

DATA REPORT

8 April 2019



TABLE OF CONTENTS

Corporate default rate declines to its lowest level since 2011	1
Part I: Trailing 12-month default rates	3
Part II: Issuer-weighted default rate forecasts	4
Part III: Default experience	11
Part IV: Recovery data	14
Part V: Rating changes	15
Part VI: Changes/remarks	16
Appendix: Five-year issuer-weighted speculative-grade default rates	17

Contacts

Sharon Ou +1.212.553.4403
VP-Sr Credit Officer/Mgr/MDG
sharon.ou@moodys.com

Joyce Jiang +1.212.553.1659
Associate Analyst/MDG
joyce.jiang@moodys.com

Yang Liu +1.212.553.2961
Analyst/MDG
yang.liu@moodys.com

Kane Chan +1.212.553.1035
Associate Analyst/MDG
kane.chan@moodys.com

Kumar Kanthan +1.212.553.1428
Senior Vice President/Mgr/MDG
kumar.kanthan@moodys.com

CLIENT SERVICES

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

Cross-Sector - Global March Default Report

Corporate default rate declines to its lowest level since 2011

Default rate to remain low in the coming 12 months

Moody's global speculative-grade default rate closed at 1.9% for the trailing 12-month period ended in March 2019, the lowest level since October 2011. The comparable rate stood at 2.3% as of December 2018. Our Credit Transition Model predicts that the default rate will finish 2019 at 1.8% before easing further to 1.5% by the end of March 2020.

The concern about the path of future interest rate increases by the US Federal Reserve faded after the central bank kept rates unchanged in March and signaled that no rate increases are likely this year. We expect credit markets to remain accommodative and allow low-rated companies to refinance in the near future, which supports our benign default outlook over the next 12 months. That said, the weaker rating distribution across speculative-grade companies and continued trade tensions between the US and China are likely to put upward pressure on the global default rate over the longer term.

In the US, we expect the speculative-grade default rate to edge lower to 2.2% at the end of 2019 from 2.4% at the end of March. We forecast the rate to decline further to 1.7% by the end of March 2020. In Europe, we predict the default rate to rise from the March level of 0.9% to 1.5% at the end of 2019 before climbing to 1.8% by March 2020. The European forecast reflects our view that the region's defaults will remain low by historical standards but that they will pick up this year from the extremely low level in 2018.

By industry, CTM forecasts that the default rate among US issuers will be the highest in Media: Advertising, Printing & Publishing over the next year. In Europe, our model forecasts that Hotel, Gaming, & Leisure Consumer Services will be the most troubled sector.

Default tally rose to 20 in Q1

We recorded 20 corporate defaults in the first quarter of 2019, up from 17 in the previous quarter but down from 30 in the first quarter of 2018. The global default rate did not rise because more defaulters are exiting the 12-month window than entering.

Of the first quarter's defaulters, 16 were based in North America, while the remainder were in Latin America, Asia and Africa. By industry, the first-quarter defaults came from a variety of industries, led by two sectors: Business Services and Retail, which each accounted for three defaults.

Three companies defaulted in March, all from the US. CTI Foods Holding Co., LLC and PHI, Inc. both filed for Chapter 11 bankruptcy protection, while Evergreen AcqCo 1 LP completed a distressed exchange, a type of default by Moody's definition.

Leveraged loan default rate unchanged in the quarter

In the leveraged loan market, we recorded 12 loan defaults in the first quarter; all but one were from the US. The issuer-weighted US leveraged loan default rate held steady at 1.9% from December 2018 to March 2019. In comparison, the rate was 2.9% at the end of March 2018.

Among high-yield bond issuers, the global speculative-grade default rate dropped noticeably in the first quarter when measured on a dollar volume basis. The decrease is mainly driven by iHeartCommunications¹ moving out of the rolling 12-month calculation window. The dollar-weighted bond default rate finished March at 1.0%, down from 1.9% at the end of 2018. Across regions, the comparable rate declined to 1.2% from 2.2% in the US and fell to 0.5% from 0.8% in Europe.

For inquiries on the underlying data, please contact ClientServices@moodyys.com.

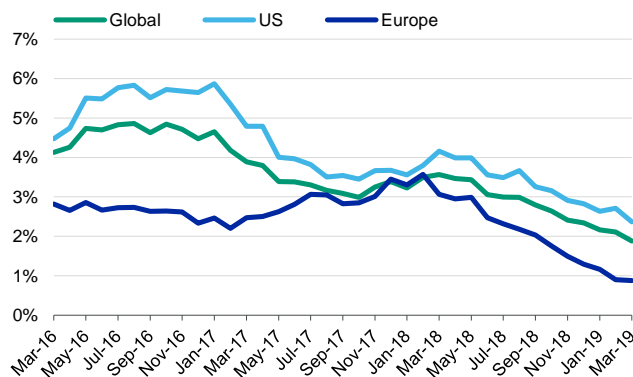
This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodyys.com for the most updated credit rating action information and rating history.

Part I: Trailing 12-month default rates

All rates in this report are issuer-weighted unless otherwise noted.

Exhibit 1

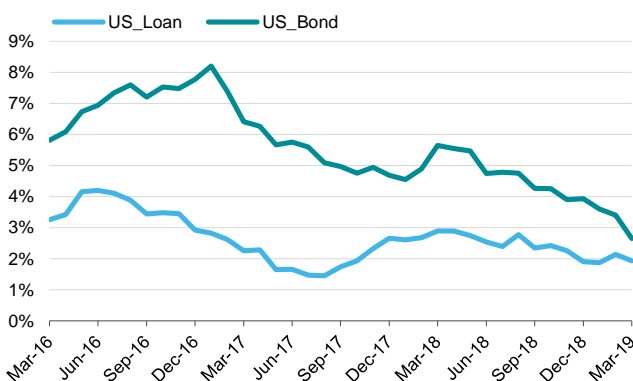
Speculative-grade corporate default rates



Source: Moody's Investors Service

Exhibit 3

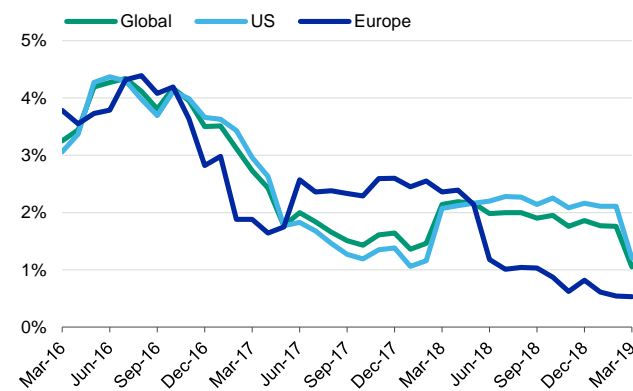
US speculative-grade bond vs. loan default rates



Source: Moody's Investors Service

Exhibit 5

Dollar-weighted speculative-grade bond default rates



Source: Moody's Investors Service

Exhibit 2

Corporate default rates as of the end of March 2019

Rating	Global	US	Europe
Aaa	0.0%	0.0%	0.0%
Aa	0.0%	0.0%	0.0%
A	0.1%	0.2%	0.0%
Baa	0.1%	0.1%	0.0%
Ba	0.0%	0.0%	0.0%
B	0.4%	0.2%	0.4%
Caa_C	4.1%	4.3%	2.0%
IG	0.1%	0.2%	0.0%
SG	1.9%	2.4%	0.9%
ALL	0.9%	1.4%	0.4%

