EMEA Credit Comment 11 May 2020



European Banks - Weekly Credit Update

The "desktop" stress test performed by the BoE found the UK banking sector to be well
positioned to weather a plausible sharp economic downturn.

• French and Italian names dominated last week's results calendar, with the varying approach towards reserves building undermining the insightfulness of banks' data.

 Activity picked up in the primary market as the Q1 earnings season approached its end, whilst the trend in the secondary market was mixed. Israel Da Costa, CFA
Credit Analyst
+44 20 7597 8355
Israel.DaCosta@uk.daiwacm.com

UK banks 'desktop' stress test

In its financial stability report <u>published</u> last week, the BoE's Financial Policy Committee (FPC) disclosed the results of its "desktop" stress test on the UK banking sector - *called "desktop" because the test was performed with data already available to the BoE, which did not reach out to the banks as would normally be done in a full stress test. The test was based on the <u>plausible illustrative economic scenario</u> for the UK set out by the BoE's Monetary Policy Committee (MPC). Among other factors, the MPC's scenario predicts a 14% decline in the UK GDP in 2020, followed by growth of 15% in 2021 and 3% growth in 2022. Despite the severe economic downturn illustrated, the FPC found that the UK banking sector is well positioned to withstand an even greater deterioration in the economy than the one described in the MPC report.*

Highlights:

- Banks entered into this period of stress with an aggregate CET1 ratio more than three times higher than before the global financial crisis, and holding approximately £1 trillion of liquid assets.
- The MPC scenario would generate material losses for banks on their corporate and household loans, with total credit losses of
 just over £80bn. Yet this draws down only 45% of the capital buffers banks have available above their minimum capital
 requirements.
- This is lower than the £100bn credit losses banks showed that they were able to withstand over the same period in the 2019 stress test. Although the MPC scenario incorporates a much sharper initial fall in output than in the 2019 stress-test scenario, the recovery from the initial fall is more rapid, such that the cumulative loss of output over three years is very similar to the 2019 stress-test scenario.
- The impact on the banking sector is mitigated by the reduction in Bank Rate, the various forms of support to corporates and individuals provided by the BoE and the government, and by the strong investment banking revenues booked in 1Q20.
- In the 2019 stress test, the aggregate CET1 ratio of UK banks decreases from a starting point of 14.5% to a ratio of 9.3% in 2021. In the desktop test, based on the MPC scenario, CET1 ratios would decline from a starting point of 14.8% at YE19 to 11% at YE21.

In all, the FPC assessment on the banking sector is reassuring and in line with our view on the resilience of the UK banking system. It is clear, however, that we will see a sizeable deterioration in UK banks' credit profiles, arising particularly from exposures to corporates and consumer lending.

1Q20 Results (Part III)

Last week's results calendar was dominated by French and Italian names. Different to their peers in Switzerland and the UK, French names failed to benefit from the strong client activity and volatility in Q1 to generate strong trading returns. **BNP Paribas** (net income: €1,282m, -33%Y/Y) and **BPCE** (net income: €180m, -47% Y/Y) followed SocGen's steps in reporting dreadful figures in Equity trading, impacted by restrictions in 2019 dividends across Europe. Yet both names benefited from the diversification of their business model to report still adequate top-line figures. Impairments increased by €657m (85%) Y/Y at BNPP, and by a marginal €211m Y/Y (43%) at BPCE. Although BPCE's figure was partly supported by a €120m reversal in loan loss provisions, and based on a GDP decline of 9% in France in 2020, the figure is low compared to its French and European peers. Surprisingly, BNPP guided for a group net income in 2020 only 15-20% lower than the €8.2bn net income reported in 2019, whilst BPCE guided for a 35-40bps cost of risk for 2020, up from the through-the-cycle loan impairment ratio of 25-30bps. All else equal, BPCE's guidance would imply a limited 22% Y/Y decline in pre-tax profits. Both outlooks would easily beat expectations if achieved amid the current economic outlook and given the elevated indebtedness of the French corporate sector before the crisis.

