

DATA REPORT

28 October 2021

CLIENT SERVICES

Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100
EMEA 44-20-7772-5454

Cross-Sector

Market Data Highlights

The latest market data from Weekly Market Outlook. Click <u>here</u> for access to the full WMO.

SPREADS

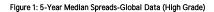
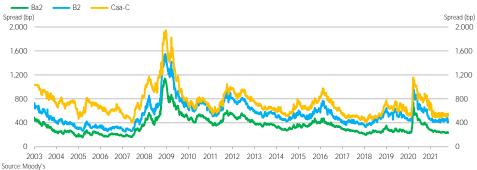




Figure 2: 5-Year Median Spreads-Global Data (High Yield)



Moody's Analytics markets and distributes all Moody's Capital Markets Research, Inc. materials. Moody's Capital Markets Research, Inc. is a subsidiary of Moody's Corporation. Moody's Analytics does not provide investment advisory services or products. For further detail, please see the last page.

CDS MOVERS

Figure 3. CDS Movers - US (October 20, 2021 – October 27, 2021)

CDS Implied Rating Rises	CDS Impli	ed Ratings	_
Issuer	Oct. 27	Oct. 20	Senior Ratings
DTE Energy Company	A1	А3	Baa2
Air Products and Chemicals, Inc.	Aa2	A1	A2
Boeing Company (The)	Baa3	Ba1	Baa2
American Tower Corporation	Baa2	Baa3	Baa3
Cargill, Incorporated	A2	А3	A2
Sysco Corporation	Baa1	Baa2	Baa1
Kimberly-Clark Corporation	Aa3	A1	A2
HP Inc.	Baa2	Baa3	Baa2
Martin Marietta Materials, Inc.	A2	А3	Baa2
CenterPoint Energy Resources Corp.	Baa1	Baa2	A3

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	Oct. 27	Oct. 20	Senior Ratings
Amazon.com, Inc.	A2	Aa3	A1
Bank of America Corporation	Baa1	A3	A2
International Business Machines Corporation	A3	A2	A3
Walt Disney Company (The) (Old)	Aa2	Aa1	A2
General Motors Company	Ba1	Baa3	Baa3
Bank of New York Mellon Corporation (The)	A3	A2	A1
Chevron Corporation	Aa3	Aa2	Aa2
Honeywell International Inc.	Aa2	Aa1	A2
Williams Companies, Inc. (The)	Baa3	Baa2	Baa2
PNC Financial Services Group, Inc.	A2	A1	A3

CDS Spread Increases	_		CDS Spreads	
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff
Xerox Corporation	Ba1	288	262	26
American Axle & Manufacturing, Inc.	B2	424	401	23
Murphy Oil Corporation	Ba3	327	306	22
Nabors Industries, Inc.	Caa2	520	499	21
K. Hovnanian Enterprises, Inc.	Caa3	843	824	19
Amkor Technology, Inc.	B1	168	150	19
DPL Inc.	Ba1	143	125	18
Rite Aid Corporation	Caa2	915	898	17
Meritor, Inc.	B1	239	223	16
Carnival Corporation	B2	401	388	13

CDS Spread Decreases	_		CDS Spreads	
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff
Talen Energy Supply, LLC	Caa1	2,165	2,299	-134
Macy's Retail Holdings, LLC	Ва3	246	279	-33
United States Steel Corporation	B3	366	389	-23
Tenet Healthcare Corporation	Caa1	270	289	-20
United States Cellular Corporation	Ba2	121	139	-18
Pactiv LLC	Caa1	446	463	-16
Mattel, Inc.	B1	187	201	-14
Olin Corporation	Ba2	172	185	-13
Whirlpool Corporation	Baa1	70	81	-11
American Tower Corporation	Baa3	61	71	-10

Source: Moody's, CMA

28 October 2021 Cross-Sector: Market Data Highlights

Figure 4. CDS Movers - Europe (October 20, 2021 - October 27, 2021)