Source: Moody's Investors Service

Exhibit 4

US bond vs loan default rates as of the end of March 2019

Rating	US Bond	US Loan
Aaa	0.0%	
Aa	0.0%	0.0%
A	0.2%	2.6%
Baa	0.0%	1.2%
Ba	0.0%	0.0%
B	0.3%	1.4%
Caa_C	8.3%	21.9%
IG	0.1%	1.6%
SG	2.7%	1.9%
ALL	1.2%	1.9%

Source: Moody's Investors Service

Exhibit 6

Dollar-weighted bond default rates as of the end of March 2019

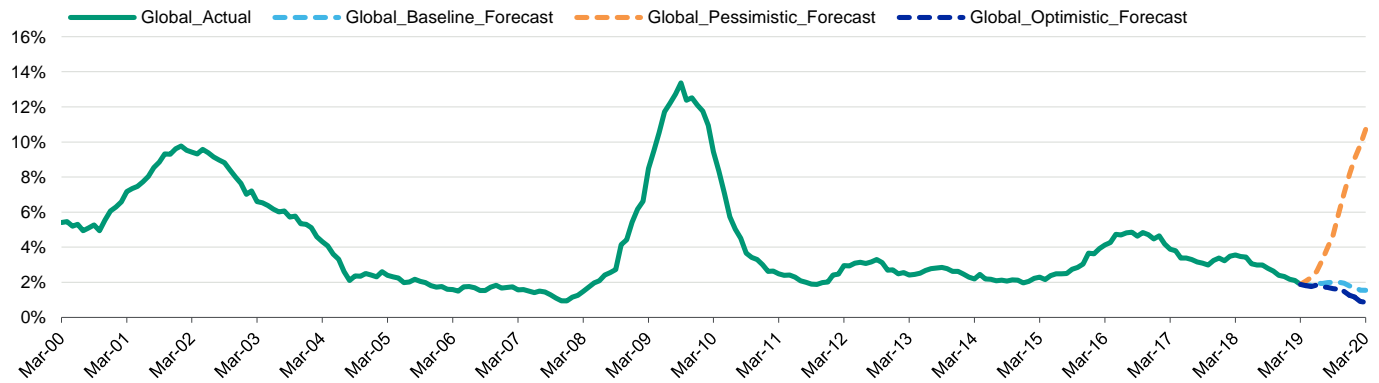
Rating	Global	US	Europe
Aaa	0.0%	0.0%	0.0%
Aa	0.0%	0.0%	0.0%
A	0.5%	0.8%	0.0%
Baa	0.0%	0.0%	0.0%
Ba	0.0%	0.0%	0.0%
B	0.2%	0.2%	0.3%
Caa_C	7.7%	7.7%	7.7%
IG	0.2%	0.3%	0.0%
SG	1.0%	1.2%	0.5%
ALL	0.4%	0.5%	0.1%

Source: Moody's Investors Service

Part II: Issuer-weighted default rate forecasts

Exhibit 7

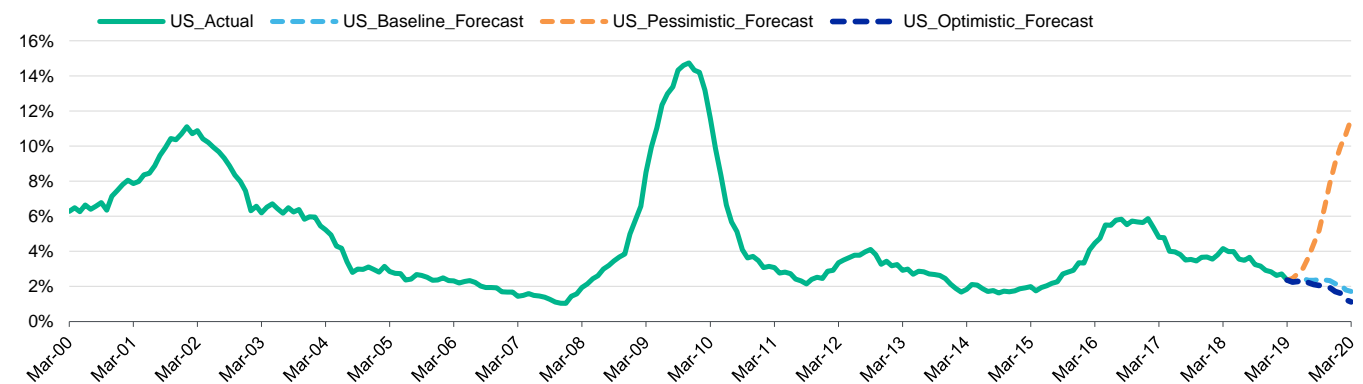
Global speculative-grade default rates (actual and forecast)



Source: Moody's Investors Service

Exhibit 8

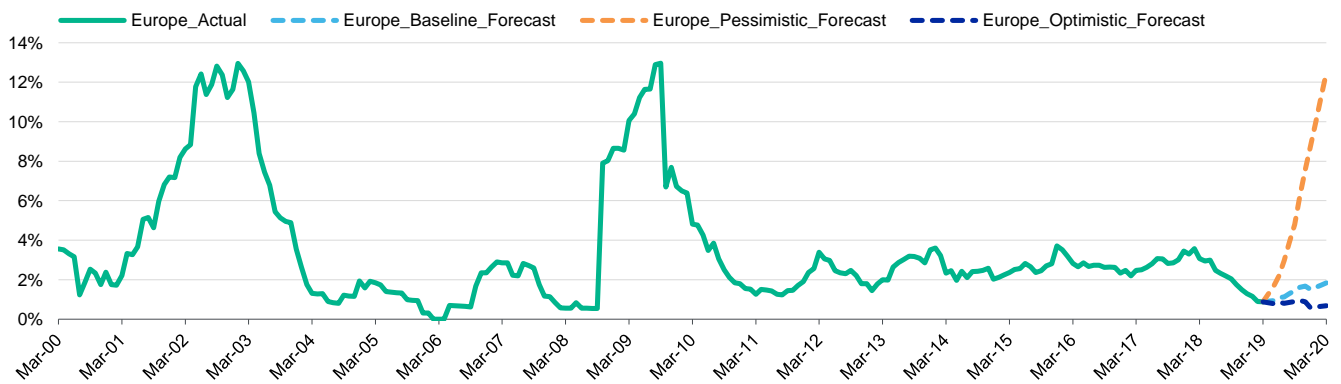
US speculative-grade default rates (actual and forecast)



Source: Moody's Investors Service

Exhibit 9

European speculative-grade default rates (actual and forecast)



Source: Moody's Investors Service

Exhibit 10

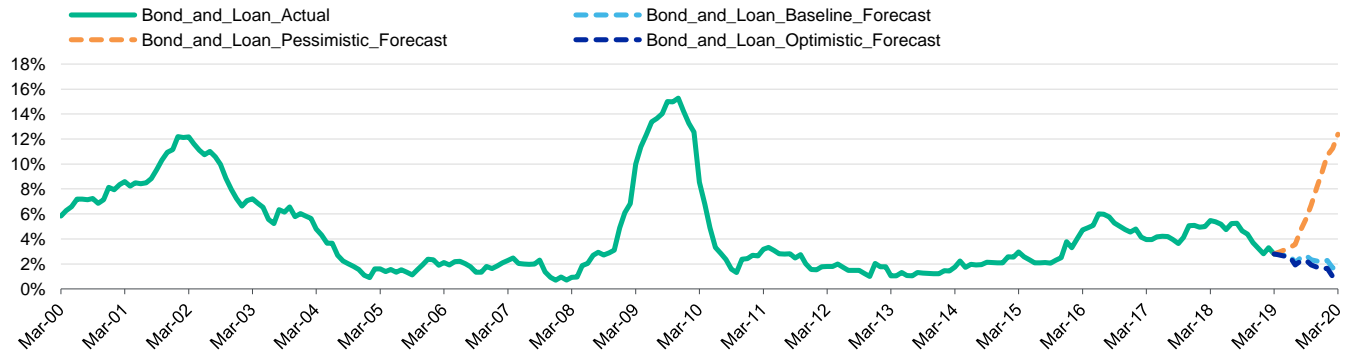
Trailing 12-month speculative-grade default rate baseline forecasts by region

