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Ratings

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Federal Home Loan Banks

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Federal Home Loan Banks

Major Rating Factors

Strengths:

- Government-related entity (GRE) with an almost certain likelihood of extraordinary government support
- Critical public-policy role as one of the primary liquidity providers to U.S. mortgage market participants, especially in times of stress
- Integral link to the U.S. government, given its special public status as a U.S. government-sponsored enterprise (GSE) and unusual credit advantages conveyed by the related legal framework
- Excellent asset quality in the fully collateralized wholesale lending portfolio

None

Weaknesses:

- Challenges to broad-based growth in advances
- Small, but growing, exposure to nondepository financial institutions
- Uncertainty related to potential legislative changes associated with housing finance reform

Outlook

Our outlook on the Federal Home Loan Bank (FHLB) System debt ratings is stable, in line with the stable outlook on the U.S. sovereign rating. We expect the likelihood of extraordinary government support for the FHLB System, if needed, to remain almost certain for at least the next two years. If we changed our rating or outlook on the U.S., we would reflect that change in our ratings and outlook on the FHLB System's debt.

Longer term, the FHLB System is subject to uncertainty related to potential legislative changes associated with the broader reform of U.S. housing finance policies. If initiatives were to gain momentum and target substantial changes to the FHLB System, such that the role of the FHLB System in housing finance and as a liquidity provider for the U.S. banking system is diminished, we could lower our ratings on the system's debt. To date, however, such initiatives have neither succeeded in gathering substantial political momentum nor targeted the FHLB System.

Rationale

The ratings on the senior debt of the FHLB System reflect S&P Global Ratings' view of the almost certain likelihood that the FHLB System would receive extraordinary support from the U.S. government, if needed. This is based on the system's integral link with the government and critical role in promoting homeownership and providing funding to U.S.

banks. Our ratings on the system's debt are at the same level as the U.S. sovereign ratings, even though the U.S. government does not explicitly guarantee the FHLB System's debt.

We view the FHLB System as one of the most important U.S. GREs. Promoting homeownership is a central and long-standing aspect of U.S. policy, which we do not expect will change. We believe that in U.S. housing finance the FHLB System has a critical public policy role as a national liquidity provider to U.S. mortgage lenders, particularly during stressful conditions when private-sector liquidity is often unreliable.

Given its special public status as a U.S. GSE, the FHLB System enjoys unusual advantages conveyed by the related legal framework.These advantages include lien priority over other creditors in the event an insured depository member to which the system had loans outstanding fails. We also believe the Federal Housing Finance Agency (FHFA), the FHLBs' regulator, has clear and robust processes and procedures that enable effective governance, monitoring, and control of the FHLB System. These include administrative capacity and mechanisms for timely responses to any financial distress the system might encounter.

The FHLB System has a diverse and global investor base, and it readily sells its debt at a small spread to U.S. Treasury obligations. In our opinion, the FHLBanks' exceptionally favorable funding advantages are likely to continue as long as their policy role remains critical, and their link integral, to the U.S. government. Moreover, based on the history of ample funding for the FHLB System during periods of market stress in early 2020 and 2008, we believe access to funding is unlikely to be problematic, even in stress scenarios.

The system has increased its reliance on short-term funding in response to member demands. However, given the generally match-funded approach to issuance, as well as the overcollateralization of advances to members, we believe the tenor of the system's funding remains manageable. The FHLBanks' principal investments are GSE mortgage-backed securities, federal funds sold, interest-bearing deposits, reverse repurchase agreements, and municipal and Treasury securities.

The FHLB System consists of the 11 Federal Home Loan Banks (FHLBanks). We assign stand-alone credit profiles (SACPs) to each of the FHLBanks, but not to the system as a whole. Because the system issues consolidated debt obligations on behalf of its component FHLBanks, and in light of their joint and several liability for these obligations, we have issue ratings on the system's debt.

The issuer credit ratings on the FHLBanks are one notch higher than their 'aa' SACPs because, in our view, the likelihood of the government providing extraordinary support to them, if needed, is very high.

