

INSURANCE NEWSLETTER

Managing Editor

Sandy Sharp
Director-Advisory Services
sandy.sharp@moodys.com

Contact Us

Americas
+1.212.553.1653
clientservices@moodys.com

Europe
+44.20.7772.5454
clientservices.emea@moodys.com

Asia-Pacific (Excluding Japan)
+85.2.3551.3077
clientservices.asia@moodys.com

Japan
+81.3.5408.4100
clientservices.japan@moodys.com

Sign Up

Subscribe at
www.moodysanalytics.com/insuranceinsight
to automatically receive your monthly copy.

Regulatory Insight

Key Developments at a Glance

This newsletter provides information about key developments in insurance regulations worldwide. New articles are sorted by country and associated with keywords. Hyperlinks provide direct access to the information sources.

KEY DEVELOPMENTS

This has been a quiet month for new regulatory developments.

The latest newsletter from the International Association of Insurance Supervisors (IAIS) highlights their new Self-Assessment and Peer Review (SAPR) program. Initially, this is a self-assessment by national regulators against lists of questions prepared by the IAIS. Each list focuses on a specific topic such as Supervisory Process or Group Wide Supervision. The national self-assessments are supported by reviews from regional coordinators and implementation partners to improve the consistency of completion. The IAIS program aggregates reviews, groups them and examines them for common themes. The first set of SAPR reviews are already underway. With this program the IAIS is clearly looking beyond its current primary role, as a standard setter, to monitoring and enforcing implementation. There is a clear parallel with the evolving role that EIOPA has outlined for itself – Gabriel Bernardino has spoken about the role EIOPA will take in ensuring consistent implementation of Solvency II across the 28 EU states.

In last month's editorial, I highlighted BaFin's 2015 Annual Report. This month BaFin produced an update on the "day 1 reporting" and the first quarterly reporting under Solvency II. Rather worryingly, the SCR coverage ratio, for the 84 Life insurers that BaFin regulates, showed a noticeable drop over the first quarter. However, the initial average level of SCR Coverage ratio was very high. Interestingly, BaFin is the only regulator to have made an announcement on the impact of the move to Solvency II.

Table of Contents

International	3
Europe	6
European Union	6
Germany	7
United Kingdom	7
Asia Pacific	8
Australia	8
Malaysia	8
Singapore	9
Glossary	10

International

Key Developments

Report to G20 Leaders on Financial Regulatory Reforms

- FSB

August 31, 2016

Type of Information:
Report

The Financial Stability Board (FSB) published a letter from its Chair Mark Carney to Group of 20 Countries (G20) Leaders, along with the second annual report on the implementation and effects of the G20 financial regulatory reforms. The letter highlights the following:

- » The G20 financial reforms are working—in the face of recent shocks the financial system has continued to function effectively, dampening aftershocks rather than amplifying them.
- » The financial system is changing to rely more on markets and less on banks—this is a major positive development, but one that also raises new vulnerabilities, which the FSB will address with its continued work to promote resilient market-based finance.
- » Ongoing support of the G20 leaders is required to implement the reforms fully, consistently, and promptly—in particular, support is required to implement the critical measures to end too-big-to-fail.
- » Developments in recent years raise the importance of new measures to support a more resilient, inclusive globalization built on sustainable cross-border investment.

Additionally, the FSB's second annual report concludes that implementation progress remains steady, but uneven, and the strengthened resilience due to the reforms has stood the global financial system in good stead. The largest internationally active banks are considerably more resilient than before the crisis, and remain on track to meet the Basel III capital and liquidity standards. Importantly, this improvement has been achieved while maintaining the overall provision of credit to the real economy.

Implementation of policies to end too-big-to-fail has advanced the most for global systemically important banks (G-SIBs), but substantial work remains to build effective resolution regimes and to operationalize resolution plans for cross-border firms. The report also highlights that implementation of resolution reforms is significantly less advanced in the insurance sector, although crisis management groups have been established and recovery plans adopted for most global systemically important insurers (G-SIIs). Progress has also been made in strengthening the resilience of financial markets, although additional efforts are needed to implement reforms to over-the-counter (OTC) derivatives markets and to transform shadow banking into resilient market-based finance. In this respect, work is ongoing to strengthen market infrastructure and address vulnerabilities in market-based finance and asset management activities.

