

## ISSUER IN-DEPTH

24 July 2018



### RATINGS

#### IFFIm

	Rating	Outlook
Long-term Issuer	Aa1	STA
Short-term Issuer	P-1	--

### TABLE OF CONTENTS

OVERVIEW AND OUTLOOK	1
Organizational structure and strategy	2
CREDIT PROFILE	3
Capital adequacy: not applicable	3
Liquidity: Very High	6
Strength of member support: High	9
Rating range	12
Comparatives	13
DATA AND REFERENCES	14
Related websites and information sources	17
Moody's related publications	17

### Contacts

**Samar Maziad** +1.212.553.4534  
 VP-Senior Analyst  
 samar.maziad@moody's.com

**Gabriel Agostini** +1.212.553.8882  
 Associate Analyst  
 gabriel.agostini@moody's.com

**Mauro Leos** +1.212.553.1947  
 Associate Managing Director  
 mauro.leos@moody's.com

# International Finance Facility for Immunisation – Aa1 Stable

## Annual credit analysis

### OVERVIEW AND OUTLOOK

The [International Finance Facility for Immunisation \(IFFIm, Aa1 stable\)](#)'s credit profile reflects very high liquidity, strong commitment from donor governments and the involvement of the [World Bank \(IBRD, Aaa stable\)](#) as treasury manager. While the institution's role as a financing vehicle implies no paid-in-capital or loan portfolio, the supranational's low gearing ratio (net debt represents just 18.8% of the present value of donor pledges) indicates low leverage and a high level of flexibility in the event that donor pledges fail to come to fruition, an outcome that we deem to be unlikely. IFFIm also benefits from a strong liquidity policy, consistently holding 1.5 times the year's worth of debt service needs in liquid assets.

IFFIm's strong gearing and liquidity positions are partially offset by high donor concentration, with the [United Kingdom \(UK, Aa2 stable\)](#) and [France \(Aa2 positive\)](#) representing 80% of remaining pledges. Because its revenue structure is reliant on the receipt of donors' pledges, IFFIm's rating is closely linked to the creditworthiness of its sovereign donors. Donor concentration risk and the UK's (IFFIm's single largest donor) recent downgrade, however, is partially offset by the IBRD's robust risk management framework, which has ample flexibility to adjust leverage and disbursements in the event of further negative rating actions on its largest donors.

Positive ratings momentum for IFFIm would emerge if the creditworthiness of its largest donors, the UK and France, were to improve. A significant decrease in the concentration of sovereign donors' pledges would also be credit positive.

A material deterioration in the creditworthiness of its donors could lead to downward pressure on IFFIm's rating, particularly if the deterioration led to a downgrade of the UK and France. A weakening of the gearing ratio limit mandate or a change in treasury manager, neither of which we consider likely, would also be credit negative.

This credit analysis elaborates on IFFIm's credit profile in terms of capital adequacy, liquidity and strength of member support, which are the three main analytical factors in Moody's [Supranational Rating Methodology](#).

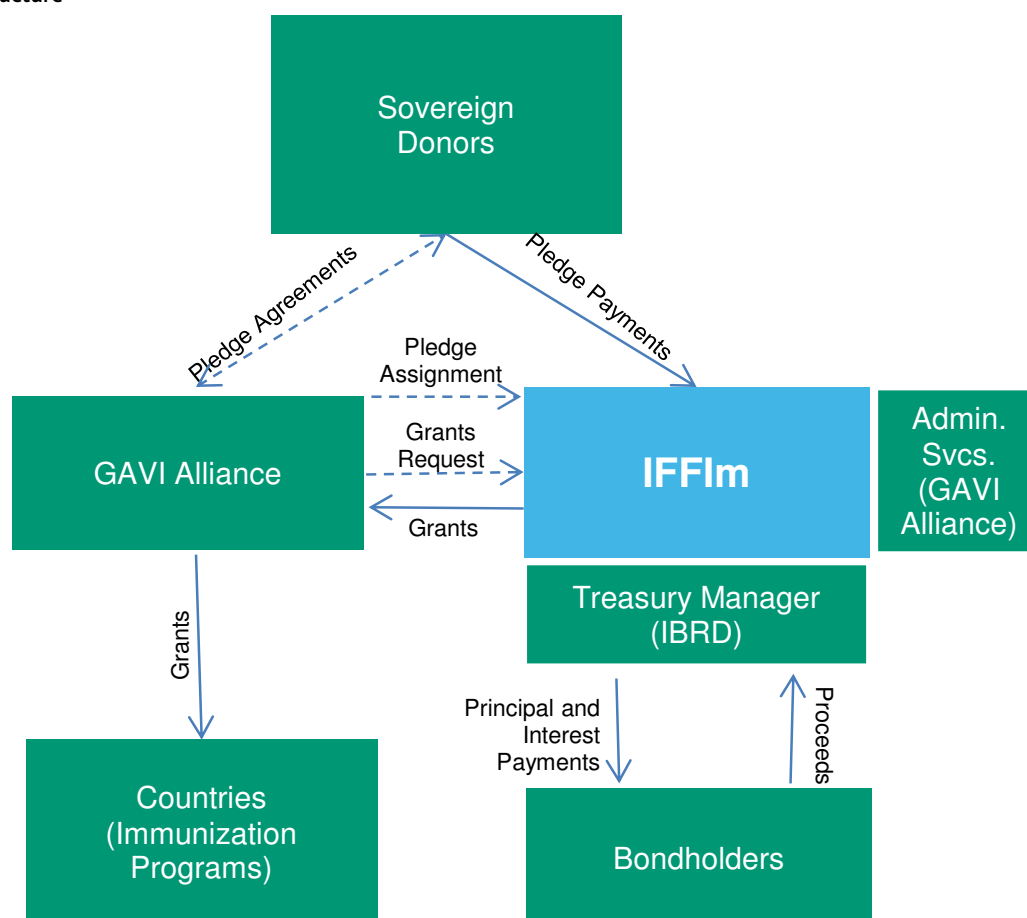
## Organizational structure and strategy

IFFIm is a multilateral development institution created in 2006 as a financing tool to accelerate and facilitate funding for immunizations carried out by Gavi, the Vaccine Alliance (Gavi<sup>1</sup>), and thereby help the international community achieve the Millennium Development Goals for improved child and maternal health. IFFIm serves as an additional funding vehicle for Gavi-approved programs and does not have any operations other than making grants to Gavi to finance programs in the world's poorest countries.<sup>2</sup> IFFIm has no employees and therefore receives administrative support from Gavi. Moreover, the IBRD, as treasury manager, conducts IFFIm's financial affairs, including risk management. IFFIm is incorporated as a private company, registered as a charity in England and Wales, and is governed by its own board of directors.

