

Deutsche Bank AG

William Hahn

Credit Research
+44 20 7597 8355
William.Hahn@uk.daiwacm.com

	Senior Preferred	Senior Non-Preferred	Outlook
Moody's	A3	Baa3	Stable
S&P	BBB+	BBB-	Negative
Fitch	BBB+	BBB-	Negative

Source: Moody's, S&P and Fitch

Background and ownership

Deutsche Bank AG (DB) is a universal bank active in wholesale banking and trading, transaction services, consumer finance, retail banking and wealth management. 87,000 employees serve clients across 70 countries. Its franchise is strong in international corporate banking and securities businesses, particularly with large German corporates. Total assets of €1.38tr and AUM of €1.23bn at 3Q20 make DB one of the largest investment banks in the world.

DB has a broad shareholder base, its shares are listed on stock exchanges in Germany and the US, with the majority of its shares owned directly or indirectly by institutional investors (72% of total). Shareholders with holdings $\geq 3\%$ are BlackRock Inc (4.98%), Capital Group (3.74%), Hudson Executive Capital (3.18%), Paramount Services Holding (3.05%), Supreme Universal holding (3.05%) and Cerberus (3.0%).

Main activities

After several restructurings, the bank now operates across four main business divisions: **(1) Corporate Bank** (CB, 20% of revenues in 9M20) which aggregates global transaction banking, corporate finance and capital markets products; **(2) Investment Bank** (IB, 39% of revenues) focusing on trading and hedging of financial products, origination & advisory and FICC; **(3) Private Bank** (PB, 32% of revenues) offering retail banking and wealth management services in Germany and abroad; and **(4) Asset Management** (AM, 9% of revenues) operating under the DWS brand offering broad range of investment fund products and services to both retail and institutional clients. As part of its most recent restructuring efforts, DB created the **Capital Release Unit (CRU)** to accelerate the wind-down of non-core business units. The CRU houses leveraged exposures of €90bn (8% of total) and RWAs of €39bn (12% of total). These were greatly reduced over the past year (-49% yoy and -30% yoy respectively). However, the anticipated residual leverage exposures of the CRU in 2022 were meaningfully upsized against initial targets which we believe will continue to drag on DB's revenue performance.

Restructuring progress visible

Deutsche Bank appears to be on course to meet the main 2022 targets of its strategic overhaul launched in July 2019. This included the disposal of less profitable capital market activities considered 'non-core' such as the global equity sales and trading division, the prime finance business and the downsizing of its rates business. DB has also made considerable progress in reducing adjusted costs as it already achieved 51% of the targeted €6bn amount, in part through headcount reductions. Moreover, DB has already booked 85% of the €8bn transformation-related charges at end-2020, which should put the bank in a better position to tackle the adverse economic effects of the pandemic and help achieve its 2022 RoTE target of 8%.

The resulting simplified business model aims to make the group more Germany- and Europe-focused with the 2022 strategic endpoints placing the bank on a stronger foundation. Despite the progress to date, there remains a degree of execution risk as the bank's digital transformation is ongoing with the effectiveness of sizeable investments in controls and technology yet to be seen. The bank also made minor downward adjustments to some of its 2022 targets due to pandemic-related challenges and resulting lowered regulatory requirements for the leverage ratio. So far, cost reductions have supported DB in reaching its interim revenue goals, but as stated by DB management it will be challenging to sustain the revenue base of its fixed income business while growing its corporate and private banking franchises under the existing, highly uncertain macroeconomic conditions. Therefore, DB's profitability target of 8% RoTE appears ambitious in our view, backed by a rather low consensus analyst forecast of just 3.3% to be achieved by 2022. Capital levels have benefitted from the significant deleveraging to date, strengthening the bank's loss absorbing capacity and liquidity levels.

Deutsche Bank – Key Data	
	3Q20
Total Assets (€bn)	1,387
Loan Book (€bn)	432.6
Loans to Deposits (%)	75.3
Cost to Income (%)	87.3
Net Profit (€m)	309
LCR (%)	151
FL CET1 (%)	13.3
Leverage Ratio (%)	4.4
Market Cap* (€bn)	19.9
P/B*	0.37

Source: Bank statements, Bloomberg. *As of 08/01/2021

Key Targets	9M20	2022 Targets
RoTE	5.6%	8.0%
Core Revenues	€24.2bn*	€24.4bn
Adjusted Costs	€18.3bn*	€16.7bn
Cost to Income Ratio	87.3%	70%
CET1 Ratio	13.3%	min. 12.5%
Leverage Ratio	4.4%	~4.5%

