Credit Europe Bank N.V.

Key Rating Drivers

Exposure to Vulnerable Industries: Credit Europe Bank N.V.'s (CEB) ratings reflect its niche but established franchise in international trade finance, corporate lending and project finance. The bank is exposed to counterparties in emerging markets and to cyclical industries. This is inherent to its business model and has led to relatively high rates of loan impairment and low profitability in recent years. The bank's stable and seasoned management, as well as its generally stable retail deposit funding, are relative rating strengths.

Material Emerging Markets Exposure: CEB is a strategic investment for the Fiba group, an industrial conglomerate controlled by the Turkish Özyeğin family. A large proportion of the bank's exposure is still to counterparties in emerging markets, despite increased underwriting in developed economies. CEB's activities comprise corporate and project finance lending, online deposit-gathering in the Netherlands and Germany, and a credit card franchise in Romania.

Further Asset Quality Deterioration: CEB has high levels of impaired assets, owing to its exposure to counterparties in emerging market economies and to cyclical corporate sectors. The inflow of impaired loans in 1H20 was limited in the pandemic context. Fitch Ratings expects a further increase in impaired loans in 2H20-2021, as fiscal support for private sector is scaled back and some borrowers benefiting from payment holidays struggle to resume payments.

Continued Profitability Challenges: CEB's profitability is highly variable due to the inherent cyclicality of its business model. It is comparable with that of specialist trade finance banks. The main profitability challenge in the near-to-medium term will be from higher loan impairment charges (LICs). We also expect the bank's revenues will decrease in 2H20 and 2021 as it is less inclined to get involved in trade finance transactions in higher-risk countries, which translates into lower underwriting.

Capital Sensitive to Shocks: CEB's leverage and capital ratios are strong but the bank's buffers over regulatory requirements are small in absolute terms, considering the bank's exposure to cyclical sectors. Its weak pre-impairment profitability offers only limited cushion and leaves its capital base exposed to asset quality shocks. Unreserved impaired loans and repossessed assets encumbered a material proportion (about 45% at end-June 2020) of the bank's Common Equity Tier 1 (CET1) capital.

Stable and Granular Funding: CEB's main source of funding is a granular retail deposit base collected in the Netherlands, Germany and Romania to a lesser extent. Reliance on wholesale funding is limited to interbank deposits and one externally placed Tier 2 bond.

Rating Sensitivities

Negative Outlook: The Negative Outlook reflects downside risks to our baseline scenario. Pressure on the bank's ratings would increase if the downturn and the impact of the crisis on the economies where CEB operates was deeper or more prolonged than we expect.

Weaker Asset Quality and Earnings: We would likely downgrade the bank if its impaired loans/gross loans ratio continued to rise on a sustained basis and the coverage of impaired loans by loan loss allowances stayed low. We would also likely downgrade CEB's ratings if the bank was not able to break even for a prolonged period of time or if losses eroded its CET1.

Loan Book Resilience and Stronger Solvency: The Outlook could be revised to Stable if the quality of CEB's loan book proves more resilient than Fitch's expectation and the bank is able to strengthen its capital base. Further reduction in its exposure to borrowers in emerging markets and to cyclical industries would also be rating positive. An upgrade is currently unlikely and would require significant strengthening of the bank's franchise.

Ratings

Foreign Currency Long-Term IDR Short-Term IDR	B+ B
Viability Rating	b+
Support Rating Support Rating Floor	5 NF
Sovereign Dick	

Sovereign Risk Long-Term Foreign- and Local- AAA

Currency IDRs Country Ceiling AAA

Outlooks

Long-Term Foreign-Currency Negative IDR Sovereign Long-Term Foreign and Local-Currency IDRs

Applicable Criteria

Bank Rating Criteria (February 2020)

Related Research

Global Economic Outlook (September 2020) Declining Global Trade to Weigh on Specialist Banks' Profitability, Asset Quality (August 2020) Fitch Affirms Credit Europe Bank at 'B+'; Outlook Negative (September 2020)