Sovereign donors enter into pledge agreements with Gavi, setting a total amount to be paid according to a schedule over a set period. Gavi assigns IFFIm the right to receive the cash as it comes in and IFFIm uses this right to future cash flows to access the international debt markets. The proceeds from IFFIm's bond issues are granted to Gavi-approved immunization programs. IFFIm uses the cash from scheduled donor payments to service debt and cover operating expenses (see Exhibit 1). The repayment of IFFIm's debt has priority over funding for immunizations, and the treasury manager is authorized to delay program funding to repay debt obligations.

Exhibit 1

### IFFIm's organizational structure



Source: IFFIm

## CREDIT PROFILE

Our determination of a supranational's rating is based on three rating factors: capital adequacy, liquidity and strength of member support. For other supranational entities we place more emphasis on the strength of member support such that it drives the preliminary rating range. Capital adequacy and liquidity combine to form the assessment of intrinsic financial strength, which can provide uplift to the preliminary rating range. For more information, please see our [supranational rating methodology](#).

### Capital adequacy: not applicable

#### Factor 1



Capital adequacy assesses the solvency of an institution. The capital adequacy assessment considers the availability of capital to cover assets in light of their inherent credit risks, the degree to which the institution is leveraged and the risk that these assets could result in capital losses.

#### The absence of capital gives factor 1 zero weighting in the methodology

IFFIm's absence of paid-in capital in its balance sheet, and consequently its dependence on grants from its donors, limits the assessment of the institution's intrinsic financial strength and makes a capital adequacy analysis less relevant to determine its creditworthiness. Additionally, given that IFFIm only provides grants to Gavi, and thus lacks a loan portfolio, it is not exposed to the same sort of credit risk that other supranational entities experience in the form of borrower quality and asset performance.

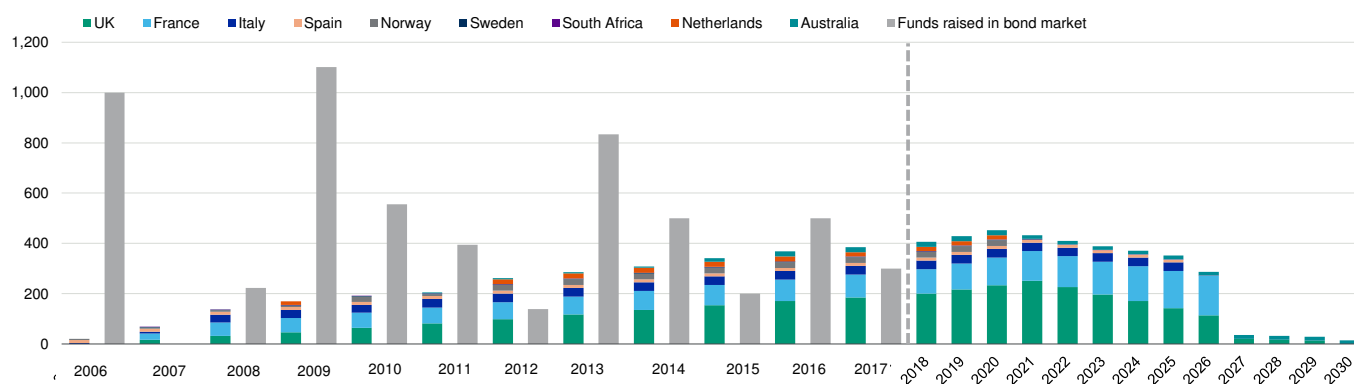
Nonetheless, IFFIm's gearing policy provides a similar point of reference to assess its solvency as the leverage ratio (debt-to-equity) does for multilateral development banks (MDBs). As such, even though these factors are not incorporated into the scorecard that accompanies the supranational rating methodology, the gearing ratio and limit are important components of our analysis of IFFIm.

#### Gearing ratio and limit conservatively manage leverage

As a financing vehicle, IFFIm's operations and leverage capability are largely dependent on donors' payments. In order to determine an appropriate level of leverage, IFFIm manages bond issuances against the present value of expected future cash flows from grantor pledges, which allows IFFIm to front-load its debt issuance (see Exhibit 2).

Exhibit 2

#### Leverage is front-loaded, supported by future cash flows (Donor commitments by year, US\$ million)



Sources: IFFIm, Moody's Investors Service

The residual, which is still available to IFFIm over time, creates a cushion to protect bond holders against adverse credit events, such as a large number of countries entering into protracted arrears with the International Monetary Fund (IMF), a condition that may diminish the total inflow of pledges because falling into protracted arrears with the IMF is a trigger for reduced disbursements from donors.

### Conditionality of donors' pledge payments a source of risk in the structure

Under Eurostat accounting rules, if the payment obligations of the donors were unconditional, the total pledge would have to be recognized all at once as a liability on the donors' accounts. A high-level financing condition (also referred to as the grant payment condition) was added to ensure that donors are not required to report their entire pledge to Gavi as a liability immediately upon making the pledge. This conditionality does not alter the legally binding nature of the commitments.

The condition is that if any of the 7 countries in the IFFIm reference portfolio were to fall into protracted arrears with the IMF (that is, more than six months), the amount of donor disbursements to IFFIm would be reduced by a predetermined amount during the time that the country remains in arrears (grant payment condition). If the country becomes current again, the donor payments would resume according to the original schedule. The treasury manager determines the reduction and coordinates the reduced payments from the donors on IFFIm's behalf.