Region	4/30/2019	5/31/2019	6/30/2019	7/31/2019	8/31/2019	9/30/2019	10/31/2019	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020
Global	1.8%	1.8%	1.9%	1.9%	2.0%	2.0%	2.0%	2.0%	1.8%	1.7%	1.6%	1.5%
US	2.3%	2.3%	2.4%	2.4%	2.4%	2.4%	2.4%	2.3%	2.2%	2.1%	1.8%	1.7%
Europe	0.9%	0.9%	1.1%	1.1%	1.3%	1.4%	1.6%	1.7%	1.5%	1.6%	1.7%	1.8%

Source: Moody's Investors Service

Exhibit 11

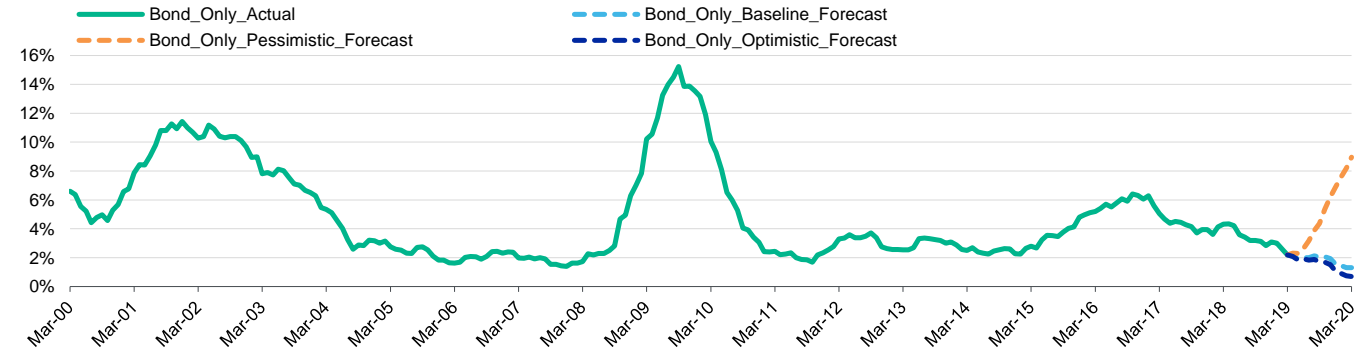
Global speculative-grade default rates for issuers with bonds and loans (actual and forecast)



Source: Moody's Investors Service

Exhibit 12

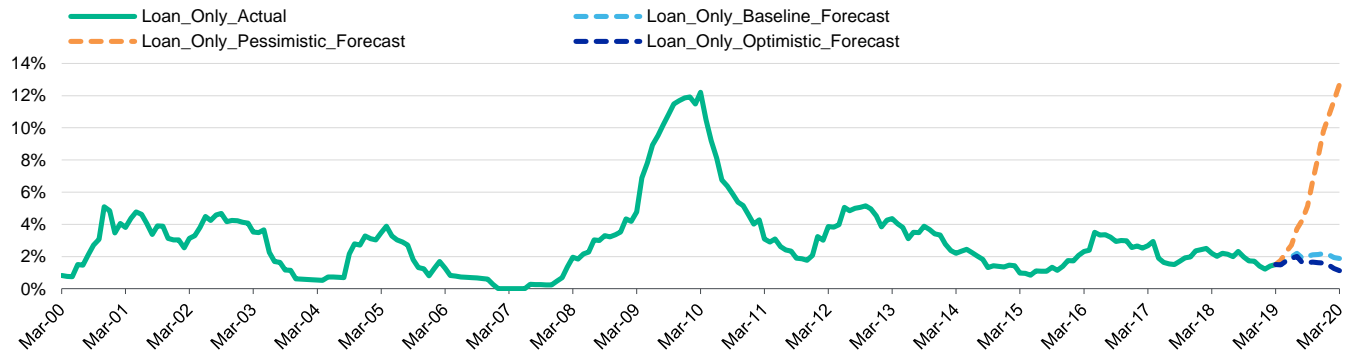
Global speculative-grade default rates for bond-only issuers (actual and forecast)



Source: Moody's Investors Service

Exhibit 13

Global speculative-grade default rates for loan-only issuers (actual and forecast)



Source: Moody's Investors Service

Exhibit 14

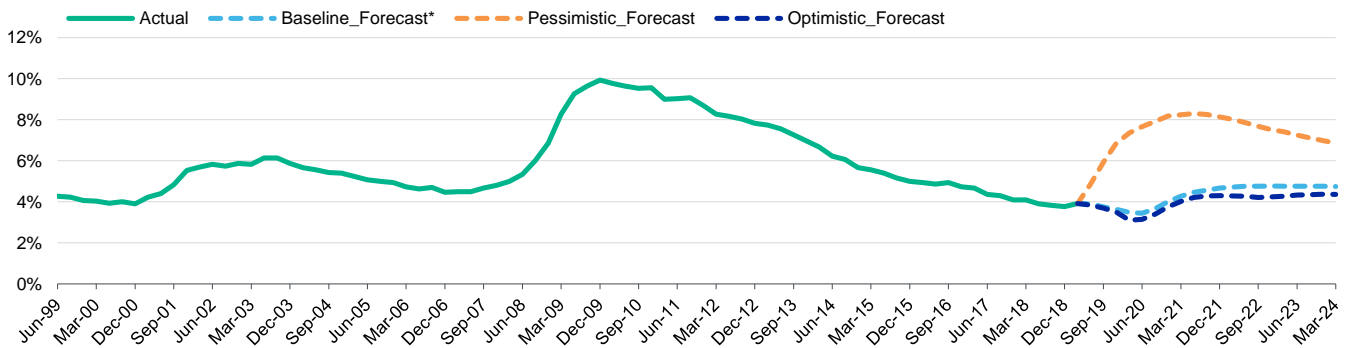
Trailing 12-month speculative-grade default rate baseline forecasts by issuer type

	4/30/2019	5/31/2019	6/30/2019	7/31/2019	8/31/2019	9/30/2019	10/31/2019	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020
Bond&Loan	2.7%	2.7%	2.6%	2.1%	2.5%	2.7%	2.3%	2.2%	2.1%	2.3%	1.7%	1.8%
Bond Only	2.1%	1.9%	2.0%	2.0%	2.1%	2.0%	2.1%	1.9%	1.6%	1.5%	1.3%	1.3%
Loan Only	1.5%	1.8%	2.0%	2.2%	1.9%	2.0%	2.1%	2.1%	2.2%	2.1%	1.9%	1.9%

