional funding immediately available for Gavi (see Section 3.2.9 for details on the risk management buffer).
- IFFIm would be in a position again to encourage pledges in any currency.
- In addition, IFFIm would be free to go to any capital markets for fundraising, potentially enabling it to borrow at more attractive costs than borrowing by issuing a bond in floating rate US dollars.

3.2 CREDIT RATING

3.2.1 WHAT IS A CREDIT RATING, AND WHY IS IT IMPORTANT?

Much in the same way that banks will use an individual's credit scoring based on their history of taking out and paying back their debt to price new loans, IFFIm's investors use its credit rating to assess its creditworthiness in relation to a particular debt or financial obligation. IFFIm's rating is important because having a higher rating enables it to raise funds on more attractive terms. The treasury manager also monitors IFFIm's rating and can tighten financial policies should the rating be below a certain level. Having a high rating thus helps IFFIm to be a more efficient mechanism for Gavi and donors.

3.2.2 WHAT IS IFFIm's CURRENT CREDIT RATING?

IFFIm's ratings with the three main rating agencies, as of December 2016, are AA, Aa1 and AA by Fitch, Moody's and Standard & Poor's respectively.

3.2.3 WHAT HAS IFFIm's CREDIT RATING BEEN HISTORICALLY?

From inception until 2011, IFFIm had a triple-A rating (the highest possible) from all three main credit rating agencies. However, in January 2012, its credit rating was downgraded for the first time by Standard & Poor's from AAA to AA+. In 2013, Moody's and Fitch also downgraded IFFIm to Aa1 and AA+ respectively. Further downgrades followed: AA+ to AA by Standard & Poor's in 2014; and AA+ to AA by Fitch in 2015.

3.2.4 WHY WAS IFFIm DOWNGRADED?

IFFIm's credit rating is closely linked to that of its major donors. The downgrade was largely a result of the downgrade of the credit ratings of its major donors following the global financial crisis.¹⁰

3.2.5 HOW OFTEN DO THE CREDIT AGENCIES ASSESS IFFIm's RATING?

Rating agencies typically issue a rating report annually following a meeting with the IFFIm Board, the World Bank and Gavi. They can, however, issue a rating action at any time when, in their view, a material event has impacted IFFIm's credit strength or rating outlook.

3.2.6 WHAT ARE THE EVENTS THAT COULD TRIGGER AN ACTION BY A RATING AGENCY?

According to the views reported by IFFIm's credit rating agencies, some of the credit events that can trigger IFFIm's credit rating include:¹¹

- If the credit ratings of the donor countries (particularly the UK and France) are downgraded.

- If major donors reduce their support for IFFIm (for example, by falling into arrears on donor grants).
- If political pressures in donor countries substantially widen the gap between the credit quality of the countries' pledges (the likelihood of honoring pledges by a country) and their sovereign debt obligation (the credit quality of a country).
- If IFFIm experiences funding pressure.
- If there is a weakening of the gearing ratio limit mandate or a change in treasury manager.

3.2.7 WHAT ARE THE FACTORS SUPPORTING IFFIm's CREDIT RATING?

The rating agencies cite the strength of donors' support and commitment as the main factor behind IFFIm's creditworthiness. They also note that the World Bank acting as treasury manager, implementing prudent financial policies, adds institutional strength to IFFIm's credit profile.