We view the FHLBanks' business positions as strong, reflecting their established market positions in their districts, recurring business volumes, and public policy role, which we believe offset some of the risks associated with their lack of business diversity.

We view the FHLBanks' capitalization as very strong based on their member-capitalized co-op structure and low-risk collateralized lending business. At June 30, 2020, the regulatory capital-to-assets ratio at each of the banks comfortably exceeded the FHFA 4.00% minimum requirement. Since the bulk of the FHLBanks' assets are advances to members, which have a relatively low risk weight in our methodology because all of the exposure is to financial institutions, we view their capital on a risk-adjusted basis as stronger than it might otherwise appear. As a result, we expect their S&P Global Ratings risk-adjusted capital ratios, based on our measure, to remain higher than 15% over at least the next two years.

Another factor supporting our ratings is that none of the FHLBanks has ever suffered a loss on a collateralized advance to a member (reflecting both the lien priority and substantial collateral held against advances). Although we believe some of the collateral could be under strain because of the current economic headwinds, we believe the amount of collateral, $2.8 trillion or more than four times outstanding advances as of June 30, 2020, offsets the potential for higher losses.

GRE Analysis: Critical Public-Policy Role And Integral Link To The Government

We view the FHLB System as one of the most important U.S. GREs. In our opinion, promoting homeownership is a central and long-standing U.S. policy, evidenced by the tax-deductibility of mortgage interest and the various activities of the U.S. Department of Housing and Urban Development. Such policies have, arguably, contributed to past U.S. housing market excesses. However, we do not expect this essential policy orientation to substantially change, given its widespread political appeal and the importance of consumption to U.S. economic growth (and homeownership to consumption, through wealth effects).

In our opinion, the FHLB System's critical public policy role to U.S. housing finance was clearly demonstrated in the U.S. mortgage crisis of 2008, during which advances (loans to client-owner members) outstanding peaked at $1 trillion. Additionally, during the first quarter of 2020, uncertainty about the COVID-19 outbreak led to disruption in the financial markets, resulting in increased liquidity needs at member financial institutions. FHLBanks continued to support their members through this uncertainty, and we expect they will continue to do so.

Total assets increased to $1.26 trillion as of March 31, 2020, primarily because of a 26% increase in advances from year-end 2019. The system's assets subsequently declined as the immediate liquidity needs diminished, falling to $992 billion as of June 30, 2020. We view this as an illustration of the FHLB System's importance to the U.S. banking sector in times of stress.

Although the government does not guarantee the FHLB System's obligations, the system's status as a U.S. GSE provides several advantages. FHLB securities are eligible to be used for collateral the U.S. Federal Reserve Banks are required to hold against currency they put into circulation. The FHLB System is also exempt from almost all corporate taxation, and the securities it issues are exempt from state and local income tax. The U.S. legal framework also gives the FHLB System lien priority over other creditors (including depositors) in the event of the failure of an insured depository member withoutstanding loans. Reinforcing these links to the government, the FHFA oversees all strategic decisions the system makes, and it closely monitors the system's financial condition.

We view the GSE Credit Facility (GSECF), temporarily established by the U.S. Treasury Department in 2008, as a clear indicator of the government's willingness and ability to provide extraordinary support to the FHLB System in time of stress. The GSECF proactively offered government loan liquidity to the FHLB System (along with Fannie Mae and

Freddie Mac), if needed, asking for just the system's own advances as collateral.

Despite the absence of a government guarantee, we believe a close association between the system and the government is well-entrenched in the minds of investors and other financial-market participants. Together with a substantial amount of system securities outstanding ($918 billion as of June 30, 2020), we believe this association could mean that substantial financial distress for the system could negatively affect the U.S. government's reputation, providing it additional incentive to support its GSEs. Supporting this belief, FHLBank consolidated obligations continue to price at a narrow spread over U.S. Treasuries, affording the FHLBanks and their member institutions low funding costs, despite the substantial volume outstanding.