For all but 10 of the countries, the reduction would be 1% of scheduled grants. For South Sudan and Sudan, the reduction would be 0.5%, for Vietnam (B1 positive) 3%, and for Bangladesh (Ba3 stable), Democratic Republic of Congo (B3 negative), Ethiopia (B1 stable), India (Baa2 stable), Indonesia (Baa2 stable), Nigeria (B2 stable) and Pakistan (B3 negative), it would be 5%. As a result, if enough countries were in arrears to the IMF at the same time, the amount of payments to IFFIm could in some circumstances be less than the amount needed to service debt, depending on the actual amount of debt that had been issued and the scheduled debt-service payments at the time.

### However, IMF arrears are historically low

At present, two countries (Somalia and Sudan) have protracted arrears with the IMF. Since 1975, there has been an average of five of the 71 countries in the IFFIm reference portfolio with protracted arrears at any one time, of which only one (Vietnam in the 1980s and through 1993) would trigger a reduction in payments of more than 1% per country. The highest number of countries in arrears in any single year was 11, in both 1988 and 1989, when Vietnam was one of those countries. Therefore, in those two years, the reduction in donor payments would have been 13% from the committed amounts, had IFFIm existed.

It is notable that the number of countries in arrears dropped considerably from 10 in the 11-year period through 1994, to three from 1994 onwards. Also, none of the countries that would trigger a 5% reduction in payments has ever been in protracted arrears, while the IMF no longer has exposure to Vietnam (3% reduction) and Laos (1% reduction), as of 2012 and 2013, respectively. Going forward, it seems likely that the number of countries going into arrears will remain low, in part because of the debt relief granted in 2005 to more than 30 of the most heavily indebted countries. The global financial crisis of 2008-9 was largely an advanced industrial crisis and, while there was an eventual spillover to the global macroeconomy, the 70 countries in consideration here were relatively insulated financially.

We deem it unlikely that reductions in donors' scheduled payments would occur to the extent that IFFIm's ability to service debt would be jeopardized. Supporting this view is the fact that the treasury manager oversees this risk by monitoring and setting a limit on IFFIm's gearing ratio.

The gearing ratio is defined as total debt net of cash holdings (net debt) over the present value of donor pledges. At end-2017, this ratio was 18.8%, down from 29.7% in 2016. However, we expect it to increase over time to closer to the gearing ratio limit (GRL) of around 70% (or slightly more than 58% plus the 12% assigned as a risk management buffer), as set by the trustees on the advice of the treasury manager. This is a natural evolution of the ratio as intended by IFFIm's structure, which front-loads bond issuance for immediate immunization impact while the sovereign pledges are paid-in gradually over IFFIm's life. It is important to note that despite the existence of a maximum level, the treasury manager is under no obligation to reach that level.

The IBRD models the risks associated with reductions in donors' scheduled payments, either stemming from recipient countries going into arrears with the IMF or due to delays in disbursement on the pledge contract with IFFIm. The model builds in the risk of either of these reductions and can be adjusted as risks increase, with the ultimate goal of minimizing the potential that a shortfall in cash inflows would prevent the timely payment of debt obligations. It is a solvency model over the remaining life of IFFIm. The treasury manager calibrates the gearing limit model to maintain a Aaa expected loss on IFFIm's bonds.

The limit on the gearing ratio provides a cushion as it keeps the amount of net debt at a level that is below the present value of cash inflows from donors' scheduled pledge payments. This cushion can absorb a significant amount of risk stemming from the grant payment condition, as well as some risk that donors' payments will fall short of the committed amount. However, given the heavy concentration of donors' pledges, we do not believe the GRL is sufficient to de-link IFFIm's creditworthiness from its donors' creditworthiness.

In our view, the strength of the GRL is not only a function of how well the risks are modeled in order to set the limit, but also of (1) the flexibility of the limit to account for increasing risks and, more importantly, (2) the flexibility for the treasury manager to delay grant commitments and disbursements to Gavi in respect of the GRL. If the treasury manager believes that a large number of countries will go into arrears or that donors' finances are facing stress that would hinder their ability to pay-in according to the pledge schedule, it could delay further approvals for Gavi grants until the gearing ratio falls comfortably below the guiding limit. We view this to be a very strong credit enhancement as it can dynamically absorb a significant amount of the risks that IFFIm faces. The institutionalized priority on timely debt servicing plays a large role in IFFIm's Aa1 rating.

## Liquidity: Very High

### Factor 2



A financial institution's liquidity is important in determining its shock absorption capacity. We evaluate the extent to which liquid assets cover debt service requirements and the stability of the institution's access to funding.

### Liquidity policy and IBRD's involvement as treasury manager are important credit enhancements

IFFIm's liquidity is "Very High" and reflects a prudent liquidity policy, the role of the IBRD as risk manager of its investment portfolio, as well as our view of high access to financial markets to issue bonds.

### Liquidity policy ensures ample coverage of upcoming financial obligations

As stated by IFFIm, its liquidity policy aims to ensure an adequate level of liquid assets to meet its operational requirements, provide predictability of program funding, and support its credit rating. To this end, the policy sets a prudential minimum level of liquidity equivalent to IFFIm's cumulative contracted debt-service payments for the next 12 months, in line with the liquidity policies of other highly rated supranationals.

The treasury manager recalculates and resets the prudential minimum once every quarter. We consider this policy to be very strong since it ensures the ability to service debt for one year in the unlikely event that IFFIm loses market access and is unable to roll over existing debt. Relative to other supranationals rated Aa1, IFFIm's debt service coverage compares well (see Exhibit 3), with the adjusted ratio scoring a "Very High" assessment.

Exhibit 3

### Debt service coverage is comparable to Aa1-rated peers

(Short-term and currently maturing long-term debt, % of liquid assets, 3-year average)



Sources: Banks' financial statements, Moody's Investors Service

IFFIm has consistently held more liquid assets than the prudential minimum set by the policy. As of year-end 2017, the calculated minimum liquidity was \$366.5 million, significantly below the value of IFFIm's liquid assets, which amounted to \$912 million, about 2.5x the prudential minimum. For the five-year period 2013-17, the actual liquid asset holdings were on average 1.8x greater than the prudential minimum. IFFIm's liquidity policy and the liquidity position demonstrated thus far are particularly important given that the entity's debt maturity profile tends to be concentrated in the medium term (see Exhibit 4).