CDS Implied Rating Rises	CDS Impli	led Ratings	_
Issuer	Oct. 27	Oct. 20	Senior Ratings
HSBC Holdings plc	A3	Baa1	A3
Banque Federative du Credit Mutuel	Aa2	Aa3	Aa3
Norddeutsche Landesbank GZ	Baa2	Baa3	A3
Standard Chartered Bank	Aa3	A1	A1
Danone	Aa1	Aa2	Baa1
HSBC Bank plc	Aa3	A1	A1
Novo Banco, S.A.	Ba2	Ba3	Caa2
Scottish Power UK plc	A2	A3	Baa1
Sky Limited	Aaa	Aa1	Baa2
ASML Holding N.V.	A3	Baa1	A2

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	Oct. 27	Oct. 20	Senior Ratings
Banco Santander S.A. (Spain)	A1	Aa3	A2
Intesa Sanpaolo S.p.A.	Baa2	Baa1	Baa1
Portugal, Government of	Aa2	Aa1	Baa2
Credit Agricole Corporate and Investment Bank	Aa3	Aa2	Aa3
Commerzbank AG	A3	A2	A1
Dexia Credit Local	Baa3	Baa2	Baa3
Landesbank Hessen-Thueringen GZ	Aa3	Aa2	Aa3
E.ON SE	A2	A1	Baa2
Anheuser-Busch InBev SA/NV	Baa2	Baa1	Baa1
Banca Monte dei Paschi di Siena S.p.A.	Ba3	Ba2	Caa1

CDS Spread Increases	_		CDS Spreads	
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff
Banca Monte dei Paschi di Siena S.p.A.	Caa1	213	179	34
Casino Guichard-Perrachon SA	Caa1	647	627	20
British Telecommunications Plc	Baa2	99	81	18
Deutsche Lufthansa Aktiengesellschaft	Ba2	233	217	16
laguar Land Rover Automotive Plc	B1	374	363	11
Boparan Finance plc	Caa1	1,186	1,176	11
Premier Foods Finance plc	B3	198	191	7
Avon Products, Inc.	Ba3	233	228	6
Piraeus Financial Holdings S.A.	Caa2	538	534	4
Rolls-Royce plc	Ba3	166	162	4

CDS Spread Decreases	_		CDS Spreads	
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff
Ineos Group Holdings S.A.	B2	198	252	-54
Vue International Bidco plc	Ca	597	623	-26
Banco Comercial Portugues, S.A.	Ba1	165	185	-20
Novo Banco, S.A.	Caa2	174	191	-17
CMA CGM S.A.	B2	295	310	-15
Norddeutsche Landesbank GZ	A3	64	72	-8
JPC Holding B.V.	В3	171	179	-7
Stena AB	Caa1	422	429	-7
Atlantia S.p.A.	Ba3	103	110	-6
CECONOMY AG	Ba1	180	186	-6

ISSUANCE

Figure 5. Market Cumulative Issuance - Corporate & Financial Institutions: USD Denominated

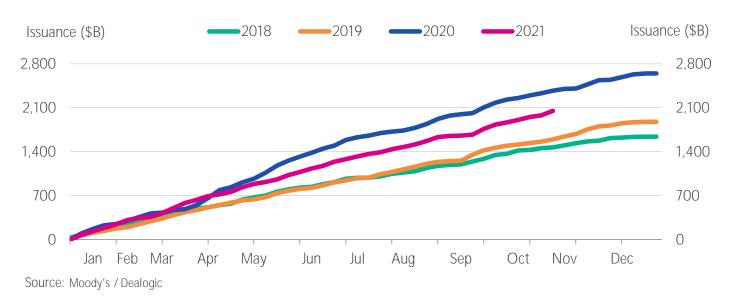
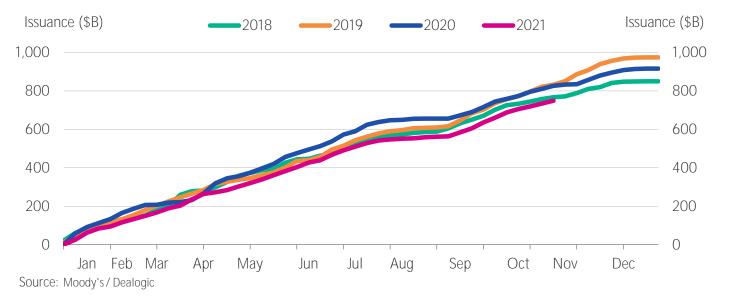