Credit Agricole (net income: €908m, -33% Y/Y) figures were robust, as usual, with the sharp increase in impairments easily absorbed by the group's decent profitability. Provisions for loan losses amounted to €930m in the quarter, up €650m Y/Y. The group refrained from giving more detailed guidance for its full year 2020 results.

In Italy, **Unicredit** (net income: - €2,706m, vs a €1,175 profit in 1Q19) reported its second consecutive quarterly net loss. The bank's Q1 numbers were hit by a €1.7bn charge from the disposal of a stake at its Turkish business (Yapi Kredi), €1.4bn in integration costs in Italy, and a €795m increase in impairment charges. Positively, core revenues were flat Y/Y, whilst the ongoing restructuring should improve efficiency. That said, profitability will remain significant pressure in forthcoming quarters given the economic environment. Moreover, on an underlying basis, impairment charges consumed an elevated 67% of the bank's preimpairment profit in Q1, signalling limited headroom for further material increases in loan loss provisions.

Intesa's (net income: €1,151m, +9.6% Y/Y) figures were decent, with flat core revenues Y/Y further supported by a significant gain in trading. Impairments (+€423m Y/Y) were indeed low when compared to peers, yet the bank aims to use a €900m gain from the sale of Nexi, a merchant payment business, to generate a total of €1.5bn of provisions to tackle the crisis.



Interestingly, ISP also reported a somewhat optimistic outlook, with a minimum net income of €3bn for FY20 (vs. €4.2bn in FY19), including the sale of Nexi, followed by a minimum €3.5bn net income for 2021.

In all, we continue to judge that the largest European banks have adequate levels of capital, liquidity and funding to weather the current crisis, supported also by the different facilities and programmes provided by central banks and government. That said, there's little clarity yet on the volume of total losses banks will incur as a result of the virus outbreak, not least because the magnitude and duration of the crisis remains highly uncertain. In Q1, provisioning for loan losses varied significantly in both absolute and relative terms, with some banks booking upfront significant charges, whilst others, partly encouraged by regulators, taking a more optimistic view on the impact the economic downturn will have on their financials. Banks' loan books do naturally differ from each other, with varying exposures to different geographies and sectors. Yet the significant variations in provisioning and scenarios reported in Q1 reduces the insightfulness and transparency of banks' financials.

Regulatory updates

The **Danish** FSA <u>announced</u> on 01 May a significant change to the MREL requirement for Danish systemically important banks. Aligned with BRRD II rules, the regulator will apply a cap on the subordination requirement on MREL. Accordingly, Danish banks will now have a total MREL requirement and a subordinated MREL requirement. The subordination requirement must be met with SNP and lower ranked paper, whilst the total MREL requirement can be partly met with SP debt.

The new cap will be the higher of (i) 2 x (Pillar 1 Requirement + Pillar 2 Requirement) + Combined Buffer Requirement and (ii) 8% of Total Own Funds and Liabilities. Danske Bank for instance had a 36.2% MREL requirement, now it will still have a 36.2% total MREL requirement, yet the subordinated requirement is only 31.5%. The change is unwelcome in terms of clarity for investors, although the minimum subordinated requirement remains elevated in Denmark vs European peers given the higher buffer requirements in Denmark.

In the **UK**, the PRA <u>will set</u> Pillar 2A capital requirements as a nominal amount instead of a percentage of RWAs in 2020 and 2021, as the regulator does not see RWAs as a good approximation for the evolution of the risks captured in Pillar 2A in a stress scenario. The measure will avoid an absolute increase in Pillar 2A capital requirements in the current stress, thus reducing capital requirements. The regulator now judges major UK banks' CET1 capital requirement triggers for restrictions on distributions to be 40–50bps (of RWA) lower than they would otherwise be by 2021.

The change in the Pillar 2A requirement will also be reflected in the 2021 MREL requirement. The BoE also stated that it will "continue to keep MRELs under review and monitor market developments carefully in Q3 of this year to inform its approach in Q4 2020 to setting January 2021 MRELs and indicative January 2022 MRELs".