Source: Moody's Investors Service

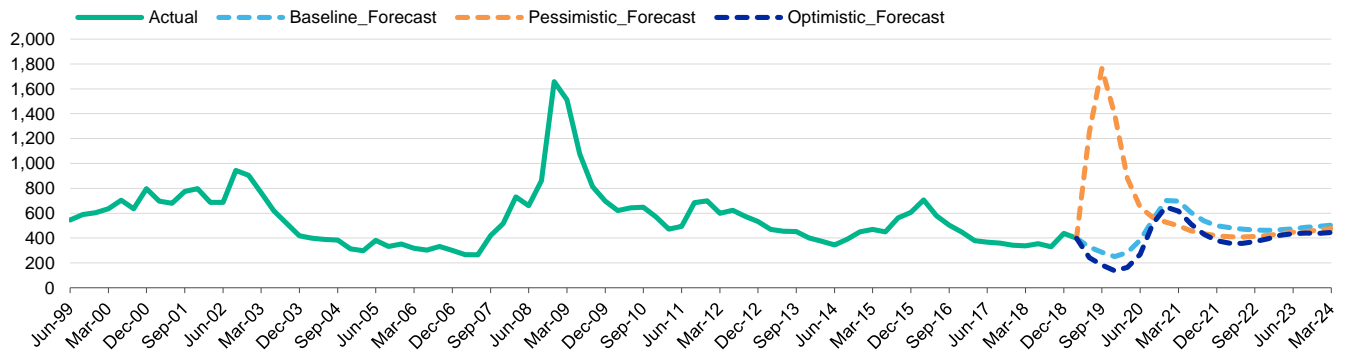
Exhibit 15

Unemployment rates (actual and forecast)



Source: Moody's Economy.com

Exhibit 16

High-yield spread (actual and forecast)

Source: Bloomberg and Moody's Investors Service

Exhibit 17

Baseline forecasts of unemployment rates and high-yield spread

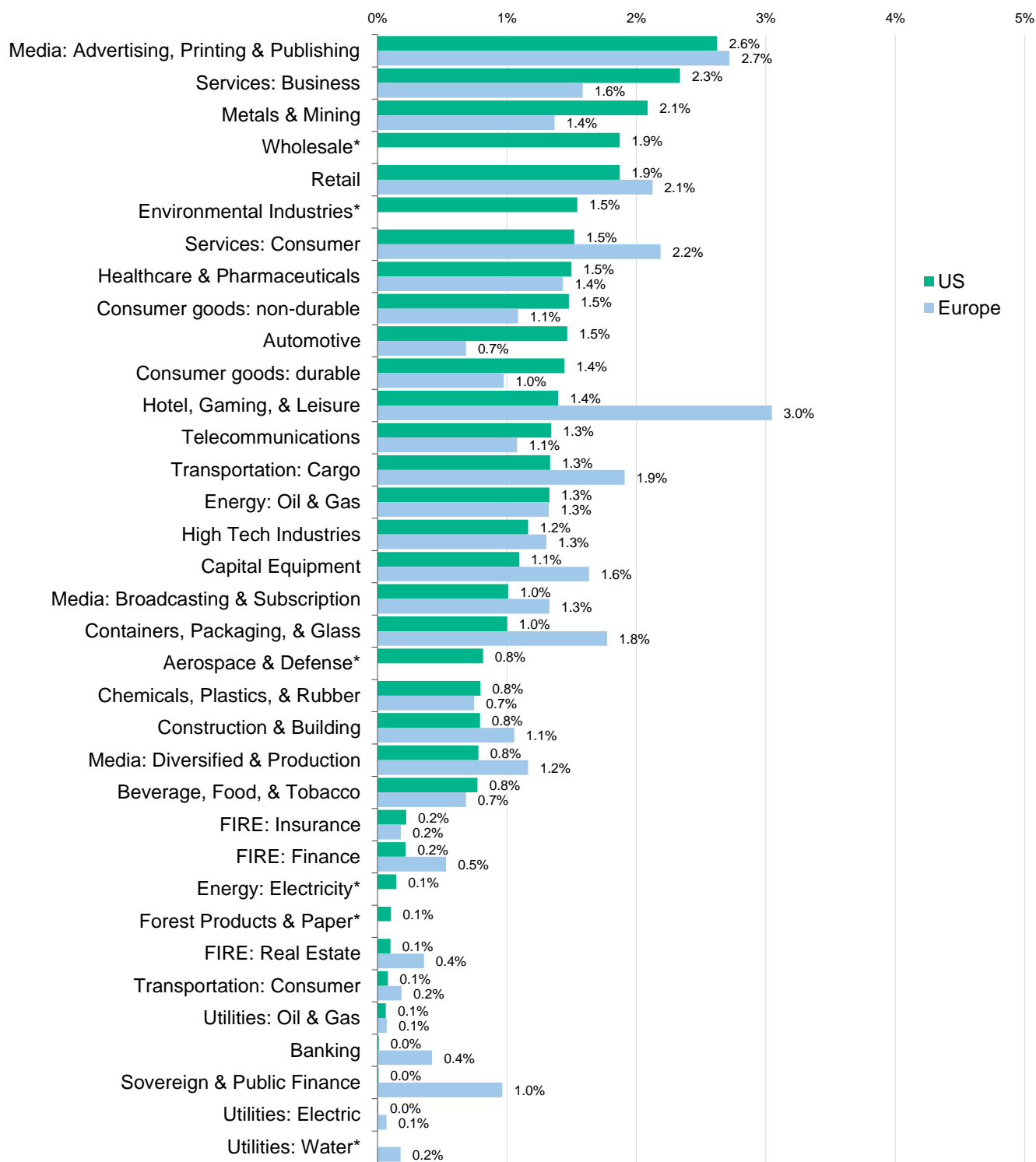
	6/30/2019	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020	3/31/2021	6/30/2021	9/30/2021
Unemployment(%)	3.9	3.8	3.6	3.5	3.4	3.7	4.0	4.3	4.5	4.6
HY Spread(bps)	327.6	286.0	251.0	283.7	383.5	547.3	702.0	696.1	603.5	537.3

	12/31/2021	3/31/2022	6/30/2022	9/30/2022	12/31/2022	3/31/2023	6/30/2023	9/30/2023	12/31/2023	3/31/2024
Unemployment(%)	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
HY Spread(bps)	499.4	483.0	470.9	463.6	462.6	467.9	475.4	486.4	494.2	503.3

Source: Bloomberg, Moody's Investors Service, and Moody's Economy.com

Exhibit 18

One-year default rate forecasts by industry* in US and Europe



*Default rate forecasts are not reported in these sectors in Europe or in the US owing to small sample size (fewer than 10 issuers).

Source: Moody's Investors Service

Exhibit 19

Actual global rating migration rates from 1 April 2018 to 31 March 2019 (percent)

From\To	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca-C	WR	DEF
Aaa	92.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0
Aa1	0.0	97.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0
Aa2	0.0	6.0	86.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0
Aa3	0.0	0.7	8.1	79.7	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0
A1	0.0	0.0	4.1	5.2	83.7	2.3	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0
A2	0.0	0.0	0.2	0.2	12.0	79.2	3.2	1.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0
A3	0.0	0.0	0.0	0.0	0.6	7.9	78.1	7.9	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.2
Baa1	0.0	0.0	0.0	0.0	0.0	0.5	8.0	83.0	4.7	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.2
Baa2	0.0	0.0	0.0	0.0	0.0	0.5	0.5	9.0	80.4	5.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Baa3	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	17.0	72.8	3.7	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	5.4	0.0
Ba1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.0	11.5	72.7	5.5	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.0	6.7	0.0
Ba2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.5	11.8	68.9	1.1	3.6	3.6	0.0	0.0	0.0	0.0	0.0	8.2	0.0
Ba3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.4	9.7	67.9	4.1	1.2	2.6	0.3	0.0	0.0	0.0	10.9	0.0
B1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.4	9.1	62.8	6.4	4.1	1.0	0.3	0.3	0.0	10.8	0.3
B2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	3.7	11.7	65.0	6.3	1.7	0.3	0.0	0.0	9.7	1.0
B3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	4.0	6.8	65.7	6.3	2.3	0.2	0.5	13.5	0.0
Caa1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	5.3	63.5	11.1	1.9	0.6	15.0	1.3
Caa2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	5.5	67.3	6.6	1.7	16.3	1.5
Caa3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	10.1	48.9	8.0	17.6	12.2
Ca-C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	8.7	52.2	14.5	21.7