The FSB, through the Standing Committee on Standards Implementation (SCSI), coordinates and oversees the monitoring of the implementation of agreed financial reforms and its reporting to the G20. The FSB reviews the list of priority areas annually in light of policy developments at the international level.

Links: [Press Release](#), [FSB Chair's Letter to G20 Leaders](#), [Second Annual Report](#), [Implementation Monitoring](#), [Priority Areas](#), [Implementation Progress Dashboard](#)

Keywords: *Financial Reform, G20*

Monthly Newsletter

- IAIS

August 23, 2016

Type of Information:
Report

The International Association of Insurance Supervisors (IAIS) published its August 2016 newsletter.

This issue of the newsletter highlights that IAIS has clearly intensified workstreams related to ComFrame, the Insurance Capital Standard (ICS), Insurance Core Principles (ICPs), and G-SII. However, standard-setting alone does not have a direct impact on insurance regulation and supervision and therefore the implementation of standards must also be a strategic priority. As a standard-setting body with a global membership of approximately 200 supervisory authorities, identifying the challenges supervisors face in implementation is of critical importance.

In this context, the IAIS developed a Self-Assessment and Peer Review (SAPR) program. The assessments, which are conducted on a thematic basis, provide members with an overview of their observance of each standard of the assessed ICPs and result in an aggregate report. Aggregate reports for the thematic topics of market conduct and Solvency and Solvency-related Issues are being drafted. Preliminary findings have been shared with the Working Groups responsible for reviewing the ICPs. Additionally, assessments on supervisory cooperation and reinsurance and macro-prudential surveillance are underway and should conclude in early 2017. IAIS assessments have taken on more significance as the International Monetary Fund (IMF) and World Bank Financial Sector Assessment Program assessments have become less frequent for a large number of supervisory authorities.

Keyword: *SAPR*

Guidance Papers on Resolution Planning and Fifth Report to the G20 on Progress in Resolution

- FSB

August 18, 2016

Type of Information:
Guideline

The FSB published two final guidance papers, along with a progress report on resolution, to assist the resolution planning work of authorities and firms, as part of the policy agenda to end "too-big-to-fail":

- » *Guiding Principles on the Temporary Funding Needed to Support the Orderly Resolution of a G-SIB:* The guiding principles seek to address the risk of banks having insufficient liquidity to maintain critical operations during a resolution. They are intended to ensure that temporary funding is available to enable effective resolution of G-SIBs without bail-out by the public sector.
- » *Guidance on Arrangements to Support Operational Continuity in Resolution:* The guidance sets out arrangements to support the continuity of critical shared services, such as information technology infrastructure and software-related services, which are necessary to maintain a firm's critical functions in resolution. The public consultation for this guidance was issued in November 2015 and this revised version incorporates the feedback received.
- » *Resilience through resolvability—moving from policy design to implementation:* This is the FSB's fifth report to the G20 on progress in resolution. The report reviews achievements so far and sets out further actions to fully implement the Key Attributes and ensure that all global systemically important financial institutions are resolvable. It also reports the findings from the second round of the Resolvability Assessment Process G-SIBs and the initial results from the first Resolvability Assessment Process for G-SIBs.