Figure 6. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated



28 October 2021 Cross-Sector: Market Data Highlights

Figure 7. Issuance: Corporate & Financial Institutions

		USD Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	59.832	10.015	70.527
Year-to-Date	1,427.840	559.592	2,051.415

		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	11.247	3.481	14.728
Year-to-Date	591.478	137.095	748.747

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

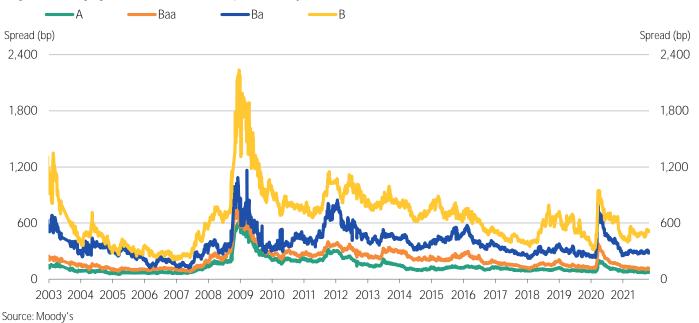
EMERGING MARKET CREDIT SPREADS

Figure 8. Emerging Market Median OAS

Emerging Market		Median	Spreads			Bond (Counts	
Duration	Α	Baa	Ba	В	Α	Baa	Ba	В
>=1 and <3	63	92	242	422	70	155	47	43
>=3 and <5	76	116	294	510	88	123	50	48
>=5 and <7	78	144	303	562	44	95	33	24
>=7	111	205	414	598	131	249	57	32
Emerging Market Sovereign		Median	Spreads			Bond (Counts	
Duration	Α	Baa	Ba	В	Α	Baa	Ba	В
>=1 and <3	46	65	133	402	17	38	17	18
>=3 and <5	47	94	197	507	20	34	21	27
>=5 and <7	35	104	290	564	18	31	19	20
>=7	66	193	387	598	78	132	43	30
Emerging Market Corporate		Median	Spreads			Bond (Counts	
Duration	Α	Baa	Ba	В	Α	Baa	Ba	В
>=1 and <3	72	111	288	477	53	117	30	25
>=3 and <5	82	138	336	556	68	89	29	21
>=5 and <7	111	171	321	456	26	64	14	4
>=7	142	221	443	581	53	117	14	2

Source: Moody's

Figure 9: Emerging Markets Median Credit Spreads (3-5 year duration)



MEDIAN CREDIT SPREADS

Figure 10. Global Financial Institutions Median Credit Spreads

B 444 510 381 413	564 483 323
510 381 413	564 483
381 413	483
413	
	323
D	
D	
В	Caa
18	-
22	4
5	3
2	3
В	Caa
16	-
21	4
5	3
2	2
	B 16 21 5

Source: Moody's

Figure 11. Global Corporate Median Credit Spreads

			N	Aedian Spread	ds		
Duration	Aaa	Aa	Α	Baa	Ba	В	Caa
>=1 and <3	28	34	40	63	231	411	579
>=3 and <5	23	37	46	72	254	406	541
>=5 and <7	26	41	59	92	257	352	552
>=7	71	93	109	142	260	382	376
				Debt Counts			
Duration	Aaa	Aa	Α	Baa	Ba	В	Caa
>=1 and <3	13	100	475	804	260	163	36
>=3 and <5	10	121	501	964	283	245	68
>=5 and <7	6	85	363	757	220	167	46
>=7	39	266	1371	1938	199	44	3
				Issuer Counts	S		
Duration	Aaa	Aa	Α	Baa	Ba	В	Caa
>=1 and <3	4	48	256	499	190	129	32
>=3 and <5	4	49	271	562	203	213	61
>=5 and <7	4	37	212	470	161	141	44
>=7	4	52	337	612	102	29	3
irce: Moody's							