Source: Bank statements; *Last twelve months (LTM) core-bank only

Financial strength indicators

Asset quality – DB's balance sheet stood at €1.38tr (-7.5% yoy) comprised of loans to customers (31%), trading and related assets (18%) and cash and central bank balances (13%). Geographically, over half of the bank's loan book is geared towards a strong, granular customer base in Germany (51%), followed by other European countries (22%), N. America (17%) and APAC (8%). The largest portion of loans relates to German mortgages, which accounted for 35% of the total. During the first nine months of 2020 DB booked loan loss provisions of some €1.5bn (9M19: €474m) which saw the bank's annualised cost of risk rise to 47bps vs 15bps in 2019 resulting in a slight deterioration in the bank's asset-quality metrics. NPLs rose to 2.9% from 2.3% one year prior and the coverage ratio fell to 33% from 41%, which may indicate some under-provisioning as most of the impaired loans are stage 3 under IFRS9. NPL and coverage ratios are slightly below European banking sector averages of 2.9% and 45.3% respectively, as reported by the EBA. Government guarantee and loan deferral schemes offered during the pandemic have helped support the strong asset quality ratios. We deem the bank's balance sheet to be in a better position to absorb further potential loan loss charges due to its lower cost base, improved revenue performance and the reduced exposure to higher risk and volatile business streams following the restructure.

Profitability – Over the last five years, Deutsche reported cumulative losses of €5.1bn due to a wide range of factors, including tax adjustments, restructuring charges, litigation, goodwill impairments, weak capital market activities, the low interest rate environment and overcapacity in the German banking sector. There were signs of improvements during the first nine months of 2020 as profits amounted to €436m helped by the strong performance of its investment-banking arm, which saw top line revenue performance rise 35% yoy. DB's revenue forecast of €24.4bn by 2022 (LTM: €23.8bn) appears credible as it plans to achieve it with continued cost discipline, backed by a track record of 11 consecutive quarters of falling expenses. As more revenue is coming from its investment bank, growth is expected to rise to 3% for the period 2018 through 2022, up from previous expectations of 2%. Nevertheless, performance still lags DB's global investment banking peers, especially those in the US that have enjoyed growth rates about twice as high in their fixed income, currencies and commodities (FICC) business segments.

Divisional performance in 3Q20 was overall positive leaning predominantly on the IB (40% of total revenues) while Asset Management (9.5% of total) provided another bright spot with revenues up 4% yoy to €563m on the back of strong asset net inflows of €11bn, positive fair value changes of guarantees and lower funding allocations. ESG-dedicated funds now account for a third of all net inflows during 2020 highlighting the growing importance of this sub-segment. In the IB, FICC as the main income driver grew 47% yoy due to higher client retention and activity, improved rates performance and growing credit trading. Origination & Advisory also improved after some lacklustre quarters in recent years. Revenues were up 15% driven by both equity and debt origination income growth that was based on market share gains. Income from the Private Bank (34% of total), which includes the German retail-banking arm, remained flat against last year as business volume growth was offset by continued deposit margin compression. To improve revenue performance in the division, DB will need to increase synergies from its Postbank integration, transforming sizeable deposit volumes into fee-yielding investment products. Lastly, revenues in the Corporate Bank (21% of total) were down 5% yoy as interest rate headwinds and lower client activity hurt cash management income and outweighed positive effects from deposit repricing and ECB tiering.

Capitalisation – The group's capital position is robust with CET1 at 13.3% as at 3Q20, which is comfortably above its SREP requirement of 10.4%. As a result of the restructure, regulators recognised Deutsche's reduced organisational complexity leading to a Pillar 2 requirement reduction of 25bps while the FSB moved the bank from bucket 2 to bucket 3 on the G-SIB list. Regulatory capital relief measures in response to the pandemic further lowered DB's capital requirements over the course of the year, resulting in sizeable buffers over SREP and MDA of some €9.4bn (+285bps) and €8.4bn (+259bps) respectively. DB expects to maintain a CET1 level of at least 12.5% over the next two years, which we deem feasible.

DB's fully-loaded leverage ratio was up slightly to 4.4% vs 4.2% at the beginning of 2020, benefitting 36bps from the ECB 'quick fix' which allows for the temporary exclusion of certain central bank balances from leverage exposures. Without the exclusion, the ratio would have been 4.1%, still well above the 3% required amount applicable from June 2021 (3.75% from 2023).