Source: Moody's Investors Service

Exhibit 20

Global rating migration rate forecasts from 1 April 2019 to 31 March 2020 (percent)

From\To	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca-C	WR	DEF
Aaa	89.5	3.0	2.9	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0
Aa1	5.6	81.4	4.8	1.6	0.8	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0
Aa2	4.4	14.0	69.4	4.4	1.7	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0
Aa3	1.6	2.5	9.9	70.9	5.3	2.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	0.0
A1	0.3	0.3	2.5	10.6	73.5	5.0	1.5	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0
A2	0.7	0.0	1.1	1.9	12.1	72.4	5.0	1.4	0.8	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0
A3	0.3	0.2	0.4	0.3	3.4	16.9	67.5	4.0	1.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0
Baa1	0.0	0.1	0.1	0.1	0.2	1.1	8.4	79.0	4.6	1.4	0.6	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0
Baa2	0.0	0.1	0.0	0.1	0.3	0.4	2.0	8.3	78.2	4.3	0.9	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	4.6	0.0
Baa3	0.1	0.0	0.0	0.1	0.1	0.1	0.7	1.4	9.4	76.6	3.5	1.3	0.9	0.3	0.3	0.2	0.0	0.0	0.0	0.0	4.9	0.1
Ba1	0.0	0.0	0.1	0.1	0.3	0.0	0.1	0.6	2.4	11.9	65.7	4.0	2.5	1.5	0.5	0.5	0.1	0.0	0.0	0.0	9.5	0.1
Ba2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.5	3.4	10.1	63.0	5.3	3.2	1.5	1.2	0.2	0.1	0.0	0.0	11.0	0.1
Ba3	0.0	0.0	0.0	0.1	0.1	0.3	0.1	0.1	0.5	1.3	2.4	8.2	64.6	4.5	2.6	1.1	0.3	0.1	0.0	0.0	13.5	0.1
B1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.3	0.8	3.0	8.2	58.2	6.6	4.6	1.6	0.6	0.2	0.2	15.0	0.2
B2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.3	1.0	2.8	9.9	57.4	7.7	3.3	1.5	0.5	0.3	13.9	0.5
B3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.3	0.8	3.1	7.8	58.5	6.6	2.5	0.9	0.5	17.8	0.8
Caa1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.4	1.6	9.2	54.4	5.6	2.1	0.9	23.9	1.4
Caa2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.3	1.1	3.9	10.1	51.6	4.7	2.4	22.5	2.7
Caa3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.1	0.1	0.1	0.3	2.4	4.8	10.9	45.6	5.4	24.7	5.2
Ca-C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4	0.1	1.4	0.1	0.9	2.3	2.3	2.5	7.8	35.5	35.2	10.3

Source: Moody's Investors Service

Exhibit 21

Rating drivers (current)

Rating	Share Population	Last Rating Action		Average Duration*
		Up	Down	
Aaa	0.8%	19.6%	0.0%	95
Aa1	0.6%	53.8%	7.7%	34
Aa2	1.6%	63.5%	24.0%	12.5
Aa3	2.2%	46.9%	38.8%	7
A1	6.1%	45.8%	32.1%	10
A2	6.0%	45.9%	29.3%	12
A3	7.1%	45.1%	31.6%	15
Baa1	9.5%	41.6%	33.5%	13
Baa2	9.9%	43.6%	26.1%	11
Baa3	7.6%	32.3%	33.7%	10
Ba1	4.0%	34.6%	38.8%	7
Ba2	4.0%	37.5%	39.3%	7
Ba3	4.7%	42.6%	18.4%	7
B1	4.4%	44.4%	23.9%	6
B2	4.5%	39.4%	28.6%	5
B3	6.1%	33.4%	24.1%	5
Caa1	8.4%	17.2%	19.7%	6
Caa2	8.9%	8.3%	33.1%	5
Caa3	2.5%	7.7%	57.7%	4
Ca/C	1.1%	5.3%	92.0%	2
Total	100.0%			

*Measured by number of quarters since last rating change.

Source: Moody's Investors Service

Exhibit 22

Rating drivers (one-year prior)

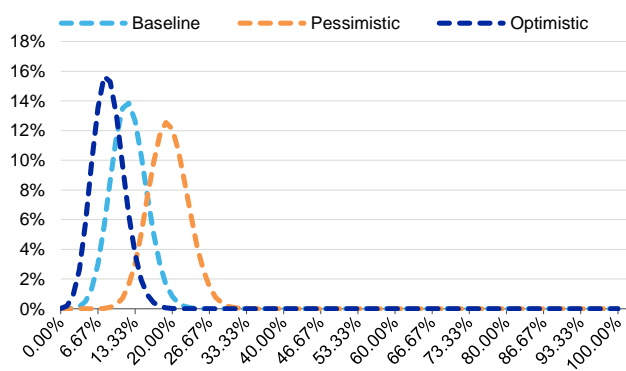
Rating	Share Population	Last Rating Action		Average Duration*
		Up	Down	
Aaa	0.8%	18.5%	0.0%	81
Aa1	0.5%	44.1%	2.9%	44
Aa2	1.2%	54.2%	36.1%	10
Aa3	2.2%	38.5%	49.3%	10
A1	5.8%	43.0%	36.8%	8
A2	6.1%	38.0%	40.0%	14
A3	7.2%	42.4%	37.4%	11
Baa1	9.0%	42.3%	32.7%	11
Baa2	9.3%	38.6%	29.8%	11
Baa3	8.1%	34.3%	35.4%	10
Ba1	3.8%	30.4%	41.9%	7
Ba2	4.2%	30.7%	44.3%	7
Ba3	5.1%	39.7%	23.8%	6
B1	4.4%	37.2%	26.7%	6
B2	4.5%	39.0%	26.3%	4
B3	6.4%	34.7%	22.8%	4
Caa1	9.4%	16.9%	19.7%	5
Caa2	8.2%	9.5%	32.1%	4
Caa3	2.8%	11.7%	53.7%	4
Ca/C	1.0%	5.8%	89.9%	3
Total	100.0%			

*Measured by number of quarters since last rating change.