Analysts

Lukas Rollmann +33 1 44 29 91 22 lukas.rollmann@fitchratings.com

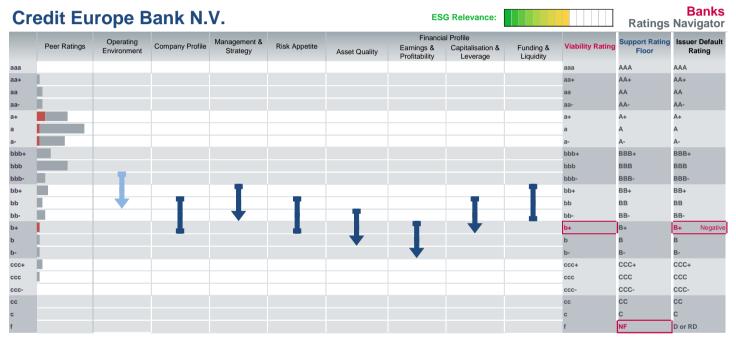
Michal Bryks, FCCA +48 22 338 6293 michal.bryks@fitchratings.com

Debt Rating Classes		
Rating Level	Rating	
Tier 2 subordinated debt	B-/RR6	
Source: Fitch Ratings		

CEB's Tier 2 subordinated debt is rated two notches below the bank's VR, reflecting belowaverage recovery prospects for this type of debt. This is owing to high levels of senior-ranking liabilities (comprising mainly insured retail and corporate deposits) and weak asset quality. This is reflected in the 'RR6' recovery rating assigned to the notes.

CEB's Tier 2 subordinated debt rating is sensitive to changes in the bank's VR.

Ratings Navigator



Significant Changes

Operating Environment Affected by the Coronavirus Pandemic

We expect CEB's operating environment to deteriorate, reflecting the bank's exposure to emerging market countries that are vulnerable to the economic fallout from the coronavirus pandemic. Fitch's baseline forecast sees global GDP contracting by 4.6% in 2020 (with the largest EM economies shrinking by 1.6%), followed by a recovery of 4.9% in 2021.

The World Trade Organisation or the International Chamber of Commerce expect global trade flows to decline by at least 20% to 30% in 2020 (from USD18.1 trillion in 2019). The impact of the pandemic on trade flows is considered long-lasting as volumes would revert to pre-crisis levels only towards the middle of the 2020 decade.

There are also concerns with regard to trade financing in the short term, owing to system-wide difficulties with USD liquidity, a broad deterioration in counterparties' credit quality and announcement by several banks to exit trade finance business.

Production shutdowns and transport and logistics seizing up in the early months of the pandemic have resulted in delayed or missed payments along global supply chains and have strained companies' cash flows. Payables financing and extraordinary support measures by banks will help support these businesses to some extent but, depending on the length of the crisis and the scope of policy response, banks will face increased asset quality pressures.

Bar Chart Legend Vertical bars - VR range of Rating Factor Bar Colors - Influence on final VR Higher influence Moderate influence Lower influence Bar Arrows - Rating Factor Outlook Positive Negative Evolving Stable

Increased Focus on Traditional Trade Finance Activities

CEB aims at increasing the proportion of traditional trade finance activities (issuance and confirmation of letters of credit) in its business mix. As a result, CEB is winding down or looking to dispose of some activities deemed less relevant to its franchise.

The bank has decided to close its small private banking operation in Switzerland due to the lack of scale and had been in talks to sell its credit cards operations in Romania prior to the pandemic. This business, although profitable, has faced increased competition from banks and non-bank financial institutions. CEB had been decreasing its headcount and branch network in the country over the past years.

Company Summary and Key Qualitatitve Assessment Factors

Domiciled and Regulated in Europe; Exposed to Emerging Markets

CEB is headquartered in the Netherlands, but the benefits of being domiciled in a highly rated country are outweighed by the bank's significant exposure to emerging market economies. The bank's exposure to developed markets comprises trade finance activities and depends on global trade flows and fluctuations in commodity prices.

The Dutch operating environment is important for CEB in the context of its reliance on Dutch deposits and in terms of banking regulation. As a bank incorporated in the eurozone, CEB also benefits from coronavirus-related relief measures from European bank supervision bodies. These measures include relaxed collateral requirements for ECB refinancing, and the extension of targeted long-term refinancing operations (TLTRO III).

Niche Trade and Corporate Banking Franchise

CEB is a niche bank with longstanding experience in international trade finance. It acts as third party to mitigate payment risk to exporters and supply risk to importers by issuing and confirming letters of credit and guarantees. CEB mainly deals with commodity traders for oil and derivatives and for metals and agricultural products. CEB's activities with corporate customers also comprise marine finance and commercial real estate financing, mainly for hotels, logistics and office space. The bank is also involved in loan syndications to businesses in a variety of sectors, mainly in Turkey and in Romania.