Exhibit 4

**Maturity of outstanding borrowings  
(% of total)**

	2012	2013	2014	2015	2016	2017
<b>1 year or less</b>	<b>21%</b>	<b>33%</b>	<b>22%</b>	<b>47%</b>	<b>38%</b>	<b>25%</b>
<b>1-5 years</b>	<b>74%</b>	<b>64%</b>	<b>74%</b>	<b>51%</b>	<b>59%</b>	<b>70%</b>
<b>Over 5 years</b>	<b>5%</b>	<b>3%</b>	<b>4%</b>	<b>2%</b>	<b>3%</b>	<b>5%</b>

Source: IFFIm

**World Bank involvement in treasury operations and risk management provides institutional strength**

The IBRD carries out IFFIm's financial management function under rules set forth in the Treasury Management Agreement (TMA). As such, there is active management of cash flows, investments and disbursements by a strong institution with a long track record. The TMA is renewed every five years, most recently in 2016.

The IBRD's financial management is very strong, one factor in its own Aaa rating and a strong supporting factor for IFFIm's Aa1 rating. The IBRD's involvement in establishing and managing IFFIm's gearing ratio, liquidity policy and the maturity structure of debt provides confidence that debt repayments will be made on time. The treasury manager has flexibility in delaying commitments and disbursements for programs in order to be within the desired gearing ratio and to maintain liquidity according to the established policy. Furthermore, it has, perhaps more than any other organization, a sense of the credit quality of recipient countries. It will therefore be able to adjust IFFIm's financial metrics in advance in the event of a reduction in donors' scheduled payments, as a result of the grant payment condition, to safeguard IFFIm debt-repayment capacity.

As IFFIm's treasury manager, the IBRD carries out the entity's asset & liability management, namely the management of IFFIm's market risk stemming from foreign-exchange rate and interest-rate risks. Almost all sovereign pledges are denominated in local currency and not US dollars and some outstanding bonds are denominated in other currencies. In addition, interest rate fluctuations can impact the value of sovereign pledges and bonds. To hedge against interest rate and exchange rate risks, IFFIm enters into US dollar floating-rate swaps. Counterparty risk is low because the swap contracts are with the IBRD.

The treasury manager invests liquid assets on IFFIm's behalf according to the following very conservative guidelines, which are similar to the IBRD's own guidelines, and whose goal is to preserve capital rather than generate earnings:

- » Money market instruments must be issued or guaranteed by financial institutions rated A3 or higher
- » Foreign-currency government and agency obligations must be rated Aa3 or higher
- » Local-currency government obligations carry no rating minimum, but are subject to credit approval on a country by country basis
- » Agency or instrumentality of a government, multilateral organization, or other official entity must be rated Aa3 or higher
- » Asset-backed securities must be rated Aaa
- » Corporate securities must be rated Aaa

Currently, around 62% of IFFIm's liquid assets portfolio is invested in sovereign bonds; about 8% of the total portfolio is invested in emerging market sovereign bonds, with no holdings having a rating below A2. Regional exposure is fairly diversified, with Europe representing 53% of total sovereign and sovereign-guaranteed exposures, followed by Asia (37%) and North America (10%).

While IFFIm's investment guidelines are the same as the IBRD's own guidelines, its actual investments are even more conservative than the IBRD's. Holdings are even shorter in maturity, with the weighted average maturity of securities holdings being 10 months and the average maturity of deposits being 10 days.

### Swap collateral posting creatively managed by setting additional limits on IFFIm's indebtedness

According to the swap agreement between IFFIm and the IBRD, after IFFIm's rating was changed from Aaa to Aa1, the IBRD has the right to call collateral above a threshold. Despite passing the threshold, the IBRD has not called collateral and has committed not to call it if doing so would constrain IFFIm's ability to meet its debt obligations. The IBRD made this commitment in line with its responsibilities as treasury manager to ensure that IFFIm has the funding to fulfill its debt obligations. The commitment was first established for one year from July 2013 through June 2014, in line with the IBRD's fiscal year, and has been renewed through 2018.

The IBRD's commitment not to call collateral comes in tandem with a structural change to the limits of IFFIm's indebtedness. A risk management buffer of 12% has been added to the gearing ratio limit. Neither the inputs nor the parameters of the gearing limit model have changed. The IBRD will run the model in the same manner and set a gearing limit to absorb risks from the two main sources of risk (that is, donor default on commitments and the grant payment condition). The risk management buffer results in an effective gearing ratio limit that is lower than that output by the model. The IBRD has sole discretion to adjust the risk management buffer.

We view this structural change positively because it reduces the overall risk taken on by the structure (that is, a lower leverage level) and enables IFFIm to maintain regular financial operations. Posting collateral would lead to additional funding obligations, which would increase the demands on IFFIm's liquidity position. Since swap transactions are frequently marked to market, the collateral positions can often change, thus requiring more active management of liquidity.

The structural change also displays the non-contractual support that IFFIm receives from the IBRD. The financial and institutional strength of the IBRD allows it to innovate solutions like this, which ultimately benefit IFFIm. A weaker organization or an organization whose own mandate does not align with IFFIm's would be less able or willing to support IFFIm in this manner. This development supports our assessment that having the IBRD as treasury manager is a significant source of credit strength for IFFIm.

### Market funding access is high due to diversified investor base

IFFIm's borrowing program can be characterized as modest in size yet diversified. By year-end 2017, total bond issuance since inception amounted to \$6.0 billion with most of that issued in 2006, 2009, 2010, and 2013 (roughly \$1 billion each year). In 2017, bond redemptions were greater than the proceeds from a new bond issuance. The redemption of two bonds amounted to \$530 million, which was partly offset by a \$300 million issuance.