While commenting on these developments, Elke König, Chair of the FSB Resolution Steering Group and Chair of the European Single Resolution Board, emphasized that good progress has been made. However, further work is required to establish effective policies and regimes, particularly for central counterparties (CCPs) and systemic insurers. He also highlighted that the steps outlined in the report to the G20, once implemented, will enable resolution of firms at no cost to the taxpayers. To ensure further progress, the FSB's priorities for the remainder of 2016 and 2017 are:

- » Develop further guidance on CCP resolution, building on the discussion paper on *Essential Aspects of CCP Resolution Planning*, which identifies elements that are core to the development of effective resolution strategies and plans for CCPs
- » Finalize the remaining elements of the total loss-absorbing capacity (TLAC) standard, including guidance on the implementation of internal TLAC and final proposals on TLAC holdings and TLAC disclosures
- » Develop further guidance to support the resolution planning work of authorities and firms, including on ways in which access to financial market infrastructures can be maintained in resolution and on the operational execution of bail-in
- » Develop a Key Attributes assessment methodology for insurers and monitor implementation of the guidance on *Developing Effective Resolution Strategies and Plans for Systemically Important Insurers*

Links: [Press Release](#), [Guiding Principles on the Temporary Funding Needed to Support Orderly Resolution of a G-SIB](#), [Guidance on Arrangements to Support Operational Continuity in Resolution](#), [Fifth Report to the G20 on Progress in Resolution](#), [Essential Aspects of CCP Resolution Planning](#), [Developing Effective Resolution Strategies and Plans for Systemically Important Insurers](#)

Keywords: G-SIB, G-SII, RRP

Forthcoming Insurance Contracts Standard: Project Updates

- IASB

August 10, 2016

Type of Information:
Statement

The International Accounting Standards Board (IASB) updated the webpage for the insurance contracts project. The updates include:

- » Information on the current stage of topic-based fieldwork, which includes the fieldwork questionnaire provided to the participants
- » Statement of the IASB feedback on the 2013 Exposure Draft Insurance Contracts
- » The effect of board re-deliberations on the 2013 Exposure Draft, a staff paper indicating how the proposals in the 2013 Exposure Draft Insurance Contracts would change as a result of the IASB's tentative decisions

Keywords: IFRS 4, Insurance Contracts

Peer Review on Implementation of the Principles of Corporate Governance

- FSB

August 08, 2016

Type of Information:
Guideline

The FSB launched a peer review on the implementation of the G20/Organisation for Economic Co-Operation and Development (OECD) Principles of Corporate Governance. The principles have been adopted as one of the FSB's Key Standards for Sound Financial Systems serving FSB, G20, and OECD members.

The review aims to assess the application of these principles to publicly listed, regulated financial institutions by the FSB member jurisdictions. The objective of this assessment is to identify the effective practices and the areas in which good progress has been made, while noting gaps and areas of weakness. It will also inform work that is underway to revise the OECD's Assessment Methodology and will provide input to governance-related aspects of the FSB's broader work on conduct for financial institutions. World Bank uses the OECD's assessment methodology as the basis for country assessments that are undertaken as part of its Corporate Governance Report of Standards and Codes initiative.

The FSB invites feedback from financial institutions, industry and consumer associations, and other stakeholders on the areas covered by the peer review. The last date to submit the feedback is September 09, 2016, including comments on the following:

- » The design of corporate governance frameworks, including legal and regulatory powers, to promote transparent and fair markets and for the efficient allocation of resources
- » How the corporate governance framework should protect and facilitate the exercise of shareholders' rights and ensure equitable treatment of all shareholders, including minority and foreign shareholders
- » Ways in which the corporate governance framework can recognize the rights of stakeholders and encourage active co-operation between the financial institution and stakeholders in creating wealth, jobs, and the sustainability of financially firms
- » How the corporate governance framework can ensure that timely and accurate disclosure is made on all material matters regarding the financial institution, including its financial situation, performance, ownership, and governance
- » How the corporate governance framework can ensure the strategic guidance of the financial institution, the effective monitoring of management by the Board, and the Board's accountability, including to the shareholders

A questionnaire to collect information from national authorities has been distributed to the FSB members. The responses will be analyzed and discussed by the FSB later this year. The peer review report will be published in early 2017.