Source: Moody's Investors Service

Exhibit 23

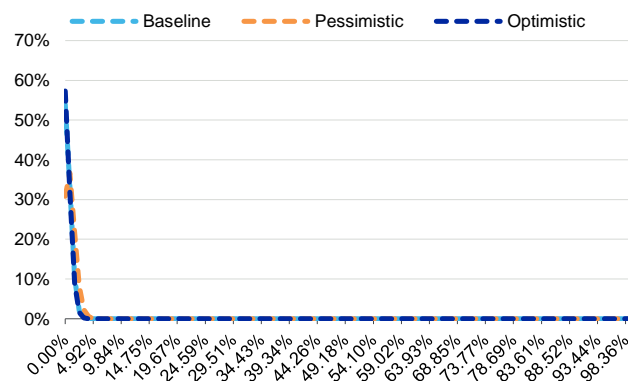
Speculative-grade portfolio default distributions: five-year horizon



Source: Moody's Investors Service

Exhibit 24

Investment-grade portfolio default distributions: five-year horizon

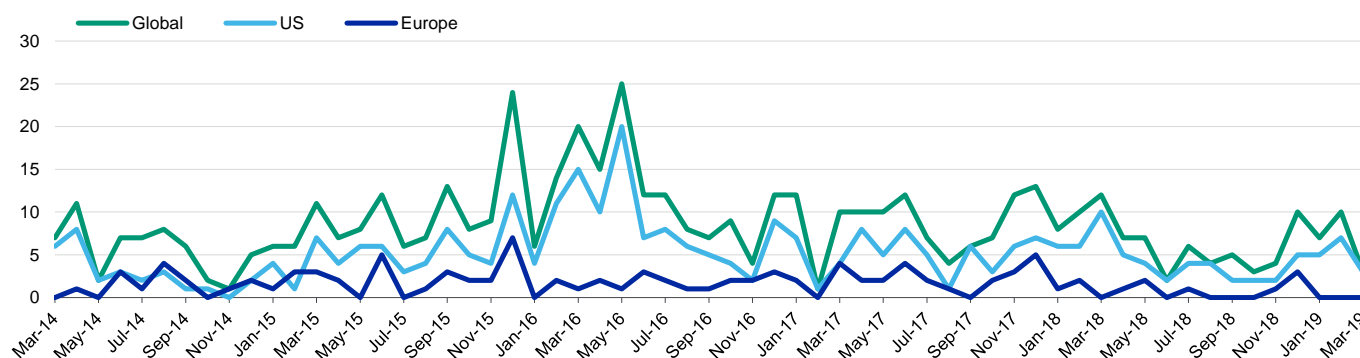


Source: Moody's Investors Service

Part III: Default experience

Exhibit 25

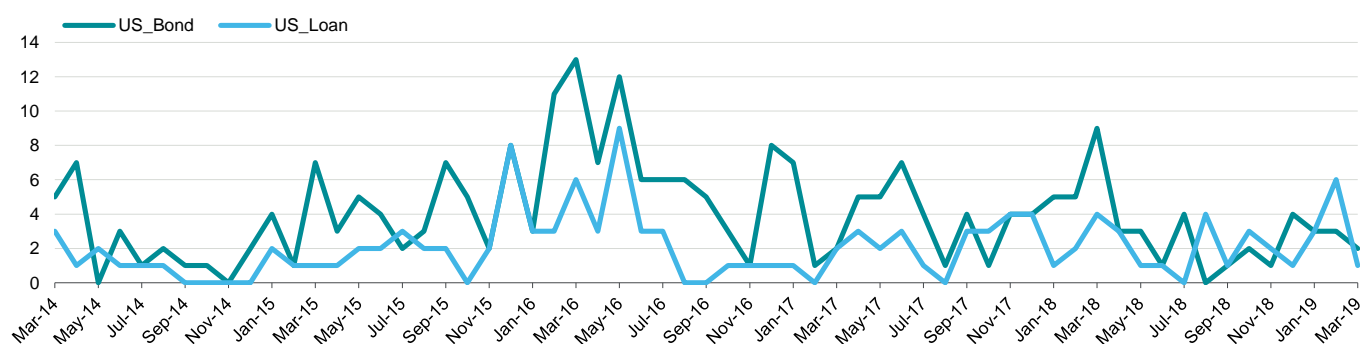
Defaulted corporate issuer counts



Source: Moody's Investors Service

Exhibit 26

Defaulted US bonds/loans issuer counts



Source: Moody's Investors Service

Exhibit 27

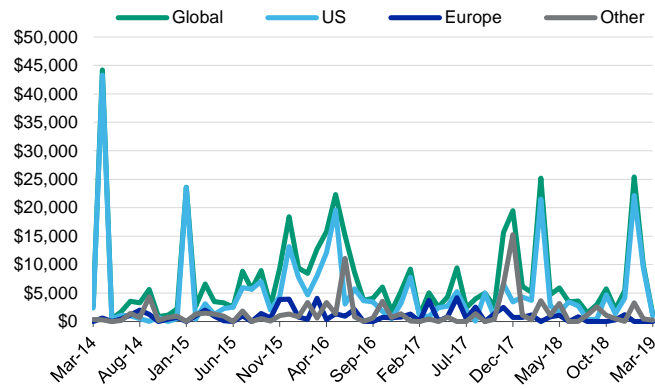
Default counts summary

Default_Month	Corporate Issuer Counts			Bond Issuer Counts			Loan Issuer Counts		
	Global	US	Europe	Global	US	Europe	Global	US	Europe
March-19	3	3	0	3	2	0	1	1	0
February-19	10	7	0	5	3	0	6	6	0
January-19	7	5	0	5	3	0	3	3	0
Year-to-date	20	15	0	13	8	0	10	10	0
5yr monthly avg	9	5	2	7	4	1	2	2	0
5yr monthly stdev	5	4	1	4	3	1	2	2	1

Source: Moody's Investors Service

Exhibit 28

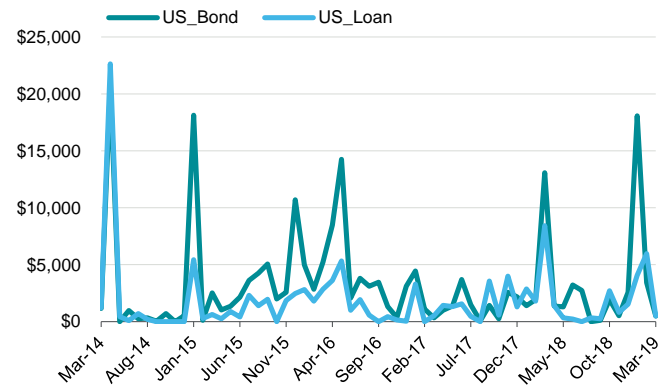
Defaulted debt (\$ millions)



Source: Moody's Investors Service

Exhibit 29

US defaulted bond/loan debt (\$ millions)



Source: Moody's Investors Service

Exhibit 30

Default volume summary (\$ millions)

Default_Month	Total Debt Volume			Bond Volume			Loan Volume		
	Global	US	Europe	Global	US	Europe	Global	US	Europe
March-19	\$1,214	\$987	\$0	\$727	\$500	\$0	\$487	\$487	\$0
February-19	\$9,892	\$9,412	\$0	\$3,919	\$3,438	\$0	\$5,973	\$5,973	\$0
January-19	\$25,415	\$22,151	\$0	\$21,332	\$18,067	\$0	\$4,084	\$4,084	\$0
Year-to-date	\$36,521	\$32,550	\$0	\$25,977	\$22,006	\$0	\$10,544	\$10,544	\$0
5yr monthly avg	\$7,701	\$5,237	\$960	\$5,650	\$3,373	\$853	\$2,051	\$1,865	\$107
5yr monthly stdev	\$7,921	\$7,387	\$1,117	\$5,466	\$4,623	\$1,027	\$3,255	\$3,238	\$448

Source: Moody's Investors Service

Exhibit 31

Initial bond default events in March 2019

Company	Default Event	Default			Ratings**	
		Amount*	Specific Industry	Domain	At_Default	1Yr_Prior
PHI, Inc.	Chapter 11	\$500	Energy: Oil & Gas	United States	Caa2	B3
Evergreen AcqCo 1 LP***	Distressed Exchange	\$301	Retail	United States	NR	NR
Imperial Metals Corporation****	Distressed Exchange	\$227	Metals & Mining	Canada	Caa3	Caa3

* Defaulted bonds in millions of US Dollars. Guaranteed debts are only added to the issuers but not to the guarantors in order to avoid double counting.

** Actual senior unsecured ratings or estimated senior unsecured ratings, which do not necessarily refer to the rating of a particular debt issue.