Primary and secondary markets

Activity in the unsecured **primary market** picked up last week as the 1Q earnings season approached its end. Placements came mostly in SP/Sr OpCo format, yet we also saw the first subordinated bond issued by a European bank since 24 February, with RBS placing T2 paper, which attracted strong demand. In all, reported primary market demand was adequate last week, with significant tightening from IPT, although NIP continue to be sizeable (12-22bps). Key Transactions:

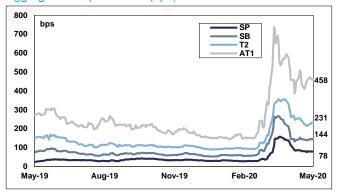
- Erste, SP, EUR750m, 7Y, priced at MS+115bs, IPT was at MS+145bps, book size over 2.2bn
- Nordea, SP, EUR1.25bn, 7Y, priced at MS+85bps, IPT was at MS+110bps, book last heard over EUR2bn
- RBS, T2, GBP1bn, 10.25NC5, priced at G+355bps, IPT was at G+400bps, book over GBP5bn
- Danske, SP, EUR1bn, 5Y, priced at MS+103bps, IPT was at MS+125/130bps, book over EUR1.8bn
- Op Corporate, SP, EUR1bn, 5.25Y, priced at MS+85bps, IPT at MS+105bps, book over EUR1.5bn
- Barclays, Sr OpCo, 2Y, USD1.75bn, priced at T+155bps, IPT at T+200.

The **secondary market** saw mixed trends in both EUR and USD spreads amid dreadful economic data across Europe, and the decision of the German Constitutional Court to question the appropriateness of the ECB's bond purchase programme. The spreads of Senior Bail-in and Tier 2 paper widened somewhat, particularly for Italian and Spanish names. Meanwhile, despite the elevated supply, the widening in aggregate EUR SP spreads was marginal, whilst USD SP spreads actually tightened backed by the good performance of large USD SP issuers. EUR SP spreads remain 50bps above pre-crisis levels (+87bps for SNP paper), whilst USD SP/Sr OpCo debt remains 85bps above pre-crisis levels (+138bps for SNP/Sr HoldCo paper).

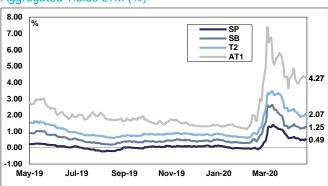


Western European Banks EUR Spreads and Yields

Aggregated Z-spread LTM (bps)



Aggregated Yields LTM (%)



Source: Bloomberg, Daiwa Capital Markets Europe. SP = Senior Preferred/Senior OpCp; SNP = Senior Non- Preferred/ Senior HoldCo; T2= Tier 2; AT1 = Additional Tier 1. All figures based on Z to worst spread of public benchmark issuances.