Links: [Press Release](#), [Details of Thematic Peer Review](#), [Principles of Corporate Governance](#), [Key Standards for Sound Financial System](#)

Keywords: Corporate Governance

Europe

European Union

Key Developments

Published Answers to Regulation-Related Questions

- EIOPA

August 05, 2016

Type of Information: Q&A

This month European Insurance and Occupational Pensions Authority (EIOPA) published answers to questions on the following topics:

- » Guidelines on valuation of technical provisions
- » Guidelines on reporting and public disclosure
- » Final report on the implementing technical standards (ITS) on the templates for the submission of information to the supervisory authorities (CP-14-052)
- » Final report on the ITS on procedures, formats, and templates of the solvency and financial condition report (CP-14-055)

The Q&A tool of EIOPA can be used to submit questions on the regulatory tools that have been published by EIOPA. These include guidelines, but also particular (regulatory) processes such as the publication of the risk-free rate. All stakeholders, including financial institutions and supervisors, can submit questions. The Q&A tool is intended to ensure consistent and effective application of regulations in the European economic area.

Link: [Q&A on Regulation](#)

Keyword: ITS

Consultation on the Presentation Format of Insurance Product Information Document

- EIOPA

August 01, 2016

Type of Information: Regulation

Regulatory Status: Proposed Rule

The EIOPA published a consultation paper on draft ITS for standardizing the presentation format of the Insurance Product Information Document (IPID).

This consultation aims to collect public feedback about the presentation of the IPID, including on features such as its length, the use of icons and symbols, and possible advantages of digital and paper formats. EIOPA's proposals for the IPID are based on two phases of consumer testing that were conducted among more than 3,000 consumers in a representative sample of member states. The IPID will be provided to the customer prior to the conclusion of a non-life insurance contract, in accordance with the provisions of the Insurance Distribution Directive (IDD). The purpose of the IPID is to ensure that key information about non-life insurance products is presented to the customer in a standardized format, which they can use to understand the product offered and to compare different products. The key information to be included in the IPID is determined by the IDD.

Comments Due Date: October 24, 2016

Effective Date: N/A

First Reporting Date: N/A

Links: [News Release](#), [Consultation Paper](#)

Keywords: IDD, IPID, ITS

Germany

Key Developments

New Solvency II Reporting: Figures Reported for Insurance Classes for the First Time

- BaFin

August 09, 2016

Type of Information:
Statement

BaFin, the Federal Financial Supervisory Authority in Germany, published its findings from the figures reported for the individual classes of insurance for the first time since the new supervisory regime, Solvency II, entered into force on January 01, 2016.

The evaluation of the "day 1 reporting" and the first quarterly reports revealed that apart from a few exceptions in property and casualty insurance, all insurers were able to provide sufficient coverage for the new solvency capital requirement (SCR). However, in the first quarter of 2016, SCR ratios deteriorated considerably due to the difficult capital market environment, in particular in life insurance. The key findings by the class of insurance follow:

- » *Life insurance:* On January 01, 2016, all of the 84 undertakings in the life insurance sector reported sufficient SCR coverage. The SCR coverage ratio of the segment totaled 283%. During the first quarter, however, it deteriorated noticeably. Nearly half of the life insurers make use of both the volatility adjustment and the transitional measures.
- » *Property and casualty insurance:* The average coverage ratio was 278% at the beginning of the year and remained virtually unchanged at 280% in first quarter. On January 01, 2016, three of the 186 property and casualty insurers subject to the reporting requirement failed to provide sufficient SCR coverage. By the end of first quarter, this number was down to two. Thanks to supervisory measures, one of these two undertakings now meets the SCR.
- » *Health insurance:* All of the 41 health insurance undertakings under BaFin's supervision reported sufficient coverage on both of the reporting dates mentioned. Eight health insurers apply specific measures for the assessment of long-term guarantees under Solvency II, along with the transitional measures.
- » *Reinsurance:* As of January 01, 2016, the reinsurance sector showed an average SCR coverage of 326%, which had declined slightly to 320% by the end of first quarter. Five reinsurers make use of a partial or full internal model.

Starting in 2017, all primary insurers, reinsurers, and insurance groups will have to publish a report on their solvency and financial condition under Solvency II.