CEB funds its corporate operations with retail savings gathered in the Netherlands and Germany. The bank also has a small Romanian subsidiary, which is mainly active in residential mortgage lending and credit cards. CEB has a strong market share of about 12% in the latter.

Experienced Management Team

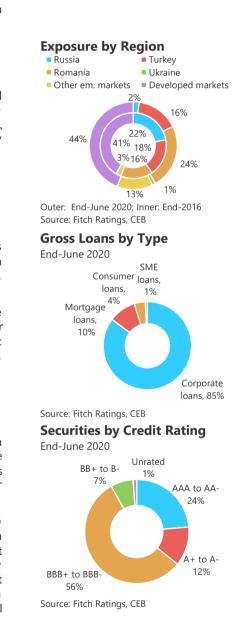
CEB's management is highly experienced in the bank's key business areas. The bank's management board is very stable, and the majority of its members have served at the bank in different capacities for about 20 years. We believe there is some reliance on key individuals, especially in corporate banking given CEB's hands-on approach in this particular segment.

CEB's supervisory board is less deep than that of larger banking groups but follows the guidelines of the Dutch corporate governance code and is commensurate with CEB's smaller size. At end-June 2020, loans to related parties were moderate at about EUR160 million (about 25% of CET1 capital) and mainly to companies owned by the Fina/Fiba holding companies. These transactions are conducted on an arm's length basis and must be approved by all three independent members of CEB's supervisory board.

Risk Appetite Commensurate with Business Model

CEB's risk appetite is above average and reflects a business model with exposure to emerging markets and cyclical industries. The bank's deep sector knowledge and hands-on approach with solid senior management expertise, as well as the short-term nature of trade finance transactions, mitigate these risks. Since the start of the coronavirus pandemic the bank has lowered its limits with higher risk countries, and significantly increased portfolio monitoring for the more vulnerable sectors in its portfolio, such as leisure and tourism.

CEB has exposure to foreign currency risk as a significant portion of its loan book is either USD or RON-denominated (about 35% and 10% respectively at end-2019). The bank uses foreign currency swaps and forwards to limit the impact from adverse movements in the relevant currency pairs on its earnings. The bank is also exposed to credit spread risk from its liquidity portfolio. About 65% of the securities in this portfolio had credit ratings of BBB+ or below at end-June 2020, indicating potential investments in debt of peripheral European and/or Eastern European countries. Non-investment grade debt holdings represented only 6% of CET1 capital at end-June 2020.



Summary Financials and Key Ratios

	30 Jun 20		31 Dec 19	31 Dec 18	31 Dec 17
	6 months - interim	6 months - interim	Year end	Year end	Year end
	(USDm)	(EURm)	(EURm)	(EURm)	(EURm)
	Reviewed -	Reviewed -	Audited -		
	unqualified(emphasis of matter)	unqualified(emphasis of matter)	unqualified(emphasis of matter)	Audited - unqualified	- Audited unqualified
Summary income statement					
Net interest and dividend income	55	48.7	120.0	165.4	286.5
Net fees and commissions	14	12.9	31.0	29.0	53.2
Other operating income	14	12.5	28.4	0.8	59.1
Total operating income	83	74.1	179.4	195.2	398.8
Operating costs	67	59.8	139.3	129.2	246.8
Pre-impairment operating profit	16	14.3	40.1	66.0	152.0
Loan and other impairment charges	27	24.3	1.9	29.2	116.2
Operating profit	-11	-10.0	38.2	36.8	35.8
Other non-operating items (net)	11	0.6	-24.0	-358.0	-18.7
Тах	-3	-2.9	-5.4	5.3	2.0
Net income	-7	-6.5	19.6	-326.5	15.1
Other comprehensive income	-17	-15.4	17.2	240.9	-25.3
Fitch comprehensive income	-25	-21.9	36.8	-85.6	-10.2
Summary balance sheet					
Assets					
Gross loans	2,721	2,429.8	2,832.3	2,891.3	4,695.9
- Of which impaired	311	277.5	258.1	310.8	376.1
Loan loss allowances	83	73.8	66.4	164.3	208.5
Net loans	2,638	2,356.0	2,765.9	2,727.0	4,487.4
Interbank	235	209.5	187.9	432.0	538.1
Derivatives	240	214.4	169.8	189.9	236.4
Other securities and earning assets	733	654.2	753.5	759.0	810.3
Total earning assets	3,846	3,434.1	3,877.1	4,107.9	6,072.2
Cash and due from banks	1,128	1,007.1	737.2	651.8	829.2
Other assets	329	293.8	305.8	323.5	471.1
Total assets	5,302	4,735.0	4,920.1	5,083.2	7,372.5
Liabilities					
Customer deposits	3,586	3,202.7	3,401.7	3,649.8	4,899.0
Interbank and other short-term funding	540	482.0	482.8	416.5	632.0
Other long-term funding	151	134.7	133.1	130.1	662.5
Trading liabilities and derivatives	229	204.1	164.5	182.7	203.6
Total funding	4,506	4,023.5	4,182.1	4,379.1	6,397.1
Other liabilities	79	70.5	72.5	76.2	100.7
Preference shares and hybrid capital	49	43.6	44.6	43.8	n.a.
Total equity	669	597.4	620.9	584.1	874.7
Total liabilities and equity	5,302	4,735.0	4,920.1	5,083.2	7,372.5
Exchange rate		USD1 = EUR0.893,017		USD1 = EUR0.873,057	USD1 = EUR0.83,382
Source: Fitch Ratings, Fitch Solutions, CEB			· · · · ·		<u> </u>