In our rating analysis, we differentiate between the aggregate FHLB System and the individual FHLBanks. The individual FHLBank's role is very important and its link to the government is very strong.

Because the 11 FHLBanks have joint and several liability for the senior unsecured debt obligations that the FHLBank's Office of Finance issues, we believe that weakness in a single FHLBank could have an impact on investors' perception of the strength of the FHLB System as a whole. On the other hand, we believe each FHLBank is less important, from a policy perspective, than the FHLB System as a whole. This is reflected in our assessing both the role and the link of each individual FHLBank as one degree weaker than our assessment for the system as a whole.

Profile And Ownership: A Cooperative Owned By Its Member Institutions

Each FHLBank is owned by its member financial institutions. The member institutions are primarily commercial and savings banks, though they have expanded to include credit unions, insurance companies, and community-development financial institutions (CDFIs). The membership mix as of June 30, 2020, was 64.7% commercial banks, 16.3% credit unions, 12.2% savings institutions, 6.0% insurance companies, and 0.8% CDFIs.

A member institution must purchase capital to belong to an FHLBank. The member institution's stock requirement is generally based on its use of FHLBank products, subject to a minimum requirement. In return, the member institution may borrow on a secured basis at typically attractive rates from its FHLBank. Member institutions may also receive dividends on their shares in the FHLBank, which helps to lower their total transaction funding costs. Additionally, the system provides support for affordable housing and community investment programs.

FHLBanks provide members with a reliable source of funding for housing finance, community lending, and asset-liability management, as well as liquidity for members' short-term needs. This funding is in the form of long-term and short-term secured loans called "advances." These advances are primarily collateralized by residential mortgage loans and commercial real estate loans, as well as government and agency securities. Community financial institutions may also pledge small business, small farm, small agri-business, and community development loans as collateral for advances. The FHLB System's combined advances totaled $557.5 billion as of June 30, 2020.

In addition to advances, letters of credit by the FHLBanks have increased significantly in the past several years--totaling $169.0 billion as of June 30, 2020. Members typically use letters of credit to secure public unit deposits, and the letters of credit would be converted to an advance in the rare event of a draw.

Although privately owned, the system is run as a cooperative for its member-owners. The system places more emphasis on retaining the capacity to quickly increase liquidity provision, when needed, than on maximizing current profits. We believe the FHFA's close oversight reinforces this strategy.

The FHLBs have recently been moving toward floating-rate bonds replacing discount notes in response to market demand and to address the FHFA's concerns regarding maturity gaps, though in many cases the bonds are short term. Short-term funding (with a remaining maturity of less than one year) made up 81% of consolidated obligations as of June 30, 2020. Total consolidated obligations were $917.9 billion at June 30, 2020. We believe the system's transition from LIBOR-based funding toward secured overnight financing rate-based funding could be smoother than at other issuers given this larger percentage of short-term debt.