Selected Names

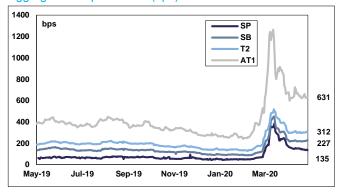
	Sr Preferred/Sr OpCo					Sr Non-Preferred/Sr HoldCo					Tier 2				
	Dur.	Yield	Z	Z 5D∆	Z YTD	Dur.	Yield	Z	Z 5D∆	Z YTD	Dur.	Yield	Z	Z 5D∆	Z YTD
Commerz	4.9	1.0	122	2	73	4.3	2.0	218	6	146	5.6	4.4	455	27	265
Barclays	3.8	1.2	128	5	85	3.5	1.6	186	3	132	6.1	4.9	484	77	363
BBVA	4.0	0.8	102	1	70	4.5	1.5	171	7	116	7.8	3.1	334	43	189
BFCM	4.1	0.5	71	-1	41	8.8	1.2	132	6	79	5.5	1.8	199	10	124
BNPP	2.7	0.4	64	0	42	5.3	1.0	127	5	72	5.7	1.7	184	12	91
BPCE	3.9	0.5	75	-1	48	4.8	1.1	138	6	85	5.4	1.8	196	5	134
Credit Ag.	3.4	0.4	66	-1	39	5.8	1.1	133	6	76	5.2	1.9	193	9	69
Credit Sui.						6.8	1.5	170	6	104					
Danske	3.0	0.5	78	1	42	3.3	1.5	172	1	100	8.4	2.5	272	12	125
Deutsche	3.1	1.0	130	-3	73	2.9	2.9	300	1	173	4.7	4.3	443	17	196
DNB	3.5	0.5	77	-2	46						7.1	2.0	215	1	156
HSBC	3.4	0.5	70	2	41	3.4	0.9	103	3	59	5.9	1.8	196	3	112
ING	1.7	0.6	80	-2	62	5.3	1.0	123	4	74	6.1	1.8	202	7	99
Intesa	4.6	1.7	188	3	115						4.2	3.3	351	23	198
Lloyds	2.3	0.7	90	-3	68	4.1	1.5	173	3	121	7.7	2.6	277	17	163
Nordea	3.7	0.4	66	-2	35	3.1	0.8	110	-1	73	4.4	2.2	209	-3	159
Rabobank	2.6	0.3	49	-4	33	6.4	0.7	95	6	55	3.0	1.3	154	-1	106
RBS						4.6	1.8	206	0	131					
Santander	4.1	0.7	95	0	69	5.0	1.4	165	9	92	5.7	2.2	242	30	140
San UK	3.2	0.8	100	-2	68	3.5	1.6	192	3	126					
SocGen	2.0	0.4	69	-2	43	5.9	1.4	168	10	95	4.5	2.1	231	6	152
SCB						6.8	1.7	189	3	119	3.7	4.4	416	3	368
Swedbank	4.9	0.6	87	3		4.4	1.0	128	-2	64	7.2	2.3	248	-2	147
UBS	1.6	0.4	70	-2	48	3.7	0.9	118	2	77					
UniCredit	4.2	1.9	213	7	130	5.1	3.1	329	19	211	5.9	5.8	556	44	360

Source: Bloomberg, Daiwa Capital Markets Europe. SP = Senior Preferred/Senior OpCp; SNP = Senior Non-Preferred/Senior HoldCo; T2 = Tier 2. Dur. = Duration. Yield to worst (%). Z = Z-Spread to Worst (bps). $Z SD\Delta = Iast 5$ days Z-spread net change (bps). Z YTD = Iast 5 year to date Z-Spread net change (bps). Blank cells represent lack of statistically significant data. Figures may not be representative of the whole market.

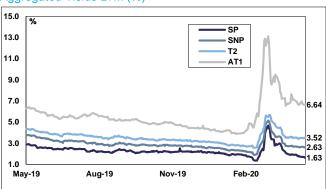


Western European Banks USD Spreads and Yields

Aggregated Z-spread LTM (bps)



Aggregated Yields LTM (%)



Source: Bloomberg, Daiwa Capital Markets Europe. SP = Senior Preferred/Senior OpCp; SNP = Senior Non- Preferred/ Senior HoldCo; T2= Tier 2; AT1 = Additional Tier 1. All figures based on Z to worst spread of public benchmark issuances.