Summary Financials and Key Ratios

	30 Jun 20	31 Dec 19	31 Dec 18	31 Dec 17
Ratios (annualised as appropriate)				
Profitability				
Operating profit/risk-weighted assets	-0.6	1.0	0.9	0.6
Net interest income/average earning assets	2.7	3.1	3.4	4.5
Non-interest expense/gross revenue	79.6	77.1	66.5	62.0
Net income/average equity	-2.2	3.3	-43.9	1.7
Asset quality				
Impaired loans ratio	11.4	9.1	10.8	8.0
Growth in gross loans	-14.2	-2.0	-38.4	-12.6
Loan loss allowances/impaired loans	26.6	25.7	52.9	55.4
Loan impairment charges/average gross loans	1.9	0.0	0.8	2.2
Capitalisation				
Common equity Tier 1 ratio	17.9	15.7	14.8	14.2
Tangible common equity/tangible assets	11.9	11.9	11.3	11.6
Basel leverage ratio	n.a.	n.a.	n.a.	11.9
Net impaired loans/common equity Tier 1	34.3	31.5	25.1	19.9
Funding and liquidity	·			
Loans/customer deposits	75.9	83.3	79.2	95.9
Liquidity coverage ratio	n.a.	509.1	n.a.	n.a.
Customer deposits/funding	82.9	83.7	86.1	79.1
Net stable funding ratio	n.a.	150.0	n.a.	n.a.

Key Financial Metrics – Latest Developments

Further Deterioration in Asset Quality Expected

The bank has lowered its exposure to emerging market countries in previous years with the aim of limiting credit risk. CEB planned to reduce the share of non-performing exposures (calculated as the sum of interbank-and customer loans and central bank deposits) below 6% of gross exposures by 2022 (end-June 2020: 8.4%). This target will prove difficult to reach as the economic fallout from the pandemic is likely to affect CEB's counterparties and result in higher levels of impaired loans.

The bank's impaired loans/gross loans ratio increased over 1H20 to 11.4% from 9.1% at end-2019, mainly due to a contraction of its loan book. CEB continues to have very low levels of provision coverage for potential loan losses, which exposes it to falls in collateral values. CEB's ratio of Stage 2 loans has risen to 22% at end-June 2020 from 12.7% at end-2019 and performing loans with modified terms and conditions were a further 4.5% of gross loans.

Exposures to Turkish corporate borrowers represented about a quarter of CEB's gross loans but accounted for nearly 40% of its impaired loans and half of its Stage 2 loans at end-June 2020. Turkish exposures, particularly in the tourism and retail sectors, drove the increase in Stage 2 loans over 1H20 and we expect they will remain a vulnerability for the bank in the short-to-medium-term. The bank's lending in developed markets, which mainly comprises exposures to commodity traders and project finance transactions, has been resilient and experienced limited impairments in 1H20.

