

Federal Home Loan Banks

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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:

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

Rationale

The ratings on the senior debt of the Federal Home Loan Banks (FHLB System) are the same as the U.S. sovereign ratings, even though the U.S. government does not explicitly guarantee the FHLB System's debt. This is because of 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.

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 aspect of U.S. policy, which we do not expect will change. We believe that within the U.S. housing finance policy framework, the FHLB System has a critical public-policy role as one of the most important national liquidity providers to U.S. mortgage lenders, particularly during stressful conditions, when private-sector liquidity often proves unreliable.

We view the FHLB System as having similar policy importance to that of Fannie Mae and Freddie Mac, which also support the mortgage market and which we also view as having a critical role. Unlike these two other U.S. housing-finance GSEs, the FHLB system has not been the focus of the several post-2008 failed legislative initiatives to reform the U.S. housing finance policy framework.

We view the FHLB System as having an integral link to the U.S. government, given its special public status as a U.S. GSE and unusual advantages conveyed by the related legal framework. Although the government does not guarantee the FHLB System's obligations, the latter's unusual advantages generally include lien priority over other creditors in the event of the failure of a member to whom the FHLB System had loans outstanding. We also believe the Federal Housing Finance Agency (FHFA; the Federal Home Loan Banks' regulator) has clear and robust processes and

procedures in place that enable effective governance, monitoring, and control of the FHLB System, including administrative capacity and mechanisms for responding to any financial distress the FHLB System might encounter in a timely manner.

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

The issuer credit ratings on the FHLBanks are one to two notches higher than their 'aa' or 'aa-' SACPs because, in our view, the likelihood of the government providing extraordinary support, 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 the FHLBanks' lack of business diversity. We also view the FHLBanks' capitalization as very strong, based on their member-capitalized co-op structure and low-risk collateralized lending business, which result in S&P Global Ratings' risk-adjusted capital ratios higher than 15%. We expect this to continue because members must scale their capital contributions to support their borrowings from their FHLBank.

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).

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 so long as their policy role remains critical, and their link integral, to the U.S. government. Moreover, based on the track record of plentiful funding for the FHLB System during the market stress of 2008, we believe access to funding is unlikely to be problematic, even in stress scenarios. The FHLB System has increased its reliance on short-term funding in response to its members' demands. However, given the match-funding approach to issuance, as well as the overcollateralization of advances to members, we believe that the tenor of the FHLB System's funding remains manageable. The FHLBanks' principal investments are GSE mortgage-backed securities, federal funds sold, and reverse repurchase agreements.

(For more information, see the full analysis on each FHLBank, listed in Related Research.)

Outlook

Our ratings on the FHLB System's debt have a stable outlook, reflecting the stable outlook on the U.S. sovereign rating. Longer term, the FHLB System is subject to uncertainty related to potential legislative changes associated with broader reform of U.S. housing finance policies. If future initiatives were to gain momentum, and target substantial changes to the FHLB System, and if we view the proposed changes as negatively affecting the FHLB System's role and link, this could cause us to reevaluate the almost certain likelihood of extraordinary government support. To date, however, such initiatives have neither succeeded in gathering substantial political momentum, nor targeted the FHLB System. We expect the likelihood of extraordinary government support for the FHLB System, if needed, to remain

almost certain for the foreseeable future.

Our ratings on the individual FHLBanks also have stable outlooks. These reflect our view that the SACP of each FHLBank and its role and link to the U.S. government are unlikely to change over at least the next two years.

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 home ownership 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, for example. Notwithstanding the contribution such policies arguably made to past U.S. housing market excesses, 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 home ownership to consumption, via wealth effects).

In our opinion, the FHLB System's critical public-policy role within the U.S. housing finance policy framework was clearly demonstrated in the U.S. mortgage crisis of 2008, during which advances (loans to client-owner members) outstanding peaked at \$1 trillion. Since then, demand for advances has fluctuated as member institutions gained access to alternative funding sources, particularly deposits. In addition, the FHLB System provides some support for affordable housing and community investment programs. The FHLB System's combined assets were \$1.082 trillion and advances totaled \$707 billion as of June 30, 2017. These figures are up 2.4% and 0.2%, respectively, relative to year-end 2016.

Although privately owned, the FHLB System is run as a cooperative for the benefit of its client-owners (private-sector financial services companies), with more emphasis on retaining the capacity to quickly increase liquidity provision when needed than on maximizing current profits. In addition, we believe the FHFA's close oversight reinforces this strategic orientation.

We view the FHLB System as having similar policy importance to that of Fannie Mae and Freddie Mac, which provide similar support to the same mortgage market, and which we also view as having a critical role. Unlike these two U.S. housing-finance GSEs, however, the FHLB System has not been the focus of the several post-2008 failed legislative initiatives to reform the U.S. housing finance policy framework.