3.2.8 WHAT WAS THE IMPACT OF IFFIm's DOWNGRADE?

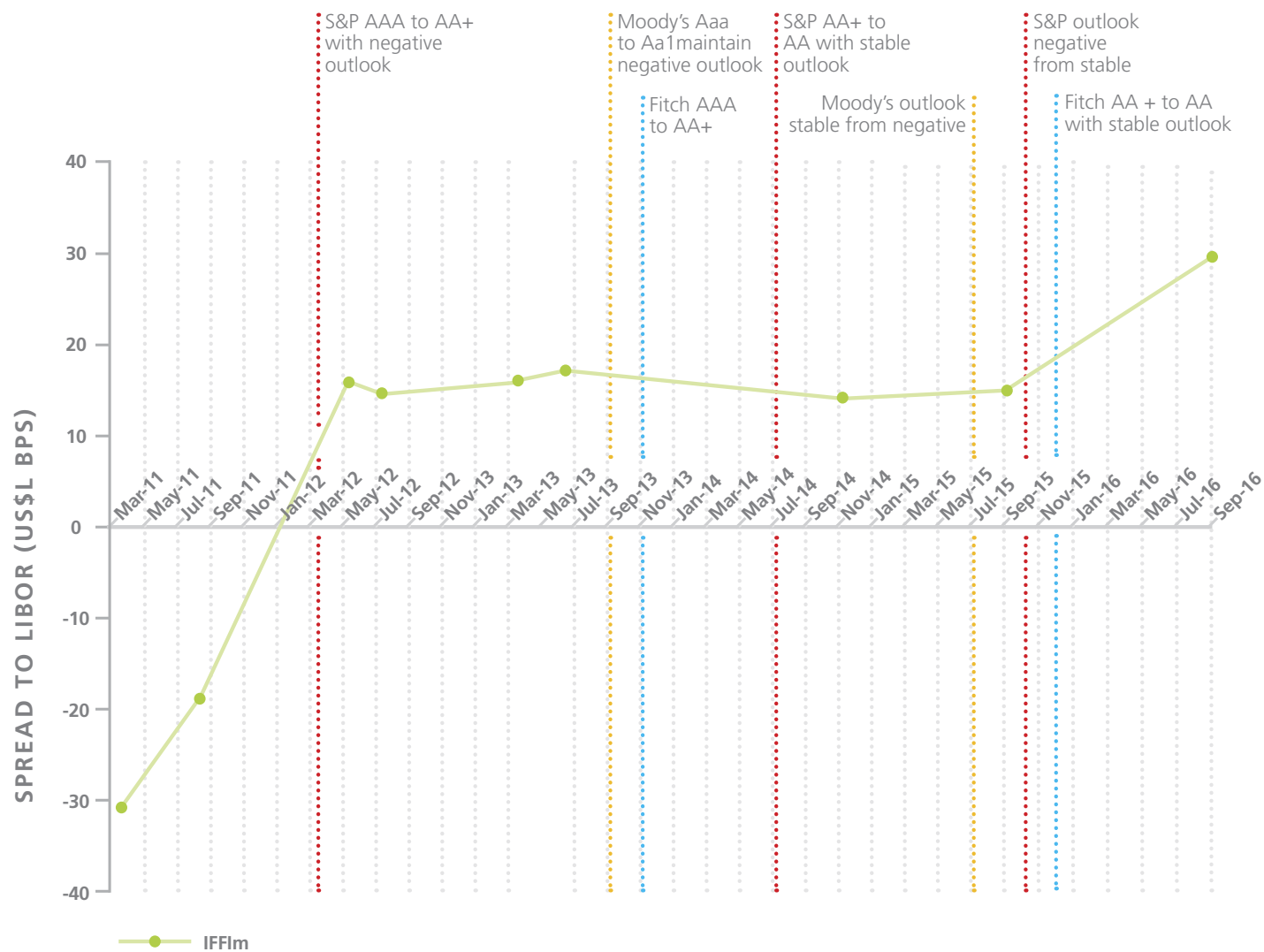
IFFIm was downgraded from a triple-A rating to a double-A rating by the three main credit rating agencies in the aftermath of the global financial crisis in 2012 and 2013. The downgrade had two main effects for IFFIm:

- It caused an increase in IFFIm's borrowing cost, as a triple-A rated institution is generally able to borrow on more attractive terms than a slightly lower-rated double-A institution. Nonetheless, IFFIm remains a highly regarded and attractive borrower, even with a double-A rating.
- In light of IFFIm's swap exposure level, it prompted the World Bank to implement a risk management buffer (RMB) to protect against its exposure on IFFIm's swap position (minus US\$ 605 million, as of November 2016). This RMB (a 12-percentage point increase to the gearing ratio limit) was chosen as an alternative to call for collateral, which the World Bank had a right to do following IFFIm's downgrade.

¹⁰ For more information, please refer to Standard & Poor's research update, January 2012 and Moody's rating action, March 2013 at <http://www.iffim.org/bonds/rating-reports/>

¹¹ For more information, see rating reports at <http://www.iffim.org/bonds/rating-reports/>

Figure 9 IFFIm's historical borrowing costs



3.2.9 WHAT IS A RISK MANAGEMENT BUFFER?

As discussed in greater detail in Section 2.2, IFFIm only raises bonds against part of donor commitments, with the remainder acting as a cushion to protect creditors against adverse credit events. This cushion causes a delay in Gavi receiving IFFIm funding as funds are locked up for a certain period of time, but does not result in any economic loss for Gavi. The risk management buffer increases the size of this cushion. It requires IFFIm to maintain 12% additional capital over and above the 30.2% minimum reserve set by the gearing ratio limit, making a total risk buffer worth

42.2% of all donor pledges. The buffer is designed to ensure IFFIm has enough liquidity to fulfill its swap obligation in the unlikely case of default.