Loan Impairment Charges Burden Profitability

CEB's revenues are mainly driven by interest income from its lending activities to corporate customers in developed markets. The reported net interest income reduced in 1H20 relative to 1H19, although the contraction is less severe than published accounts suggest due to the presentation of derivatives interest booked in trading income. We expect loan volumes will remain subdued in the medium term and cost reductions will only partly offset lower revenues.

The bank's low pre-impairment profit is insufficient to absorb even moderate asset quality stress and will be largely spent on higher LICs in 2H20 and 2021. In 1H20, LICs equalled 170% of the bank's pre-impairment profit or 186bp of gross loans. Positively, and unlike several of its peers, CEB has avoided large losses from operational risk in recent years. The bank had no exposure to the series of recent high-profile fraud cases in Asia, and continuing litigation is for relatively low amounts.

Thin Buffers over Regulatory Capital Requirements

CEB's CET1 ratio improved over 1H20 to 17.9% from 15.8% at end-2019 due to loan book deleveraging. The bank also benefits from a transitional arrangement for the implementation of IFRS9, which improves its CET1 ratio by about 80bp. CEB's buffer over its CET1 regulatory requirement improved as the latter was lowered in the wake of the pandemic. However, the buffer remains small in nominal terms in light of CEB's exposure to cyclical sectors and emerging markets, as well as single name concentrations in its loan portfolio.

We consider potential ordinary capital support from the bank's ultimate parent in our assessment of its capitalisation. CEB is Fiba Holding's largest investment and the bank's development has been repeatedly supported with capital injections in the past. Limited dividend pay-out and subdued loan growth support the bank's capitalisation.

Low Reliance on Wholesale Funding

CEB has generally attracted retail savings, which form the bulk of its funding, with competitive interest rates compared to most Western European banks. However, the gradual reduction in offered rates in recent years has not resulted in large withdrawals. CEB's reliance on wholesale funding is limited and funding obtained from related parties is negligible.

CEB's liquidity management is relatively conservative. Most of the bank's subsidiaries are selffunded as liquidity is not fully fungible within the group. At end-June 2020 the bank had about EUR1.4 billion of unrestricted cash and balances with central banks and unencumbered securities (about 30% of total assets, before haircuts on the value of securities), which would allow it to cover outflows of nearly 50% of its retail deposit base.

Note on Charts

Black dashed lines represent indicative quantitative ranges and implied scores for Fitch's core financial metrics for banks operating in the environments that Fitch scores in the 'bb' category. Peer average includes Credit Europe Bank N.V. (VR: b+), Union de Banques Arabes et Francaises - U.B.A.F. (bb-), Banque de Commerce et de Placements SA (bbb-), Credit Europe Bank (Russia) Ltd (bb-), Arap Turk Bankasi A.S. (b+), Banca UBAE S.p.A. (b+), FIMBank p.l.c. (b+), Anadolubank A.S. (b+) and Garanti Bank S.A. (bb-). No average calculation performed for last period due to data unavailability.

Asset Quality



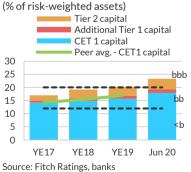
Source: Fitch Ratings, banks

Operating Profit



Source: Fitch Ratings, banks

Regulatory Capital



Sovereign Support Assessment

No Reliance on Sovereign Support

Support Rating Floor			Value
Typical D-SIB SRF for sovereign's rating level (as	A+ to A-		
Actual country D-SIB SRF			NF
Support Rating Floor:			NF
Support Factors	Positive	Neutral	Negative
Sovereign ability to support system			
Size of banking system relative to economy			\checkmark
Size of potential problem	\checkmark		
Structure of banking system			\checkmark
Liability structure of banking system		\checkmark	
Sovereign financial flexibility (for rating level)		\checkmark	
Sovereign propensity to support system			
Resolution legislation with senior debt bail-in			✓
Track record of banking sector support		✓	
Government statements of support			\checkmark
Sovereign propensity to support bank			
Systemic importance			✓
Liability structure of bank		\checkmark	
Ownership			\checkmark
Specifics of bank failure		✓	
Policy banks			
Policy role			
Funding guarantees and legal status			
Government ownership			

CEB's Support Rating of '5' and Support Rating Floor of 'No Floor' reflect Fitch's view that support from the Dutch state cannot be relied upon. This reflects the bank's lack of systemic importance in the Netherlands, as well as legislative, regulatory and policy initiatives (including the implementation of the Bank Recovery and Resolution Directive) that have substantially reduced the likelihood of sovereign support for EU commercial banks in general.