Links: [Notification](#), [Summary of Results](#) (to original language material)

Keywords: Regulatory Reporting, Solvency II

United Kingdom

Key Developments

Policy Statement and Supervisory Statement on Solvency II Remuneration Requirements

- PRA

August 12, 2016

Type of Information:
Statement

The Prudential Regulation Authority (PRA) published a policy statement (PS 22/16) and a supervisory statement (SS 10/16) addressing Solvency II remuneration requirements. The PRA policy statement PS 22/16 provides feedback to responses on consultation paper (CP 13/16) "Solvency II: Remuneration requirements" and includes a final supervisory statement SS 10/16 on the Solvency II remuneration requirements, along with a Remuneration Policy Statement reporting template for the PRA category 1 and 2 firms. The supervisory statement SS 10/16 provides guidance for PRA category 1 and 2 Solvency II firms in complying with the remuneration requirements.

Links: [PS 22/16](#), [SS 10/16](#)

Keywords: PS22/16, Remuneration Requirements, SS10/16

Asia Pacific

Australia

Key Developments

Delay in Implementation of Margining and Risk Mitigation for Non-Centrally Cleared Derivatives

- APRA

August 22, 2016

Type of Information: Statement

The Australian Prudential Regulation Authority (APRA) published a letter to communicate to all APRA-regulated institutions (other than private health insurers), its decision of deferring the implementation of the margin and risk mitigation requirements beyond September 01, 2016. These requirements have been specified in CPS 226, which is the Prudential Standard on margining and risk mitigation for non-centrally cleared derivatives. This deferment is due to the delays in implementation of the internationally agreed framework in other major derivative markets.

On February 25, 2016, APRA had released for consultation, a discussion paper on margining and risk mitigation for non-centrally cleared derivatives, along with the new prudential standard CPS 226. As part of that consultation, APRA had proposed that CPS 226 would formally commence on September 01, 2016, with the new margining requirements phased-in from September 2016 to September 2020. The final version, which will consider feedback received during the consultation period, will be released in the near future, thus allowing industry participants to complete their preparations for the new standard. However, APRA will not set a commencement date for CPS 226 at this stage. APRA will continue to monitor progress in other jurisdictions and will advise the Australian implementation date, along with the revised phase-in schedule for margin requirements, in due course.

Links: [Notification, CPS 226 and Related Documents](#)

Keywords: Initial Margin, Non-Centrally Cleared Derivatives, Variation Margin

Final Requirements for Non-Capital Components of the Supervision of Conglomerate Groups

- APRA

August 08, 2016

Type of Information: Regulation

Regulatory Status: Final Rule

APRA released the final requirements for governance and risk management components of the framework for supervision of banking and insurance conglomerate groups (Level 3 framework). APRA also released a letter in response to the feedback received on the March 2016 consultation on these new requirements.

Four submissions were received on the March 2016 consultation. As a result of the feedback, minor clarifications have been made, with details included in the response letter. APRA will formally determine the Level 3 Heads and members of each of the eight Level 3 groups between now and July 01, 2017, when these requirements take effect.

APRA had announced in March 2016 that it was deferring capital requirements for conglomerates until a number of other domestic and international policy initiatives are further progressed. APRA does not propose to initiate new consultations on the capital component of the conglomerate framework before mid-2017.

Comments Due Date: N/A

Effective Date: July 01, 2017

First Reporting Date: N/A

Links: [Media Release, Response Letter and Other Relevant Documents](#)

Keywords: Financial Conglomerates

Malaysia

Key Developments

Revised Corporate Governance Standards

- BNM

August 03, 2016

Type of Information: Guideline

Bank Negara Malaysia (BNM) released the revised corporate governance standards, which are aimed at raising the bar for financial institutions.

BNM expects financial institutions to implement the minimum standards set out in the policy document. Institutions are expected to demonstrate that their governance arrangements are operating effectively and remain appropriate, given their size, nature of business, complexity of activities, structure, and systemic importance. This policy document comes into effect on August 03, 2016, subject to the transitional arrangements set out in Part G.