Deutsche Bank - Additional Data			
Key Ratios (%)	9M20	FY19	FY18
FL CET1	13.3	13.6	13.6
Total Capital	17.6	17.4	17.5
Leverage Ratio	4.4	4.2	4.1
LCR	151	141	140
Cost to Income	87.3	108.3	92.7
RWA TLAC	32.5	34.6	33.71
€bn			
Total assets	1,388	1,298	1,348
Loans	432	434	405
Senior Pref. Debt	4	3	1
Senior Non-Pref Debt	48	56	55
AT1 / Tier 2	14	12	14
CET1	43	44	47
Total MREL	109	115	118
Liquidity Buffer	253	222	259
Total AuM	1,236	1,255	1,203
€m			
Revenues	24,263*	23,165	25,316
<i>o/w Origination & Advisory</i>	-	1,606	1,784
<i>o/w FICC</i>	-	5,534	5,646
<i>o/w Equities</i>	-	-	1,957
Expenses	18,367*	25,076	23,461
Loan loss impairments	1,787*	723	525
Net Profit	435	-5,718	-52

Source: Deutsche Bank earnings reports, as stated, *LTM core bank

Subordinated TLAC/MREL amounted to €105bn at 9M20 vs a subordination requirement of €66bn. Total TLAC/MREL (including vanilla senior preferred debt) amounted to €109bn against a €92bn requirement. The stated figures already exclude €4bn in bonds issued under UK law that are de-recognised as of January 2021. As per above, outstanding MREL is well in excess of requirements, yet the bank aims to maintain this surplus in expectation of higher MREL subordination and requirements during 2021. Deutsche is also considering replacing some of its outstanding SNP with cheaper SP paper however, this could lead to a lower LCR ratio, restricting its operational flexibility.

Funding & Liquidity – As at 3Q20 Deutsche Bank's funding base consists primarily of €575bn customer deposits of which 52% were granular retail deposits. Customer deposits thus accounted for 58% of the bank's net balance sheet highlighting DB's strong retail base, especially in Germany. Reflective of the ongoing deleveraging, trading and related assets have fallen to €158bn (-5% yoy) accounting for 16% of the net balance sheet while capital market funding reliance is considered low, totalling just €162bn (16% of total). In 9M20, DB issued debt of €14bn, including €7bn Senior Non Preferred (SNP) and €3bn Senior Preferred (SP). This largely completes the bank's revised funding plan for 2020, which stood at €10-15bn. However, DB announced that it would prefund some of its 2021 requirements if market conditions would allow for it, which it promptly did in November issuing three SNP for a combined amount equating to €4.6bn.

Deutsche also participated in the ECB's T-LTRO III programme for a total of €34bn, taking advantage of recalibrated and favourable funding conditions that have been offered since June and that were improved further in December 2020. Liquidity reserves of €253bn are sizeable and split by cash balances (66%) and highly quality liquid assets (34%), amounting to 25% of the bank's net balance sheet. They have grown by €31bn since the beginning of 2020 which was mostly due to participation in the ECB's funding programme. However, we expect a gradual reduction of liquidity reserves to €200bn in line with DB's communicated target, supporting expected balance sheet expansion and reducing the negative carry associated with central bank cash balances. Liquidity indicators LCR and NSFR remained adequate and above minimum requirements at 151% and >100% respectively.

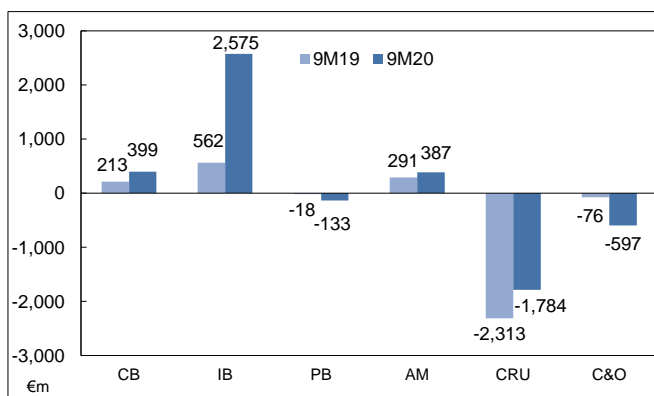
Rating agencies' views

Moody's affirmed Deutsche's deposit and senior unsecured debt and issuer rating at A3 stable and changed the outlook to stable from negative. The affirmation and change in outlook reflect progress in executing its new, more radical shift in strategy, which has put the bank in a better position to absorb the effects of the coronavirus-driven macroeconomic shock, supporting its standalone credit strength. But Moody's acknowledged that execution remains key to improving DB's credit profile and ratings.

S&P affirmed its ratings for the SP (BBB+) and SNP (BBB-) while noting that the cyclical downturn arising from the COVID-19 pandemic has led to a weakened economic and operating environment for Deutsche Bank. The agency expects the bank's earnings, asset quality, and capitalization to be weaker than previously envisaged through end-2020 and into 2021. The management's restructuring plan is still considered fundamentally on track. And S&P's judges that the management will likely deliver a significantly improved business and operating model, bringing the bank close to covering its cost of capital by 2022. However, the negative outlook acknowledges substantial downside risks.