Peer Comparison for Federal Home Loan Banks

Mil. $	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Note: Information is as of June 2020 unless otherwise indicated											
Cash and due from banks	4,188	248	48	23	96	483	99	44	377	173	28
Investments, including MBS	24,923	12,017	26,279	24,139	24,611	24,049	19,817	30,146	16,297	26,816	13,645
Securities purchased under agreements to resell	11,000	1,250	3,500	964	2,500	3,300	3,000	4,950	1,600	5,000	4,450
Interest-bearing deposits+federal funds sold	18,244	3,019	6,226	4,430	4,889	6,966	2,692	6,280	4,436	7,213	2,538
Advances	67,221	24,828	49,250	48,913	38,643	57,942	34,848	113,789	49,614	50,970	21,529
Mortgage loans, Net	263	4,411	10,947	11,703	4,020	9,246	10,083	3,165	5,242	2,888	10,946
Other	757	388	481	472	202	499	531	498	409	380	398
Total assets	126,596	46,161	96,731	90,645	74,960	102,485	71,070	158,872	77,975	93,440	53,534
Asset composition (% total assets)											
Cash and due from banks	3.3%	0.5%	0.0%	0.0%	0.1%	0.5%	0.1%	0.0%	0.5%	0.2%	0.1%
Investments, including MBS	19.7%	26.0%	27.2%	26.6%	32.8%	23.5%	27.9%	19.0%	20.9%	28.7%	25.5%
Securities purchased under agreements to resell	8.7%	2.7%	3.6%	1.1%	3.3%	3.2%	4.2%	3.1%	2.1%	5.4%	8.3%
Interest-bearing deposits+Federal funds sold	14.4%	6.5%	6.4%	4.9%	6.5%	6.8%	3.8%	4.0%	5.7%	7.7%	4.7%
Advances	53.1%	53.8%	50.9%	54.0%	51.6%	56.5%	49.0%	71.6%	63.6%	54.5%	40.2%
Mortgage loans	0.2%	9.6%	11.3%	12.9%	5.4%	9.0%	14.2%	2.0%	6.7%	3.1%	20.4%
Other	0.6%	0.8%	0.5%	0.5%	0.3%	0.5%	0.7%	0.3%	0.5%	0.4%	0.7%
Advance concentrations: Top five concentrations											
Q2 2020	50.0%	21.0%	52.0%	64.0%	36.0%	31.0%	39.0%	60.0%	74.0%	64.0%	48.0%
Q1 2020	63.0%	43.0%	49.0%	64.0%	36.0%	41.0%	43.0%	60.0%	78.0%	62.0%	63.0%
AR 2019	56.0%	36.0%	54.0%	56.0%	37.0%	49.0%	42.0%	62.0%	78.0%	68.0%	57.0%