Bonds are issued in four markets: [Japan \(A1 stable\)](#), the UK, [Australia \(Aaa stable\)](#) and the Eurobond market, as well as global benchmark bonds. In November 2017, IFFIm issued a \$300 million bond in the international US dollar benchmark market, the previous issuance was a \$500 million bond in October 2016. IFFIm bonds are also well received in the deep Uridashi market and the organization has returned to this market repeatedly. To hedge currency and interest-rate risk, all bonds are swapped at issuance into US dollar floating rate.

IFFIm entered the sukuk market with an issuance of a three-year, \$500 million bond in 2014. The bond, maturing on 4 December 2017, was oversubscribed. It attracted new investors with 68% of them coming from the Middle East and Africa. The organization took advantage of its newly established position in the sukuk market by issuing another \$200 million sukuk in September 2015.

Despite having a sovereign donor base that is mainly European, including several euro area members, IFFIm has been able to maintain its very low borrowing rates over recent years. Unlike Europe-based MDBs, IFFIm's borrowing costs were not stressed at the height of the European debt crisis. This can be largely attributed to the reputational benefits of having the IBRD as its treasury manager.

In 2015, IFFIm's second sukuk issuance combined with fair value gains on its other borrowings and redemptions of bonds (total value of \$361 million) decreased bonds payable by \$287 million, resulting in lower financing costs for the entity. IFFIm's borrowing costs are below its donors' composite cost. We view it as unlikely that there will be a dislocation in IFFIm's market access, but the liquidity policy discussed above provides additional protection for bondholders.



## Strength of member support: High

### Factor 3

Scale

Very High

High

Medium

Low

Very Low



Contractual support primarily manifests itself in the callable capital pledge, which is a form of emergency support. Extraordinary support is a function of shareholders' ability and willingness to support the institution in ways other than callable capital.

Strength of member support can increase the preliminary rating range determined by combining factors 1 and 2 by as many as three scores.

### Strong donors' ability and willingness to support are counterbalanced by high concentration of pledges

We assess IFFIm's strength of member support as "High." This score balances the expectation of very high contractual and extraordinary support from its donors against the relatively high concentration of pledges, one of the main sources of risk to IFFIm's creditworthiness. Given IFFIm's structure and grant operations, our analysis focuses on the likelihood that donor pledges will fall short of what was originally contracted, potentially hampering its ability to service debt. A reduction in the amount paid-in could result from either a donor breaking its contract with Gavi or a substantial number of recipient countries going into arrears with the IMF, thereby causing significant reductions in donor payments via the grant payment condition. We view the likelihood that a donor would break its contract with Gavi to be very low due not only to the legally binding nature of the pledges, but also the very strong commitment of the donors. Incorporated in the assessment of commitment are measures of donors' ability and willingness to honor pledges.

### IFFIm's contractual support is based on its donors' pledges

The commitments made by IFFIm's donor governments constitute a legally binding contractual obligation that the entity can employ as backing to issue debt and as a financial resource to service it. The six original donors to IFFIm were the UK, France, [Italy \(Baa2 RUR-\)](#), [Norway \(Aaa stable\)](#), [Spain \(Baa1 stable\)](#), and [Sweden \(Aaa stable\)](#). Australia, the [Netherlands \(Aaa stable\)](#) and [South Africa \(Baa3 stable\)](#) also finalized pledges. Since inception, four original donors and two subsequent donors have made additional pledges. In 2011, [Brazil \(Ba2 stable\)](#) pledged the equivalent of \$20 million over 20 years; a grant agreement is pending. In 2016, Australia finalized a AUD 37.5 million pledge, and this year IFFIm has received two new sovereign pledges. In May 2017, IFFIm received pledges from the Netherlands and France, in the amount of \$66.7 million and \$132 million, respectively. Exhibit 5 breaks below down the \$6.5 billion in total outstanding commitments.

Exhibit 5

#### Sovereign donors and pledges as of December 2017

	Original pledge date*	Time period (years)	Total amount (\$ mil)	Share of total (%)	Share of remaining pledges 2018-2030 (%)	Rating** as of Aug 01, 2018
United Kingdom	Oct-06	23	2,980	45.5	49.6	Aa2/STA
France	Oct-06	20	1,906	29.1	31.0	Aa2/POS
Italy	Oct-06	20	635	9.7	7.5	Baa2/RUR-
Spain	Oct-06	20	240	3.7	2.6	Baa1/STA
Norway	Oct-06	15	264	4.0	1.9	Aaa/STA
Sweden	Oct-06	15	38	0.6	0.3	Aaa/STA
South Africa	Mar-07	20	20	0.3	0.2	Baa3/STA
Netherlands	Dec-09	10	181	2.8	1.3	Aaa/STA
Australia	Jun-11	20	283	4.3	5.6	Aaa/STA
			6,548			

\* Additional pledge made by the UK in August 2010; France in December 2007, January 2015 and May 2017; Italy in November 2011; Norway in August 2010; Australia in January 2015 and June 2016; the Netherlands in January 2015, and May 2017

\*\* Government bond rating

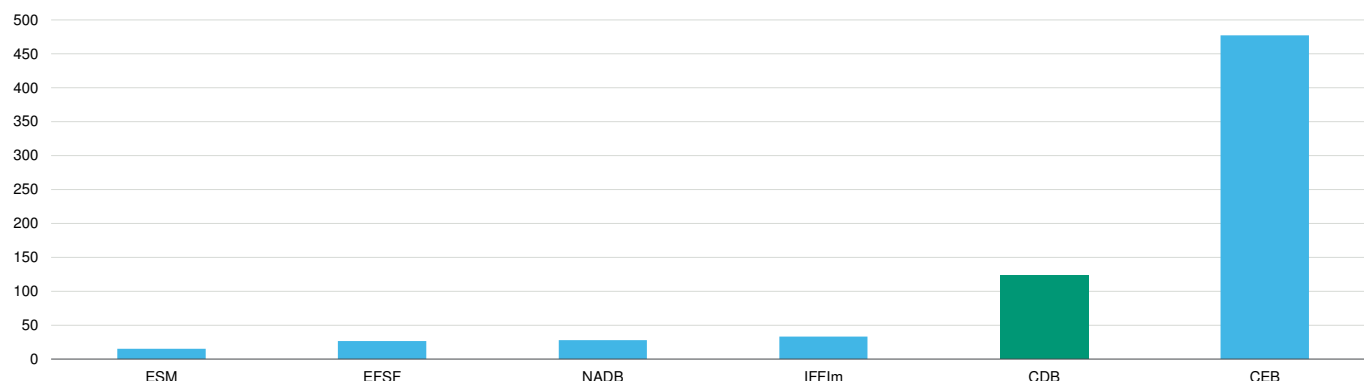
Sources: IFFIm, Moody's Investors Service