Source: Moody's

MEDIAN 5-YEAR CDS SPREADS

Figure 12. Global Median CDS Spreads By Rating Category

Global Median Spreads by Fine Rating Category

Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	
15	21	30	33	36	39	44	49	55	
	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa	
	80	115	166	209	264	332	396	686	

Global Median Spreads by Broad Rating Category

Aaa	Aa	Α	Baa	Ba	В	Caa
22	30	39	55	166	332	564

Global Issuer Counts by Broad Rating Category

Aaa	Aa	Α	Baa	Ba	В	Caa
9	49	172	343	94	43	28

Figure 13. Median CDS Spreads By Region

Median CDS Spreads

Region	Aaa	Aa	Α	Baa	Ba	В	Caa
North America	22	32	38	57	166	306	446
Europe	8	29	36	54	131	221	564
Asia Pacific (ex.Japan)	16	27	49	73	142	315	-
Japan	-	-	24	32	47	65	-

Issuer Counts

Region	Aaa	Aa	Α	Baa	Ba	В	Caa
North America	3	20	84	207	59	29	13
Europe	6	29	85	123	24	12	12
Asia Pacific (ex.Japan)	3	18	31	36	5	2	-
Japan	-	-	32	14	3	1	-

Source: Moody's, CMA

Figure 14. Global Median CDS Spreads by Sector

Median CDS Spreads

Sector	Aaa	Aa	Α	Baa	Ba	В	Caa
Corporates	24	29	34	56	163	239	635
Financials	9	29	41	62	166	373	343
Sovereigns	9	12	47	69	91	373	995
Banks	-	31	41	61	198	220	278

Issuer Counts

Sector	Aaa	Aa	Α	Baa	Ba	В	Caa
Corporates	3	24	142	318	85	43	23
Financials	9	43	93	75	17	3	5
Banks	-	32	58	30	8	1	4
Sovereigns	9	7	6	13	4	1	1

Figure 15. Global Financial Institutions Median CDS Spreads by Region

Median CDS Spreads

Region	Aaa	Aa	Α	Baa	Ba	В	Caa
North America	14	41	45	63	168	426	-
Europe	8	29	37	59	79	220	278
Asia Pacific (ex.Japan)	15	30	50	69	96	373	-
Japan	-	-	28	57	-	-	-

Issuer Counts

Region	Aaa	Aa	Α	Baa	Ba	В	Caa
North America	1	7	24	24	6	1	-
Europe	6	23	43	30	4	1	4
Asia Pacific (ex.Japan)	2	13	14	12	3	1	-
Japan	-	-	11	2	-	-	-

Source: Moody's, CMA

Figure 16. Global Corporates Median CDS Spreads by Region

Median CDS Spreads

Region	Aaa	Aa	Α	Baa	Ba	В	Caa
North America	23	32	35	56	164	304	446
Europe	-	25	35	53	137	222	616
Asia Pacific (ex.Japan)	30	24	49	73	149	257	-
Japan	-	-	21	29	47	65	-

Issuer Counts

Region	Aaa	Aa	Α	Baa	Ba	В	Caa
North America	2	13	60	183	53	28	13
Europe	-	6	42	93	20	11	8
Asia Pacific (ex.Japan)	1	5	17	24	2	1	-
Japan	-	-	21	12	3	1	-

© 2021 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 CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. 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 OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER 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. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND 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, ASSESSMENTS, OTHER OPINIONS, AND 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, ASSESSMENTS, OTHER OPINIONS OR 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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 its 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 CREDIT RATING. ASSESSMENT. 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 credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.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 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 investors.

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 credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

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

REPORT NUMBER

1308532

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