*** It's bonds are not rated by Moody's. It is excluded from the rated bond count in exhibit 27 and its bonds are excluded from the rated volume in exhibit 30.

**** The company initially defaulted on loans in February 2019 before its bond default.

Source: Moody's Investors Service

Exhibit 32

Initial loan default events in March 2019

Company	Default Event	Default			Ratings**	
		Amount*	Specific Industry	Domain	At_Default	1Yr_Prior
CTI Foods Holding Co., LLC	Prepackaged Chapter 11	\$487	Beverage, Food, & Tobacco	United States	Caa3	B3
PHI, Inc.***	Chapter 11	\$600	Energy: Oil & Gas	United States	NR	NR

* Defaulted loans in millions of US Dollars. Guaranteed debts are only added to the issuers but not to the guarantors in order to avoid double counting.

** Most senior loan rating.

*** This company's loans are not rated by Moody's. It is excluded from the rated loan count in exhibit 27 and their loans are excluded from the rated volume in exhibit 30.

Source: Moody's Investors Service

Exhibit 33

Initial deposit default events in March 2019

					Ratings**	
Company	Default Event	Default Amount*	Specific Industry	Domain	At_Default	1Yr_Prior
None						

* Defaulted deposits in millions of US dollars.

Source: Moody's Investors Service

Exhibit 34

Other credit events in March 2019

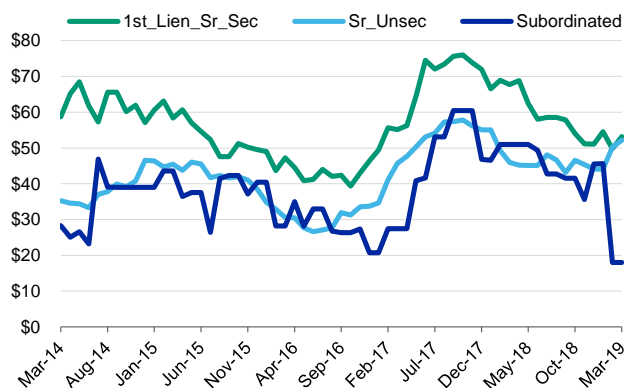
Company	Credit Event	Initial Default Date	Initial Default Event
Nine West Holdings, Inc.	Emerged from Chapter 11	April-18	Chapter 11
Westmoreland Coal Company	Emerged from Chapter 11	July-18	Missed interest payment

Source: Moody's Investors Service

Part IV: Recovery data

Exhibit 35

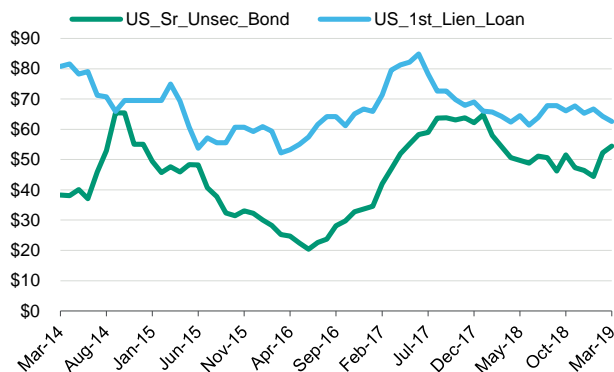
Trailing 12-month global defaulted bond recovery rates (per \$100 par)*



Source: Moody's Investors Service

Exhibit 37

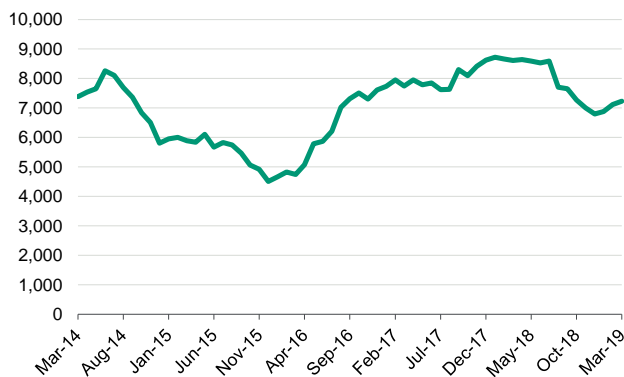
Trailing 12-month US first-lien loan vs. US senior unsecured bond recovery rates (per \$100 par)*



Source: Moody's Investors Service

Exhibit 39

Moody's bankrupt bond index (Dec. 1980 = 100)



Source: Moody's Investors Service

Exhibit 36

Trailing 12-month global defaulted bond recovery rates summary*

	1st Lien Sr. Secured	Sr. Unsecured	Subordinated
Last 12 Month	\$53.2	\$52.1	\$18.0
Count	23	84	1
5-yr Average	\$57.0	\$42.5	\$38.2
5-yr Stdev	\$10.0	\$8.3	\$10.6

*Measured by debt prices which are taken immediately before distressed exchanges or 30 days after non-distressed exchange defaults.

Source: Moody's Investors Service

Exhibit 38

Trailing 12-month US first-lien loan vs. US senior unsecured bond recovery rates summary*

	US Sr. Unsec Bond	US First Lien Loan
Last 12 Month	\$54.5	\$62.6
Count	67	16
5-yr Average	\$45.1	\$66.6
5-yr Stdev	\$12.7	\$7.6

*Measured by debt prices which are taken immediately before distressed exchanges or 30 days after non-distressed exchange defaults.

Source: Moody's Investors Service

Exhibit 40

Moody's bankrupt bond index summary

	Level	Changes				YTD 2019	YTD 2018
		1-Month	3-Month	6-Month	12-Month		
Index	7,235	1.6%	6.4%	-5.5%	-16.0%	6.4%	-0.1%
Issuer count	74	2.8%	-1.3%	-2.6%	-11.9%	-1.3%	-2.3%
Issue count	186	21.6%	17.7%	16.3%	12.7%	17.7%	-2.4%
Total Par*	\$88	25.3%	19.7%	16.8%	-1.2%	19.7%	-3.6%

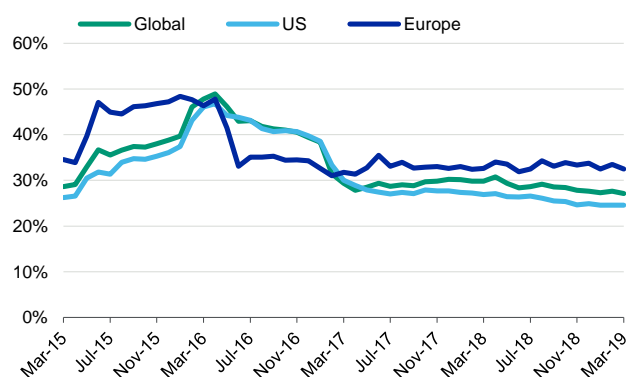
*Measured in billions of US dollars.