Peer Comparison for Federal Home Loan Banks (cont.)											
Mil. $	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
AR 2018	55.0%	35.0%	59.0%	65.0%	38.0%	60.0%	40.0%	54.0%	77.0%	62.0%	57.0%
AR 2017	56.0%	30.0%	59.0%	62.0%	29.0%	59.0%	44.0%	64.0%	77.0%	62.0%	52.0%
AR 2016	54.0%	39.0%	59.0%	70.0%	26.0%	70.0%	43.0%	64.0%	80.0%	65.0%	53.0%
AR 2015	59.0%	39.0%	60.0%	72.0%	26.0%	57.0%	43.0%	55.0%	74.0%	62.0%	55.0%
Net Income											
Q2 2020	56	3	52	99	67	85	13	138	60	88	20
Q1 2020	108	42	80	80	52	92	30	105	36	(8)	12
AR 2019	367	191	300	276	227	384	142	473	317	327	185
AR 2018	416	217	303	339	199	460	195	560	347	360	170
AR 2017	349	190	317	314	150	518	156	479	340	376	197
AR 2016	278	173	327	268	79	649	113	401	260	712	162
AR 2015	301	289	349	249	67	131	121	415	257	638	93
Return on average assets (%)											
Q2 2020	0.14%	0.02%	0.20%	0..37%	0.32%	0.31%	0.07%	0.32%	0.26%	0.32%	0.14%
Q1 2020	0.28%	0.27%	0.30%	0.34%	0.28%	0.29%	0.17%	0.27%	0.15%	-0.03%	0.08%
AR 2019	0.25%	0.35%	0.30%	0.28%	0.32%	0.27%	0.21%	0.32%	0.31%	0.31%	0.33%
AR 2018	0.27%	0.35%	0.33%	0.32%	0.29%	0.31%	0.30%	0.36%	0.36%	0.32%	0.32%
AR 2017	0.25%	0.32%	0.38%	0.31%	0.25%	0.31%	0.26%	0.32%	0.35%	0.36%	0.37%
AR-2016	0.20%	0.29%	0.42%	0.25%	0.15%	0.40%	0.22%	0.31%	0.28%	0.77%	0.33%
AR 2015	0.23%	0.52%	0.49%	0.24%	0.16%	0.12%	0.27%	0.34%	0.29%	0.76%	0.21%
Duration gap (in months)											
Q2 2020	0.1	3.5	1.2	(0.2)	(2.6)	0.7	0.3	(1.4)	(0.2)	0.7	(2.5)
Q1 2020	(1.4)	0.8	(1.3)	(0.3)	(3.3)	(0.5)	(1.1)	(2)	(0.2)	(0.5)	(1.3)
AR 2019	0.1	0.7	0.8	(0.1)	(1.5)	(0.4)	1.0	(0.8)	(0.2)	0.7	(0.5)
AR 2018	0.6	(0.2)	0.5	-	(1.3)	0.3	1.1	(0.4)	(0.2)	0.7	0.8
AR 2017	0.2	(0.3)	0.9	-	(0.2)	0.5	1.2	(0.5)	(0.2)	1.1	(1)
AR 2016	0.4	1.2	1.0	-	(0.7)	0.4	0.3	(0.2)	(0.1)	1.2	(0.6)
AR 2015	(0.1)	0.1	0.5	-	(0.6)	(1.1)	0.7	(0.8)	(0.6)	1.4	0.5
Regulatory capital ratio (%)											
Q2 2020	4.65%	6.46%	6.20%	5.60%	5.10%	5.99%	5.10%	5.18%	5.14%	6.68%	4.47%
Q1 2020	4.67%	5.44%	5.90%	5.28%	4.74%	5.51%	4.51%	5.00%	4.53%	5.38%	4.41%
AR 2019	4.77%	6.00%	5.82%	4.79%	4.92%	5.31%	5.05%	4.68%	4.94%	6.18%	4.38%
AR 2018	4.92%	6.22%	5.97%	5.41%	5.01%	5.27%	4.86%	5.38%	4.95%	5.97%	5.12%
AR 2017	4.88%	6.01%	5.99%	4.88%	4.77%	5..03%	4.81%	5.23%	4.84%	5.51%	5.17%
AR 2016	4.94%	5.95%	6.40%	4.80%	4.74%	4.48%	4.73%	5.40%	4.69%	6.40%	4.34%
AR 2015	4.89%	6.04%	6.63%	4.40%	5.49%	4.23%	4.70%	5.58%	4.60%	6.26%	4.19%
Private-label mortgage-backed securities											
Residential PLMBS-AFS-amortized cost	0	0	29	0	0	0	0	0	247	2,125	0

Peer Comparison for Federal Home Loan Banks (cont.)