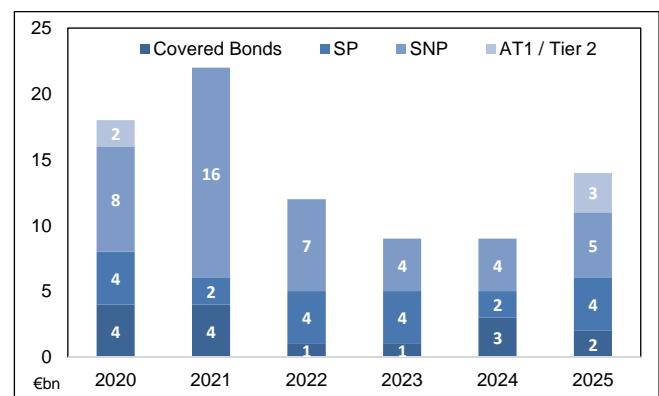
Fitch: Deutsche Bank's IDR and SNP debt ratings (BBB) are equalised with the VR while the SP rating (BBB+) is sensitive to a downgrade in the respective IDR. The latter reflects progress but also continued challenges associated with the bank's ambitious multi-year restructuring. Fitch judges that the restructuring should result in a more focused and profitable business model, but will weigh on the bank's financials in the near term, at a time when the external environment has also come under shock due to the coronavirus pandemic and related lockdowns. Continued medium-term risks to Deutsche Bank's strategy and financial profile in view of the weak economic outlook are reflected in the negative outlook.

9M pre-tax profit by business segment



Source: Company reports

Debt Maturity Profile as at 9M20



Source: Company reports

Recent Transactions

Issue Date	Security	Maturity	Currency	Size (m)	Type	Coupon	Yield	Final Spread (bps)
17/11/2020	Senior Non-Preferred	6NC5	USD	2,000	Fixed	2.129%	2.129%	T + 175
09/11/2020	Senior Non-Preferred	10NC9	EUR	1,500	Fixed	1.750%	1.792%	MS + 205
09/11/2020	Senior Non-Preferred	5NC4	EUR	1,500	Fixed	1.000%	1.119%	MS + 160
10/09/2020	Senior Non-Preferred	11NC10	USD	1,500	Fixed	3.547%	3.547%	T + 287
10/09/2020	Senior Non-Preferred	4NC3	USD	1,750	Fixed	2.222%	2.222%	T + 207
28/08/2020	Senior Non-Preferred	6NC5	EUR	750	Fixed	1.375%	1.461%	MS + 185

Source: Deutsche Bank, BondRadar

This is an issuer profile and contains factual statements only. All statements are sourced from Deutsche Bank financial reports, which can be found at https://www.db.com/ir/index_en.htm

Credit Research

Key contacts

<i>London</i>		
<i>Head of Research</i>	<i>Chris Scicluna</i>	+44 20 7597 8326
<i>Financials, Supras/Sovereigns & Agencies</i>	<i>William Hahn</i>	+44 20 7597 8355
<i>Research Assistant Manager</i>	<i>Katherine Ludlow</i>	+44 20 7597 8318
<i>Tokyo</i>		
<i>Domestic Credit</i>		
<i>Chief Credit Analyst</i>	<i>Toshiyasu Ohashi</i>	+81 3 5555 8753
<i>Electronics, Automobiles, Non-Banks, Real Estate, REIT</i>	<i>Takao Matsuzaka</i>	+81 3 5555 8763
<i>Chemicals, Iron & Steel</i>	<i>Kazuaki Fujita</i>	+81 3 5555 8765
<i>International Credit</i>		
<i>Non-Japanese/Samurai, European Sovereigns</i>	<i>Hiroaki Fujioka</i>	+81 3 5555 8761
<i>Non-Japanese/Samurai</i>	<i>Fumio Taki</i>	+81 3 5555 8787
<i>Non-Japanese</i>	<i>Jiang Jiang</i>	+81 3 5555 8755
<i>London Translation</i>		
<i>Head of Translation, Economic and Credit</i>	<i>Mariko Humphris</i>	+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>. If you are unable to access the research on this page, please contact Katherine Ludlow on +44 207 597 8318.

Access our research blog at:

www.uk.daiwacm.com/research-zone/research-blog



Follow us
[@DaiwaEurope](https://twitter.com/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 January 2021.

Additional notes for Japanese-based investors

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, Inc. ("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.moody.com/pages/default_ja.aspx))

Assumptions, Significance and Limitations of Credit Ratings

Credit ratings are Moody's Investors Service, Inc.'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 May 13th, 2016, 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.moody.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.co.jp/web/>)

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 May 13th, 2016, 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.co.jp/web/>)