The sovereign commitments are legally valid, binding and enforceable payment obligations. Given the legal characteristics of these pledges, these contractual obligations can be considered analogous to the callable capital (CC) that most MDBs have. When assessing the strength of a supranational's contractual support we look at the coverage that CC provides over the entity's current stock of debt. In the specific case of IFFIm, we consider the nominal value of the donors' remaining pledges. When comparing this metric with other supranationals rated Aa1, IFFIm scores well since the coverage that the remaining pledges provide exceeds the total gross debt stock (see Exhibit 6).

Exhibit 6

### Contractual obligations provide ample coverage of debt

(Gross debt over discounted callable/committed capital pledged by members rated Baa3 or higher, %)



Source: Moody's Investors Service

### Ability to honor pledges remains very strong despite some donors' recent weakness

The ability of the donors to honor their commitment can be measured using our government bond ratings, which assess the expected loss an investor may face when holding debt obligations issued by the sovereign. Because bonds represent contracts that the sovereign enters into and commits to paying cash (interest and principal) on a set schedule, we view the government bond ratings as a good proxy and applicable to IFFIm's case.

The weighted median donor rating is Aa2. Since UK pledges account for just under 50% of remaining pledges as the new pledges from France and the Netherlands have been signed in 2017, this calculation is largely determined by the UK's government bond rating, which was changed from Aaa to Aa1 in February 2013 and downgraded further to Aa2 in September 2017. In addition, several other donors' creditworthiness experienced negative pressure over the past few years, namely euro area donors and South Africa, though the latter has stabilized since early 2018.

Despite recent weakness, all the donors have investment grade ratings, and several members are very highly rated. This indicates that there is a very high likelihood that IFFIm will receive the pledges as promised from the sovereign donors with no, or minimal, delays or reductions.

In addition, the annual commitment for each donor is small in the context of the government's total budget. For example, the UK government's annual commitment, while varying by year, averages around £90 million, approximately 0.01% of its total annual revenue. Similarly, France's annual commitment to IFFIm represents an extremely small portion of its total annual budget of around 0.01% of revenue. It seems unlikely, given the relative affordability of the annual amounts, that donors will renege on their commitments.

### Willingness to honor pledges supported by effectiveness in achieving mandate

With IFFIm, as with all supranationals, we assess the willingness of members to provide support in light of the importance of the institution to the member. Regional multilateral development banks, as enactors of economic public policy, are often of strong economic importance to their sovereign members. This is not the case for IFFIm since Gavi is a charity organization and

all immunization programs are located exclusively in non-donor countries. Therefore, the importance to the donors rests on the importance of the charity mandate and IFFIm's ability to help Gavi fulfill that mandate.

Gavi and the financing provided through IFFIm is an integral part of the United Nations' three Millennium Development Goals related to health, targets four, five, and six, which aim to reduce child mortality rates, improve maternal health, and combat HIV/AIDS, malaria and other diseases, respectively. The likelihood that a donor would abandon this goal once they have committed to it is very small, not just because of the gravity of the goal, but also because of the negative political repercussions stemming from a lawsuit over failure to honor commitments to fund immunizations.

In addition, there are no serious questions about IFFIm's role in helping to reach this goal. Independent reviews conducted in recent years and separately commissioned by several different stakeholders spoke positively about IFFIm's effectiveness in accelerating and facilitating funding for Gavi. IFFIm continues to be a very important source of funding for Gavi and expects to disburse over \$850 million to support Gavi programs between 2018 and 2020.

### **Concentration of pledges is a source of credit weakness**

The two largest donors, the UK and France, account for 80% of IFFIm's remaining pledges. This concentration could fall, though only marginally, if new donors make new pledges or current donors make additional pledges.

Overall, however, the concentration, especially the UK's 50% share, is a credit weakness since it exposes IFFIm to a material loss of incoming payments based on the creditworthiness of one donor. That said, despite recent downward revisions to the UK's sovereign rating, IFFIm's solvency and liquidity buffers continue to provide significant protection to IFFIm's bondholders. Additionally, in past years even though the UK had already faced increased negative rating pressures, the government continued to display strong ability and willingness to honor its pledges to IFFIm.

Another source of risk due to concentration of donors' pledges that IFFIm faced in recent years came from the potential default correlation that exists among euro area sovereign donors. France, Italy, Spain, and the Netherlands account for 42% of remaining pledges through 2030. During the euro area debt crisis, the close institutional, economic and financial linkages between the major euro area sovereigns, along with the rating downgrades that three of these four sovereigns experienced, implied that under an extreme stress scenario a large portion of IFFIm's remaining pledges could have been at risk.

The stabilization in credit trends for France, the Netherlands and Spain, even if at lower rating levels than a few years ago, mitigates some of the risks seen for IFFIm in past years. Additionally, since 2014, we have reassessed the default correlation for euro area members because: (1) while the credit pressures facing countries of the monetary union share common characteristics, there also exist some idiosyncratic elements that drive the rating trajectories of individual countries and that would imply a lower mutuality of risk than previously assumed; (2) measures put in place since the start of the euro area crisis should improve the authorities' ability to manage contagion within the system, even that arising from the default of a very large euro area member. Taking these factors together – the improvement in and greater stability of donor creditworthiness and the lower default correlation assumption – we believe IFFIm's creditworthiness would be less immediately affected were any one of its euro area donors to be downgraded.

## Rating range

Combining the scores for individual factors provides an indicative rating range. While the information used to determine the grid mapping is mainly historical, our ratings incorporate expectations around future metrics and risk developments that may differ from the ones implied by the rating range. Thus, the rating process is deliberative and not mechanical, meaning that it depends on peer comparisons and should leave room for exceptional risk factors to be taken into account that may result in an assigned rating outside the indicative rating range. For more information please see our [Supranational Rating Methodology](#).