Mil. $	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Allowances for credit losses	0	0	0	0	0	0	0	0	-2	(29)	0
Gross unrealized gains	0	0	3	0	0	0	0	0	35	162	0
Gross unrealized losses	0	0	(1)	0	0	0	0	0	0	(33)	0
Est fair value	0	0	31	0	0	0	0	0	281	2,225	0
Residential PLMBS - HTM - amortized cost	0	254	342	0	56	7	0	107	108	339	0
Allowances for credit losses	0	-6	0	0	0	0	0	0	0	0	0
OTTI in AOCI	0	-50	(76)	0	-8	0	0	(7)	0	0	0
Carrying value	0	198	266	0	49	7	0	100	108	339	0
Gross unrealized gains	0	78	152	0	8	0	0	20	0	3	0
Gross unrealized losses	0	0	(1)	0	-1	(1)	0	0	-3	(16)	0
Est fair value	0	276	417	0	55	6	0	120	105	326	0
Capital								-11965.70%			
Total regulatory capital	5,881	2,980	5,999	5,079	3,820	6,139	3,622	8,222	4,009	6,245	2,391
Min required risk-based capital	1,778	432	1,380	500	1,038	674	608	1,062	561	1,390	348
Excess over risk-based capital	4,103	2,548	4,619	4,579	2,782	5,465	3,013	7,161	3,448	4,855	2,043
Other than temporary impairments in accumulated other comprehensive income											
Q2 2020	-	(50)	(76)	-	(8)	-	-	(7)	-	-	-
Q1 2020	-	(53)	(81)	-	(8)	-	-	(7)	-	(1)	-
AR 2019	41	(76)	(85)	-	(9)	-	-	(8)	52	267	-
AR 2018	72	(129)	(114)	-	(11)	-	-	(11)	65	284	-
AR 2017	134	(158)	(143)	-	(14)	-	29	(15)	73	331	(4)
AR 2016	124	(192)	(177)	-	(17)	-	27	(30)	67	127	(6)
AR 2015	95	(230)	(217)		(21)		30	(37)	73	29	(8)
	92	(240)	(227)		(23)		34	(39)	81	53	(9)
Retained earnings											
Q2 2020	2,200	1,456	3,873	1,247	1,339	2,257	1,128	1,885	1,334	3,494	997
Q1 2020	2,185	1,473	3,822	1,153	1,267	2,199	1,124	1,815	1,306	3,404	981
AR 2019	2,153	1,463	3,770	1,094	1,233	2,165	1,115	1,801	1,326	3,467	1,000
AR 2018	2,110	1,395	3,536	1,023	1,081	2,050	1,078	1,694	1,276	3,346	914
AR 2017	2,003	1,308	3,297	940	942	1,839	976	1,546	1,158	3,245	840
AR 2016	1,892	1,217	3,020	834	824	1,450	887	1,412	986	3,056	735
AR 2015	1,840	1,129	2,730	766	762	801	835	1,270	881	2,628	652
OTTI in AOCI/retained earn											
Q2 2020	0.0%	-3.5%	-2.0%	0.0%	-0.6%	0.0%	0.0%	-0.3%	0.0%	0.0%	0.0%
Q1 2020	0.0%	-3.6%	-2.1%	0.0%	-0.6%	0.0%	0.0%	-0.4%	0.0%	0.0%	0.0%
AR 2019	1.9%	-5.2%	-2.3%	0.0%	-0.7%	0.0%	0.0%	-0.4%	3.9%	7.7%	0.0%

Peer Comparison for Federal Home Loan Banks (cont.)

Mil. $	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
AR 2018	3.4%	-9.3%	-3.2%	0.0%	-1.0%	0.0%	0.0%	-0.7%	5.1%	8.5%	0.0%
AR 2017	6.7%	-12.1%	-4.3%	0.0%	-1.4%	0.0%	3.0%	-1.0%	6.3%	10.2%	-0.5%
AR 2016	6.6%	-15.8%	-5.9%	0.0%	-2.1%	0.0%	3.0%	-2.1%	6.8%	4.2%	-0.8%
AR 2015	5.2%	-20.4%	-7.9%	0.0%	-2.8%	0.0%	3.6%	-2.9%	8.3%	1.1%	-1.2%

Related Criteria

- Criteria | Governments | Sovereigns: Sovereign Rating Methodology, Dec. 18, 2017
- Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology, July 20, 2017
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- Criteria | Financial Institutions | Banks: Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
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Related Research

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- Sovereign Risk Indicators, July 14, 2020

Ratings Detail (As Of September 9, 2020)*	
Federal Home Loan Banks	
Senior Unsecured	AA+
Senior Unsecured	AA+/A-1+
Senior Unsecured	AA+/Stable
Short-Term Debt	A-1+
Sovereign Rating	
United States	AA+/Stable/A-1+
Related Entities	
Federal Home Loan Bank of Atlanta	
Issuer Credit Rating	AA+/Stable/A-1+

Ratings Detail (As Of September 9, 2020)*(cont.)	
Federal Home Loan Bank of Boston	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of Chicago	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of Cincinnati	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of Dallas	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of Des Moines	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of Indianapolis	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of New York	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of Pittsburgh	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of San Francisco	
Issuer Credit Rating	AA+/Stable/A-1+
Federal Home Loan Bank of Topeka	
Issuer Credit Rating	AA+/Stable/A-1+

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.