Selected Names

	Sr Preferred/Sr OpCo					Sr Non-Preferred/Sr HoldCo					Tier 2				
	Dur.	Yield	Z	Z 5D∆	Z YTD	Dur.	Yield	Z	Z 5D∆	Z YTD	Dur.	Yield	Z	Z 5D∆	Z YTD
Barclays	2.8	2.1	189	14	173	4.8	2.8	241	4	128	5.7	4.0	348	9	170
BFCM	2.4	1.7	136	6	87										
BNPP	2.0	1.2	91	-9	60	4.6	2.9	227	8	136	5.3	3.3	281	21	159
BPCE	2.5	1.7	144	-4	80	4.4	2.8	230	2	132	3.7	3.5	298	5	188
Credit Ag.	1.8	1.6	119	-14	83	3.4	2.3	189	-1	117	8.2	3.4	269	11	157
Credit Sui.	1.8	1.6	113	-8	81	4.9	2.7	202	12	134					
Danske	1.5	1.6	137	-13	74	3.2	3.0	258	-12	154					
Deutsche						2.5	4.2	369	-21	241	6.6	6.4	577	5	248
HSBC	4.1	2.6	221	-11	113	5.1	2.3	190	6	98	10.8	3.9	297	19	149
ING	1.1	1.1	82	-11	61	5.0	2.4	192	5	112	4.9	3.2	265	6	164
Intesa	3.7	3.2	274	7	161						4.2	5.7	520	38	288
Lloyds	3.4	2.1	174	0	108	3.8	2.5	205	8	130	5.1	3.2	271	9	136
Nordea	1.0	1.0	69	15	45	3.1	2.4	198	-1	115	1.6	2.6	195	-38	133
Rabobank	2.5	1.4	107	0	62	3.5	2.2	161	-6	99	5.1	2.8	230	0	133
RBS						4.8	2.7	228	8	126	3.2	3.6	315	7	195
Santander	5.8	2.5	209	9	122	4.4	3.0	250	7	153	4.7	3.7	320	13	203
San UK	1.5	1.7	150	-7	98	3.4	2.5	202	3	120	4.7	4.1	360	16	210
SocGen						4.3	2.8	241	6	142	4.6	3.8	332	16	186
SCB	3.1	3.0	251	-6	12	4.5	2.9	247	-6	148	5.8	4.0	334	2	198
UBS	9.7	2.1	157	3	93	4.8	2.3	183	8	109					
UniCredit	2.4	3.7	332	17	192	2.3	5.0	452	18	320	8.6	6.5	576	18	234

Source: Bloomberg, Daiwa Capital Markets Europe. SP = Senior Preferred/Senior OpCp; SNP = Senior Non-Preferred/Senior HoldCo; T2 = Tier 2. Dur = Duration. Yield to worst (%). Z = Z-Spread to Worst (bps). $Z SD\Delta = Iast 5$ days Z-spread net change (bps). Z YTD = Iast 5 year to date Z-Spread net change (bps). Blank cells represent lack of statistically significant data. Figures may not be representative of the whole market.



Credit Research

Key contacts

London	Chris Saighma	. 44 00 7507 0000
Head of Research	Chris Scicluna	+44 20 7597 8326
Financials, Supras/Sovereigns & Agencies	Israel Da Costa, CFA	+44 20 7597 8355
Research Assistant	Katherine Ludlow	+44 20 7597 8318
Tokyo		
Domestic Credit		
Chief Credit Analyst	Toshiyasu Ohashi	+81 3 5555 8753
Electronics, Automobiles, Non-Banks, Real Estate, I	REIT Takao Matsuzaka	+81 3 5555 8763
Chemicals, Iron & Steel	Kazuaki Fujita	+81 3 5555 8765
International Credit		
Non-Japanese/Samurai, European Sovereigns	Hiroaki Fujioka	+81 3 5555 8761
Non-Japanese/Samurai	Fumio Taki	+81 3 5555 8787
Non-Japanese	Jiang Jiang	+81 3 5555 8755
	3 3 3 3	
Landan Turnalatian		
London Translation	Adamstra Harman Inda	. 44 00 7507 0007
Head of Translation, Economic and Credit	Mariko Humphris	+44 20 7597 8327

DAIR <GO>

All of the research published by the London and New York research teams is available on our Bloomberg page at DAIR <GO>.