Exhibit 7

### Supranational rating metrics: International Finance Facility for Immunisation

#### Capital Adequacy

How strong is the capital buffer?

Sub-Factors: Capital Position, Leverage, Asset Performance

Very High   High   Medium   Low   Very Low

+  -

#### Liquidity

How strong is the institutions' shock absorption capacity?

Sub-Factors: Position, Funding

Very High   High   Medium   Low   Very Low

+  -

#### Strength of Member Support

How strong is members' support of the institution?

Sub-Factors: Contractual Support, Extraordinary Support

Very High   High   Medium   Low   Very Low

+  -

#### Intrinsic Financial Strength

Very High   High   Medium   Low   Very Low

+  -

**Rating Range:**  
Aaa-Aa2

**Assigned Rating:**  
Aa1

Source: Moody's Investors Service

## Comparatives

This section compares credit relevant information regarding the International Finance Facility for Immunisation with other supranational entities that we rate. It focuses on a comparison with supranationals within the same rating range and shows the relevant credit metrics and factor scores.

IFFIm and the [European Financial Stability Facility \(EFSF, Aa1 positive\)](#) both rely on guarantees from their members to back debt issuance, and thus exhibit similar credit features, particularly the lack of a loan portfolio or paid-in capital. Our "Very High" assessment of IFFIm's liquidity reflects the institution's ability to obtain debt financing at low cost, as indicated by the narrow spreads of its actively traded bonds. Although lower than those of the EFSF, European Stability Mechanism (ESM) and Council of Europe Development Bank (CEB), IFFIm's seven-year average bond-implied rating is in line with the Aa median and is higher than those of [Caribbean Development Bank \(CDB, Aa1 stable\)](#) and [North American Development Bank \(NADB, Aa1 stable\)](#). Conversely, IFFIm's debt service coverage ratio is somewhat weaker than those reported by peers, which can be partially attributed to its front-loaded debt issuance. IFFIm shares the "High" assessment for strength of member support with EFSF, ESM and NADB, with all four institutions benefiting from member pledges that exceed their total debt stock by at least 100%.

Exhibit 8

### IFFIm's key peers

	Year	IFFIm	EFSF	NADB	CDB	CEB	ESM	Aa Median
Rating/Outlook		Aa1/STA	Aa1/STA	Aa1/STA	Aa1/STA	Aa1/STA	Aa1/STA	--
Total Assets (US\$ million)	2016	0	198,635	1,814	1,599	26,988	177,696	6,472
<b>Factor 1</b>		--	--	High	Very High	Very High	Very High	--
Usable Equity/Gross Loans Outstanding + Equity Operations (%) <sup>[1]</sup>	2016	0.0	N/A	42.8	88.4	20.5	113.3	47.7
Debt/Usable Equity (%) <sup>[1]</sup>	2016	--	--	195.8	73.0	711.1	103.9	136.2
Gross NPLs/Gross Loans Outstanding (%) <sup>[2]</sup>	2016	--	0.0	0.0	0.5	0.0	0.0	0.0
<b>Factor 2</b>		Very High	Very High	High	Very High	Very High	Very High	--
ST Debt + CMLTD/Liquid Assets (%) <sup>[3]</sup>	2016	61.7	N/A	1.0	1.7	36.6	19.0	27.3
Bond-Implied Ratings (Long-Term Average)	2010-2016	Aa3	--	--	--	--	--	--
Intrinsic Financial Strength (F1+F2)		Very High	Very High	High	Very High	Very High	Very High	--
<b>Factor 3</b>		High	High	High	Very High	Medium	High	--
Total Debt/Discounted Callable Capital (%) <sup>[4]</sup>	2016	37.4	26.7	22.1	111.9	507.2	15.1	111.9
Weighted Median Shareholder Rating (Year-End)	2016	Aa1	Aa2	A1	Ba1	A2	Aa2	A1
<b>Rating Range (F1+F2+F3)</b>		Aaa-Aa2	Aaa-Aa2	Aaa-Aa2	Aaa-Aa2	Aaa-Aa2	Aaa-Aa2	--

[1] Usable equity is total shareholder's equity and excludes callable capital

[2] Non performing loans

[3] Short-term debt and currently-maturing long-term debt

[4] Callable capital pledge by members rated Baa3 or higher, discounted by Moody's 30-year expected loss rates associated with ratings.

Sources: Moody's Investors Service, respective MDB financial statements

## DATA AND REFERENCES

### Rating history

Exhibit 9

#### International Finance Facility for Immunisation (IFFIm)<sup>[1]</sup>

	Issuer Rating		Senior Unsecured	Outlook	Date
	Long-term	Short-term			
Outlook Changed	--	--	--	STA	Aug-14
Rating Lowered	Aa1	--	Aa1	--	Mar-13
Outlook Changed	--	--	--	NEG	Dec-12
Rating Assigned	--	P-1	Aaa	--	Nov-06
Changed to definitive from prospective	Aaa	--	--	--	Oct-06
Rating and Outlook Assigned	(P)Aaa	--	--	STA	Aug-06

Notes: [1] Table excludes rating affirmations. Please visit the issuer page for [IFFIm](#) for the full rating history.