Theoretically, this means that IFFIm can only transfer 57.8% of the net present value calculated in US\$ of all the donor pledges to Gavi instead of 69.8%. In practice, at this stage, IFFIm has only been asked to transfer about 25.9% of the net present value of the donor pledges to Gavi.

It is important to note here that because IFFIm has always carefully and conservatively controlled the leverage of donor commitments, the introduction of the risk management buffer will not affect IFFIm's ability to meet all its current commitments to funding Gavi.

4 Recent developments and future opportunities

Moving beyond what IFFIm has already achieved, this section looks at the 2015 Gavi replenishment and plans for the future.

4.1 REPLENISHMENT

4.1.1 WHAT NEW PLEDGES WERE MADE TO IFFIm AT THE 2015 GAVI REPLENISHMENT?

IFFIm was part of Gavi's replenishment at a pledging conference held in Berlin, Germany in January 2015. At the conference, donors made new pledges to IFFIm totalling US\$ 280 million:

- €150 million from France for the 2022 to 2026 period.
- €60 million from the Netherlands for the 2017 to 2020 period.
- A\$ 37.5 million from Australia for the 2016 to 2020 period.

While Australia's grant agreement has been signed, France and the Netherlands are in process of finalising their respective agreements. In addition, IFFIm is close to finalising a US\$ 20 million pledge with Brazil – a new donor country. Once finalised, these pledges will bring the total amount of donor pledges to IFFIm up to US\$ 6.5 billion.

IFFIm continues to engage with existing donors and with new donors, particularly in the Middle East, to explore prospects for further pledges.

4.2 FUTURE PLANS

4.2.1 HOW CAN IFFIm CONTINUE TO PLAY A STRATEGIC ROLE IN FUNDING GAVI?

IFFIm will continue to deliver value to Gavi in the following ways:

- IFFIm's **frontloading** model will help to support the introduction of new, life-saving vaccines.
- By transforming medium- to long-term pledges into immediate cash, IFFIm will continue to provide Gavi with the **funding flexibility** that it needs to combat disease.
- IFFIm will continue to play a key role in helping Gavi **shape the market** for vaccine production. By increasing the long-term predictability of funding, IFFIm's funding enables Gavi to invest large amounts at an early stage, encouraging increased vaccine production while reducing vaccine prices.

4.2.2 WHAT IS IFFIm DOING TO ENSURE ITS CONTINUING VALUE?

IFFIm is currently reviewing its future value, both to Gavi and in the context of other global goals. To this end, the IFFIm Board and the Gavi Secretariat, in consultation with donors, held an IFFIm Board strategy retreat in October 2015 and a donor workshop in June 2016 to discuss the future role of IFFIm as an instrument for Gavi as well as possible wider uses.

4.2.3 WHY A DISCUSSION ON IFFIm's CONTINUED STRATEGIC ROLE NOW?

As IFFIm entered its tenth year in 2016, and in light of Gavi's 2015 replenishment, now is an appropriate time to prepare for the next decade. It is also the right time to ensure IFFIm maximises its impact on Gavi's 2016-2020 strategy. The timing of this discussion coincides with the UN endorsement (through the July 2015 Addis Ababa Conference outcome document) of a possible replication of the IFFIm model to address broader development needs.

4.2.4 WHAT AREAS FOR POTENTIAL FUTURE DIRECTION IS IFFIm CONSIDERING?

Potential opportunities for IFFIm to align itself and its donors more closely with Gavi's broader strategic goals have been identified. These include:

- continuing to enable vaccine scale-up;
- providing medium- to long-term financial guarantees to support vaccine procurement and broader market shaping activities;
- supporting the Cold Chain Equipment Optimisation Platform to help ensure vaccines are kept and distributed in good condition; and
- providing the capacity to rapidly raise funding to help Gavi respond to disease outbreaks, should Gavi decide to play an active role in this area.

Work on all the above areas continues. The IFFIm Board and Gavi are closely engaging with donors to develop them further.