Link: [Corporate Governance Standards](#)

Keywords: Corporate Governance

Singapore

Key Developments

Circular on Margin Requirements for Non-Centrally Cleared Derivatives

- MAS

August 22, 2016

Type of Information:
Statement

Monetary Authority of Singapore (MAS), in its circular (MPI 01/2016), is communicating its decision to defer implementation of the margin requirements for non-centrally cleared OTC derivative trades beyond September 01, 2016.

Earlier, on October 01, 2015, MAS had issued a consultation proposing to implement these margin requirements in a phased-in manner from September 01, 2016. MAS has been in close consultations with the industry in Singapore and regional regulators on a coordinated implementation of the margin requirements. Taking into account cross-border coordination issues as well as the level of industry preparedness, the MAS has concluded that deferring the implementation is the most practical way forward. This will avoid unintended disruptions to financial markets and allow more time for the industry in Singapore to implement the new requirements. MAS remains committed to the implementation of margin requirements for uncleared derivatives in an internationally coordinated timeframe.

The circular also states that MAS will remain committed to the implementation of margin requirements for uncleared derivatives in an internationally coordinated timeframe. MAS will issue the final rules on margin requirements for uncleared derivatives in the coming months and expects financial institutions to continue their preparation for the exchange of margins on uncleared derivatives. MAS will also monitor progress in the implementation schedules of other major markets and will announce a revised phase-in schedule for Singapore in due course.

Keywords: *Initial Margin, Non-Centrally Cleared Derivatives, Variation Margin*

Third Consultation on RBC 2 Review: Issuance of Supplementary Technical Specifications for QIS 2

- MAS

August 15, 2016

Type of Information:
Regulation

Regulatory Status:
Proposed Rule

The MAS had published its third consultation paper on the review of risk-based capital (RBC) framework for insurers in Singapore on July 15, 2016. The paper stated that MAS was working with the Singapore Actuarial Society on certain design parameters for the matching adjustment and illiquidity premium. MAS is now issuing a circular (ID 05/16) on the supplementary technical specifications that are designed to assess the impact of matching adjustment and illiquidity premium proposals under the second quantitative impact study (QIS 2) and to gather additional information that might be helpful to refine the proposals.

The supplementary specifications also contain the instructions for insurers to conduct some sensitivity tests related to market movements; for example, widening of credit spread and stresses on the Ultimate Forward Rate (UFR) and risk-free rates. These supplementary specifications should be read in conjunction with the third consultation paper on RBC 2 review.

Comments Due Date: *October 20, 2016*

Effective Date: *N/A*

First Reporting Date: *N/A*

Keywords: *QIS 2, RBC 2*

Glossary

APRA	Australian Prudential Regulation Authority
BaFin	Federal Financial Supervisory Authority, Germany
BNM	Bank Negara Malaysia
CCP	Central Counterparty
EIOPA	European Insurance and Occupational Pensions Authority
FSB	Financial Stability Board
G20	Group of 20 Countries
G-SIB	Global Systemically Important Bank
G-SII	Global Systemically Important Insurer
IAIS	International Association of Insurance Supervisors
IASB	International Accounting Standards Board
ICP	Insurance Core Principle
ICS	Insurance Capital Standard
IDD	Insurance Distribution Directive
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IPID	Insurance Product Information Document
ITS	Implementing Technical Standards
MAS	Monetary Authority of Singapore
OECD	Organization for Economic Co-operation and Development
OTC	Over-the-Counter
PRA	Prudential Regulation Authority
Q&A	Questions & Answers
QIS	Quantitative Impact Study
RBC	Risk-Based Capital Framework
RRP	Recovery and Resolution Plan
SAPR	Self-Assessment and Peer Review
SCR	Solvency Capital Requirement
SCSI	Standing Committee on Standards Implementation
TLAC	Total Loss-Absorbing Capacity
UFR	Ultimate Forward Rate

© 2016 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. ("MIS") AND ITS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("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 FOR RETAIL INVESTORS TO CONSIDER MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS IN MAKING ANY 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.

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.

MIS, 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 MIS have, prior to assignment of any rating, agreed to pay to MIS 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 under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

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 657AFSL 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 clients. It would be dangerous for "retail clients" to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.