Source: Moody's Investors Service

## Annual statistics

Exhibit 10

## International Finance Facility for Immunisation (IFFIm)

	2011	2012	2013	2014	2015	2016	2017
<b>Balance Sheet, USD Thousands</b>							
<b>Assets</b>							
Cash & Equivalents	692	549	22	3,349	1,197	81	14
Securities [1]	850,958	546,648	1,024,771	1,011,747	985,108	863,214	911,776
Derivative Assets	269,107	133,239	55,692	2,494	14,915	10,827	1,817
Other Assets [2]	3,404,209	3,562,479	3,362,170	3,152,876	2,735,697	2,355,136	2,588,323
<b>Total Assets</b>	<b>4,524,966</b>	<b>4,242,915</b>	<b>4,442,655</b>	<b>4,170,466</b>	<b>3,736,917</b>	<b>3,229,258</b>	<b>3,501,930</b>
<b>Liabilities</b>							
Bonds	2,573,414	1,959,039	2,168,030	1,892,780	1,605,984	1,381,669	1,181,141
Derivative Liabilities	755,794	1,145,828	1,194,230	1,088,961	859,903	577,518	768,689
Other Liabilities [3]	419,265	707,741	507,780	508,327	507,776	458,101	508,032
<b>Total Liabilities</b>	<b>3,748,473</b>	<b>3,812,608</b>	<b>3,870,040</b>	<b>3,490,068</b>	<b>2,973,663</b>	<b>2,417,288</b>	<b>2,457,862</b>
<b>Net Assets/Restricted Funds</b>	<b>776,493</b>	<b>430,307</b>	<b>572,615</b>	<b>680,398</b>	<b>763,254</b>	<b>811,970</b>	<b>1,044,068</b>
<b>Memo</b>							
Other borrowings by:							
IFFIm Sukuk Company Limited	0	0	0	0	499,000	502,000	0
IFFIm Sukuk Company II Limited	0	0	0	0	199,000	200,000	200,000

**Notes:**

[1] Funds held in trust

[2] Sovereign pledges and prepayments

[3] Grants payable to Gavi and other liabilities

Sources: IFFIm, Moody's Investors Service

Exhibit 11

## International Finance Facility for Immunisation (IFFIm)

	2011	2012	2013	2014	2015	2016	2017
<b>Income Statement, USD Thousands</b>							
<b>Net Interest Income</b>	<b>-158,353</b>	<b>-97,665</b>	<b>-73,960</b>	<b>-48,378</b>	<b>-28,570</b>	<b>-9,630</b>	<b>-7,542</b>
Interest Income	8,046	6,282	3,752	2,950	4,784	8,224	15,043
Interest Expense	166,399	103,947	77,712	51,328	33,354	17,854	22,585
<b>Net Non-Interest Income</b>	<b>191,198</b>	<b>147,482</b>	<b>224,967</b>	<b>162,524</b>	<b>116,215</b>	<b>112,599</b>	<b>293,753</b>
Net Commissions/Fees Income	0	0	0	0	0	0	0
Other Income	191,198	147,482	224,967	162,524	116,215	112,599	293,753
<b>Other Operating Expenses</b>	<b>209,527</b>	<b>396,003</b>	<b>8,699</b>	<b>6,363</b>	<b>4,789</b>	<b>54,253</b>	<b>54,113</b>
Treasury manager's fees and governance costs	5,318	5,374	4,977	5,111	4,163	4,026	3,746
Program grants to GAVI	200,000	390,000	0	0	0	50,000	50,000
<b>Net Income (Loss)</b>	<b>-176,682</b>	<b>-346,186</b>	<b>142,308</b>	<b>107,783</b>	<b>82,856</b>	<b>48,716</b>	<b>232,098</b>

Sources: IFFIm, Moody's Investors Service

Exhibit 12

## International Finance Facility for Immunisation (IFFIm)

	2011	2012	2013	2014	2015	2016	2017
<b>Financial Ratios</b>							
<b>Liquidity, %</b>							
St Debt + CMLTD / Liquid Assets	89.8	76.7	70.7	41.7	76.5	61.6	32.0
Bond-Implied Rating	Aaa	A1	Baa2	Baa2	--	--	--
Liquid Assets / Total Debt	33.1	27.9	47.3	53.5	61.3	62.5	77.2
Liquid Assets / Total Assets	18.8	12.9	23.1	24.3	26.4	26.7	26.0
Liquid Assets/Prudential Minimum (X) [1]	1.4	1.3	1.3	2.0	1.2	1.5	2.5
<b>Other Ratios, %</b>							
Gearing Ratio Limit [2]	70.2	69.3	69.2	69.3	69.7	69.8	70.2
Gearing Ratio (Actual) [3]	44.0	43.2	44.7	40.0	33.5	29.7	18.8
Weighted Median Donor Rating (Year-End)	Aaa	Aaa	Aa1	Aa1	Aa1	Aa1	Aa2

**Notes:**

[1] IFFIm maintains a prudential minimum level of liquidity equivalent to its cumulative contracted debt service payments for the next twelve months.

[2] Risk Management Buffer is 12%

[3] Net debt as percent of the present value of donor pledges

Sources: IFFIm, Moody's Investors Service



## Related websites and information sources

- » [Sovereign and supranational risk group web page](#)
- » [Sovereign and supranational rating list](#)
- » [The IFFIm website](#)

MOODY'S has provided links or references to third party World Wide Websites or URLs ("Links or References") solely for your convenience in locating related information and services. The websites reached through these Links or References have not necessarily been reviewed by MOODY'S, and are maintained by a third party over which MOODY'S exercises no control. Accordingly, MOODY'S expressly disclaims any responsibility or liability for the content, the accuracy of the information, and/or quality of products or services provided by or advertised on any third party web site accessed via a Link or Reference. Moreover, a Link or Reference does not imply an endorsement of any third party, any website, or the products or services provided by any third party.

## Moody's related publications

- » **Rating Action:** [Moody's affirms Aa1 issuer and bond ratings of the International Finance Facility for Immunisation \(IFFIm\) with a stable outlook](#), 17 January 2018
- » **Credit Opinion:** [International Finance Facility for Immunisation – Aa1 Stable: Update following affirmation of rating and outlook](#), 19 January 2018
- » **Rating Methodology:** [Multilateral Development Banks and Other Supranational Entities](#), 29 March 2017

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

## Endnotes

- [1](#) A charity established in 2000. As a public-private partnership, Gavi's donors are governments, corporations, foundations and private individuals.
- [2](#) The world's poorest countries are defined as those with a per capita gross national income (GNI) of less than \$1,580. Gavi currently supports 73 countries, and 47 of those countries are eligible to apply for new immunization programs with Gavi.

© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody.com](http://www.moody.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody.com](http://www.moody.com) for the most updated credit rating action information and rating history.

REPORT NUMBER

1134474