Access our research at:

http://www.uk.daiwacm.com/ficc-research/research-reports



Follow us

@DaiwaEurope

This document is produced by Daiwa Securities Co. Ltd and/or its affiliates and is distributed by Daiwa Capital Markets Europe Limited in the European Union, Iceland, Liechtenstein, Norway and Switzerland. Daiwa Capital Markets Europe Limited is authorised and regulated by The Financial Conduct Authority, is a member of the London Stock Exchange and an exchange participant of Eurex. Daiwa Capital Markets Europe Limited and its affiliates may, from time to time, to the extent permitted by law, participate or invest in, or be mandated in respect of, other transactions with the issuer(s) referred to herein, perform services for or solicit business from such issuer(s), and/or have a position or effect transactions in a particular issuer's securities or options thereof and/or may have acted as an underwriter during the past twelve months in respect of a particular issuer of its securities. In addition, employees of Daiwa Capital Markets Europe Limited and its affiliates may have positions and effect transactions in such securities or options and may serve as Directors of a particular issuer. Daiwa Capital Markets Europe Limited may, to the extent permitted by applicable UK law and other applicable law or regulation, effect transactions in securities of a particular issuer before this material is published to recipients.

This publication is intended for investors who are not Retail Clients in the United Kingdom within the meaning of the Rules of the FCA and should not therefore be distributed to such Retail Clients in the United Kingdom. Should you enter into investment business with Daiwa Capital Markets Europe's affiliates outside the United Kingdom, we are obliged to advise that the protection afforded by the United Kingdom regulatory system may not apply; in particular, the benefits of the Financial Services Compensation Scheme may not be available.

Daiwa Capital Markets Europe Limited is part of Daiwa Securities Group Inc. Daiwa Securities Group Inc., its subsidiaries or affiliates, or its or their respective directors, officers and employees from time to time have trades as principals, or have positions in, or have other interests in the securities of the company under research including market making activities, derivatives in respect of such securities or may have also performed investment banking and other services for the issuer of such securities. Daiwa Securities Group Inc., its subsidiaries or affiliates do and seek to do business with the company(s) covered in this research report. Therefore, investors should be aware that a conflict of interest may exist.

Daiwa Capital Markets Europe Limited has in place organisational arrangements for the prevention and avoidance of conflicts of interest. Our conflict management policy is available at http://www.uk.daiwacm.com/about-us/corporate-governance-regulatory. Regulatory disclosures of investment banking relationships are available at http://www.us.daiwacm.com/.

The statements in the preceding paragraphs are made as of May 2020.



Explanatory Document of Unregistered Credit Ratings

In order to ensure the fairness and transparency in the markets, Credit Rating Agencies became subject to the Credit Rating Agencies' registration system based on the Financial Instruments and Exchange Act. In accordance with this Act, in soliciting customers, Financial Instruments Business Operators, etc. shall not use the credit ratings provided by unregistered Credit Rating Agencies without informing customers of the fact that those Credit Rating Agencies are not registered, and shall also inform customers of the significance and limitations of credit ratings, etc.

■ The Significance of Registration

Registered Credit Rating Agencies are subject to the following regulations:

- 1) Duty of good faith.
- 2) Establishment of control systems (fairness of the rating process, and prevention of conflicts of interest, etc.).
- 3) Prohibition of the ratings in cases where Credit Rating Agencies have a close relationship with the issuers of the financial instruments to be rated, etc.
- 4) Duty to disclose information (preparation and publication of rating policies, etc. and public disclosure of explanatory documents).

In addition to the above, Registered Credit Rating Agencies are subject to the supervision of the Financial Services Agency ("FSA"), and as such may be ordered to produce reports, be subject to on-site inspection, and be ordered to improve business operations, whereas unregistered Credit Rating Agencies are free from such regulations and supervision.

■ Credit Rating Agencies

[Standard & Poor's]

The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: S&P Global Ratings ("Standard & Poor's")

The name and registration number of the Registered Credit Rating Agency in the group: S&P Global Ratings Japan Inc. (FSA commissioner (Rating) No.5)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Unregistered Rating Information" (http://www.standardandpoors.co.jp/unregistered) in the "Library and Regulations" section on the website of S&P Global Ratings Japan Inc. (http://www.standardandpoors.co.jp)

Assumptions, Significance and Limitations of Credit Ratings

Credit ratings assigned by Standard & Poor's are statements of opinion on the future credit quality of specific issuers or issues as of the date they are expressed and they are not indexes which show the probability of the occurrence of the failure to pay by the issuer or a specific debt and do not guarantee creditworthiness. Credit ratings are not a recommendation to purchase, sell or hold any securities, or a statement of market liquidity or prices in the secondary market of any issues.