Environmental, Social and Governance Considerations

Banks Ratings Navigator **Fitch**Ratings **Credit Europe Bank N.V.** Credit-Relevant ESG Derivation all ESG Sca Credit Europe Bank N.V. has 5 ESG potential rating drivers 0 5 key drive issues Credit Europe Bank N.V. has exposure to compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security) but this has very low impact on the rating. driver 0 issues 4 Bovernance is minimally relevant to the rating and is not currently a driver. potential driver 5 3 issues 4 issues 2 not a rating drive 5 issues Environmental (E) General Issues Sector-Specific Issues Reference E Score How to Read This Page ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant. GHG Emissions & Air Quality 1 n.a. n.a. The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issues. These scores signify the credit-relevance of the sector-specific issues to the issuing entity soverall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are carefuted in Etho's credit areabies. Energy Management 1 n.a n.a Water & Wastewater Management 1 n.a. na 3 Waste & Hazardous Materials Management; Ecological Impacts 1 n.a 2 n.a. Impact of extreme weather events on assets and/or operations and red in Fitch's credit analysis Exposure to Environmental Company Profile; Management & Strategy; Risk Appetite; Asset Quality corresponding risk appetite & management; catastrophe risk; cr concentrations 2 1 Impacts The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG scores summarize the issuing entity's sub-component ESG scores. The box on the far left identifies some of the main ESG issues that are drivers or potential drivers Social (S) General Issues Sector-Specific Issues Reference S Score Human Rights, Community Relations, Access & Affordability Services for underbanked and underserved communities: SME and community development programs; financial literacy programs Company Profile; Management & Strategy; Risk Appetite of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and 2 5 provides a brief explanation for the score Compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Priniciples for Responsible Investing (PRI) and the Sustainability Accounting Standards Board(SASB). Customer Welfare - Fair Operating Environment: Company Messaging, Privacy & Data Security 3 reposses security) rofile; Management & Strategy; Risk 4 Appetite Company Profile; Management & Impact of labor negotiations, including board/employee compensation and composition Labor Relations & Practices 2 3 strategy Employee Wellbeing 1 n.a 2 Sector references in the scale definitions below refer to Sector as displayed in the Sector Details box on page 1 of the navigator. n a Shift in social or consumer preferences as a result of an institution's Exposure to Social Impacts Company Profile; Financial Profile 2 1 social positions, or social and/or political disapproval of core banking practices Governance (G) CREDIT-RELEVANT ESG SCALE nt are E, S and G issues to the overall credit rating? Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator. General Issues G Score Sector-Specific Issues Reference Management Strategy 3 Operational implementation of strategy Management & Strategy 5 Management & Strategy; Earnings & Profitability; Capitalisation & Leverage Board independence and effectiveness; ownership concentration; Importance within Navigator. Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator. Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "tower" relative importance within Navigator. Governance Structure 3 4 protection of creditor/stakeholder rights; legal /compliance risks; business continuity; key person risk; related party transactions 4 Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership 3 Group Structure 3 Company Profile 3 Financial Transparency 2 2 Irrelevant to the entity rating but relevant to the sector 3 Quality and frequency of financial reporting and auditing processes Management & Strategy 1 rrelevant to the entity rating and irrelevant to the sector 1

The highest level of ESG credit relevance is a score of 3. This means ESG issues are creditneutral or have only a minimal credit impact on CEB, either due to their nature or to the way in which they are being managed by the bank. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

FitchRatings

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: HTTPS://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS.IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM. PUBLISHEDRATINGS, CRITERIA, AND METHODOLOGIESARE AVAILABLE FROM THIS SITE ATALLT MES FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISUER ON THE FITCH WEBSITE.

Copyright © 2020 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission inwhole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings and inmaking other reports (including forecast information), Fitchrelies 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 independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, regineering reports, legal opinions and other security or in the particular jurisdiction of the issuer, and avariety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch reles on in connection with a rating or areport will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, fitch must rely on the work of experts, including indepen

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation buy, sell, or hold any security. Ratingsdo not comment on the adequacy of market price, the suitability of any security or a particular investor, or the tax-exempt nature or taxability of paymentsmade in respect to any security. Fitch receives fees from issuers, insurers, guarant ors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$1,500,000 (or the applicable currency equivalerd) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guarante edby a particularise securities laws of any expressed a

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license m 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.