Source: Moody's Investors Service

Part V: Rating changes

Exhibit 41

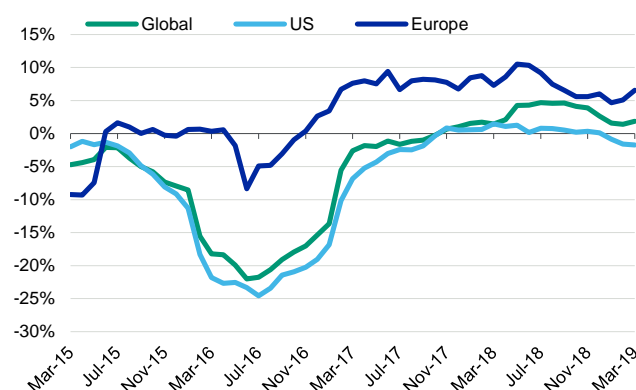
Trailing 12-month rating volatility rate*



Source: Moody's Investors Service

Exhibit 42

Trailing 12-month rating drift*



Source: Moody's Investors Service

Exhibit 43

Fallen angels in March 2019

Company	Specific Industry	Domicile	From Rating*	To Rating*
National Bank of Oman SAOG	Non-U.S. Bank	Oman	Baa3	Ba1
Bank Muscat SAOG	Non-U.S. Bank	Oman	Baa3	Ba1
HSBC Bank Oman SAOG	Non-U.S. Bank	Oman	Baa3	Ba1
Bank Dhofar SAOG	Non-U.S. Bank	Oman	Baa3	Ba1
Oman Telecommunications Company S.A.O.G.	Telecommunications: Integrated - Gri	Oman	Baa3	Ba1
Oman Electricity Transmission Company SAOC	Utility: Network - Electricity - Gri	Oman	Baa3	Ba1
Lamar Funding Limited	Utility: Network - Electricity - Gri	Oman	Baa3	Ba1
Mazoon Assets Company S.A.O.C	Utility: Reg - Electr - Trans&Dist - Gri	Oman	Baa3	Ba1

*Estimated senior unsecured ratings, which do not necessarily refer to the rating of a particular debt issue.

Source: Moody's Investors Service

Exhibit 44

Rising stars in March 2019

Company	Specific Industry	Domicile	From Rating*	To Rating*
Peugeot S.A.	Automotive: Passenger	France	Ba1	Baa3
GIE PSA Tresorerie	Automotive: Passenger	France	Ba1	Baa3

*Estimated senior unsecured ratings, which do not necessarily refer to the rating of a particular debt issue.

Source: Moody's Investors Service

Part VI: Changes/remarks

Exhibit 45
Changes/additions to prior-month reports

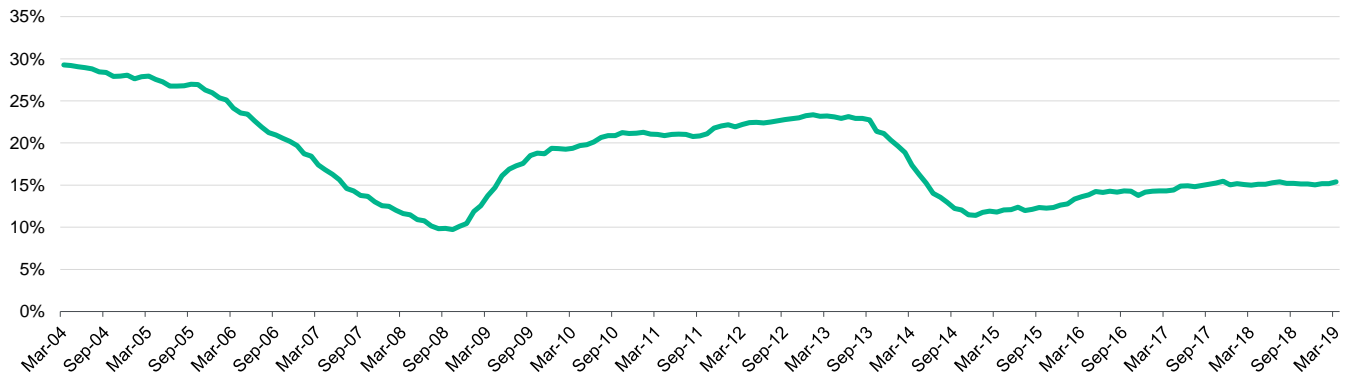
					Ratings**	
Company	Default Event	Default Amount*	Specific Industry	Domain	At_Default	1Yr_Prior
None						

Source: Moody's Investors Service

Appendix: Five-year issuer-weighted speculative-grade default rates

Exhibit 46

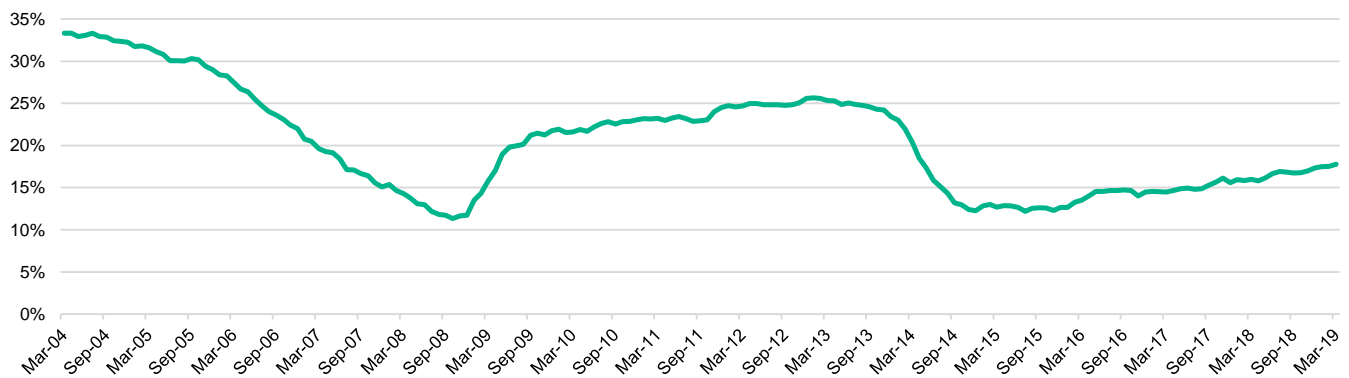
Five-year global speculative-grade default rates



Source: Moody's Investors Service

Exhibit 47

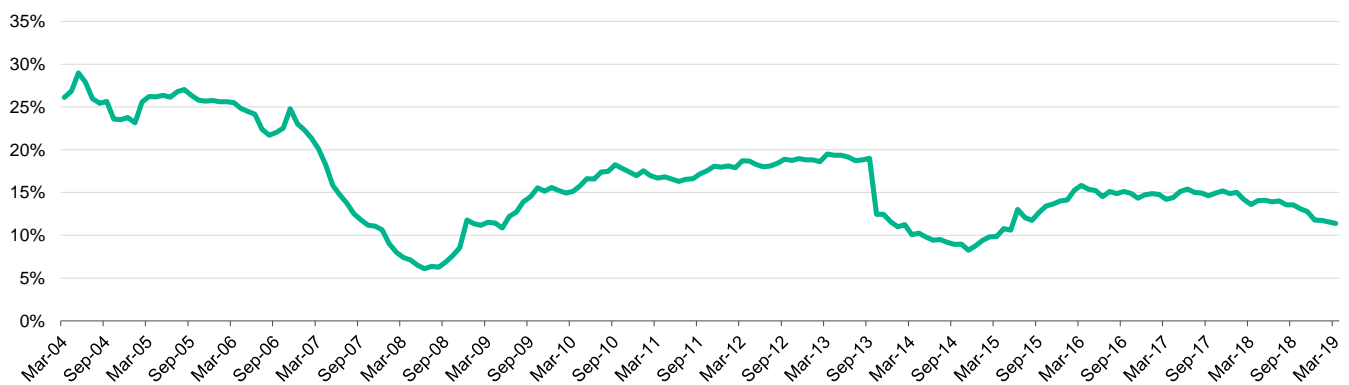
Five-year US speculative-grade default rates



Source: Moody's Investors Service

Exhibit 48

Five-year European speculative-grade default rates



Source: Moody's Investors Service

© 2019 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 OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. 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 CREDIT 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 ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. 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 "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 rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

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

REPORT NUMBER

1170180