Credit ratings may change depending on various factors, including issuers' performance, changes in external environment, performance of underlying assets, creditworthiness of counterparties and others. Standard & Poor's conducts rating analysis based on information it believes to be provided by the reliable source and assigns credit ratings only when it believes there is enough information in terms of quality and quantity to make a conclusion. However, Standard & Poor's does not perform an audit, due diligence or independent verification of any information it receives from the issuer or a third party, or guarantee its accuracy, completeness or timeliness of the results by using the information. Moreover, it needs to be noted that it may incur a potential risk due to the limitation of the historical data that are available for use depending on the rating.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of March 7th, 2017, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of S&P Global Ratings Japan Inc. (http://www.standardandpoors.co.jp)

[Moody's]

The Name of the Credit Rating Agencies Group, etc

The name of the Credit Rating Agencies group: Moody's Investors Service ("MIS")

The name and registration number of the Registered Credit Rating Agency in the group: Moody's Japan K.K. (FSA commissioner (Rating) No.2)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Unregistered Rating explanation" in the section on "The use of Ratings of Unregistered Agencies" on the website of Moody's Japan K.K. (The website can be viewed after clicking on "Credit Rating Business" on the Japanese version of Moody's website (https://www.moodys.com/pages/default_ja.aspx)

Assumptions, Significance and Limitations of Credit Ratings

Credit ratings are Moody's Investors Service's ("MIS") current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. MIS 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 do not constitute investment or financial advice, and credit ratings are not recommendations to purchase, sell, or hold particular securities. 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 MIS in any form or manner whatsoever.

Based on the information received from issuers or from public sources, the credit risks of the issuers or obligations are assessed. MIS adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MIS considers to be reliable. However, MIS is not an auditor and cannot in every instance independently verify or validate information received in the rating process.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of April 16th, 2018, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Moody's Japan K.K. (https://www.moodys.com/pages/default_ja.aspx)

[Fitch]

The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: Fitch Ratings ("Fitch")

The name and registration number of the Registered Credit Rating Agency in the group: Fitch Ratings Japan Limited (FSA commissioner (Rating) No.7)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Outline of Rating Policies" in the section of "Regulatory Affairs" on the website of Fitch Ratings Japan Limited (https://www.fitchratings.com/site/japan)

Assumptions, Significance and Limitations of Credit Ratings

Ratings assigned by Fitch are opinions based on established criteria and methodologies. Ratings are not facts, and therefore cannot be described as being "accurate" or "inaccurate". Credit ratings do not directly address any risk other than credit risk. Credit ratings do not comment on the adequacy of market price or market liquidity for rated instruments. Ratings are relative measures of risk; as a result, the assignment of ratings in the same category to entities and obligations may not fully reflect small differences in the degrees of risk. Credit ratings, as opinions on relative ranking of vulnerability to default, do not imply or convey a specific statistical probability of default.

In issuing and maintaining its ratings, Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The assignment of a rating to any issuer or any security should not be viewed as a guarantee of the accuracy, completeness, or timeliness of the information relied on in connection with the rating or the results obtained from the use of such information. If any such information should turn out to contain misrepresentations or to be otherwise misleading, the rating associated with that information may not be appropriate. Despite any verification of current facts, ratings can be affected by future events or conditions that were not anticipated at the time a rating was issued or affirmed.

For the details of assumption, purpose and restriction of credit ratings, please refer to "Definitions of ratings and other forms of opinion" on the website of Fitch Rating Japan Limited.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of September 27th, 2019, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Fitch Rating Japan Limited (https://www.fitchratings.com/site/japan)

February 2020