Although the government does not guarantee the FHLB System's obligations, the FHLB System's status as a U.S. GSE has several advantages, such as the eligibility of GSE securities for collateral the U.S. Federal Reserve Banks (the U.S. monetary authority) are required to hold against currency they have 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. In addition to these advantages, the U.S. legal framework gives the FHLB System lien priority over other creditors (including depositors) in the event of the failure of a member to whom the FHLB System had loans outstanding.

Reinforcing these links to the government, the FHFA has what we consider clear and robust processes and procedures in place that enable effective governance, monitoring, and control of the FHLB System, including administrative

capacity and mechanisms for responding to any financial distress the FHLB System might encounter in a timely manner. We believe the FHFA is involved in all strategic decisions the FHLB System makes, and that it has and uses the capacity to closely monitor the FHLB System's financial condition.

Of note, 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 times of stress. The GSECF proactively offered government-loan liquidity to the FHLB System (along with Fannie Mae and Freddie Mac), if needed, asking nothing more than the FHLB System's own advances as collateral.

Finally, despite the absence of a government guarantee, we believe a close association between the FHLB System and the government is well-entrenched in the minds of investors and other financial-market participants. Together with a substantial amount of FHLB System securities outstanding (\$1.01 trillion as of June 30, 2017), this association could mean, we believe, that substantial financial distress for the FHLB 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. We classify an individual FHLBank's role as very important and its link to the government as very strong. Because the 11 FHLBanks have joint and several liability for the senior unsecured debt obligations that the FHLBanks 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. That is one reason we judge the link between each of the FHLBanks and the government as very strong. 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 FHLB System as a whole. We view the 2015 merger of FHLBank Seattle (which experienced a number of financial difficulties since 2008) with FHLBank Des Moines as supportive of this belief. To our knowledge, the merger did not receive any resistance from the FHFA or from any other arm of government.

Profile And Ownership: A Cooperative Owned By Its Member Institutions

Each FHLBank is owned by its private-sector 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, 2017, was 68.7% commercial banks, 13.4% credit unions, 13.2% savings institutions, 4.2% insurance companies, and 0.5% 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. In addition, member institutions may receive dividends on their shares in the FHLBank, which helps to lower their total transaction funding costs.

FHLBanks provide their 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," to their members. These advances are primarily collateralized by residential mortgage and commercial real estate loans. Community financial institutions may also pledge small business, small farm, small agri-business, and community development loans as collateral for advances.

Peer Comparison For Federal Home Loan Banks

Information As Of June 2017 Unless Otherwise Indicated

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Cash and due from banks	1,070	177	168	370	43	964	92	534	4,010	30	492
Investments, including mortgage-backed securities	26,451	9,054	18,778	15,038	16,619	29,161	12,705	17,772	12,153	19,613	9,155
Securities purchased under agreements to resell	1,500	4,349	2,250	5,866	3,600	3,500	2,527	5,175	500	16,500	2,650
Interest-bearing deposits plus Federal funds sold	11,801	4,739	8,433	7,030	7,903	5,102	2,909	10,700	6,290	8,922	3,951
Advances	91,590	38,428	46,844	71,088	34,132	118,878	32,253	117,934	74,080	55,179	26,443
Mortgage loans, net	486	3,805	4,965	9,447	379	6,953	9,894	2,848	3,538	1,383	6,840
Other	779	203	341	213	186	430	331	566	257	296	210
Total assets	133,677	60,754	81,779	109,053	62,862	164,988	60,712	155,529	100,829	101,923	49,742
Asset composition (% total assets)											
Cash and due from banks	0.8	0.3	0.2	0.3	0.1	0.6	0.2	0.3	4.0	0.0	1.0
Investments, including mortgage-backed securities	19.8	14.9	23.0	13.8	26.4	17.7	20.9	11.4	12.1	19.2	18.4
Securities purchased under agreements to resell	1.1	7.2	2.8	5.4	5.7	2.1	4.2	3.3	0.5	16.2	5.3
Interest-bearing deposits plus Federal funds sold	8.8	7.8	10.3	6.4	12.6	3.1	4.8	6.9	6.2	8.8	7.9
Advances	68.5	63.3	57.3	65.2	54.3	72.1	53.1	75.8	73.5	54.1	53.2
Mortgage loans	0.4	6.3	6.1	8.7	0.6	4.2	16.3	1.8	3.5	1.4	13.8
Other	0.6	0.3	0.4	0.2	0.3	0.3	0.5	0.4	0.3	0.3	0.4
Advance concentrations: top 5 concentrations (%)											
Q2 2017	52.0	32.0	60.0	67.0	29.0	65.0	45.0	60.0	75.0	66.0	52.0
Q1 2017	58.0	32.0	58.0	72.0	28.0	70.0	45.0	61.0	77.0	65.0	57.0
Dec' 2016	54.0	39.0	59.0	70.0	26.0	70.0	43.0	64.0	80.0	65.0	53.0

Peer Comparison For Federal Home Loan Banks (cont.)

Information As Of June 2017 Unless Otherwise Indicated

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Q3-2016	56.0	39.0	58.0	71.0	26.0	67.0	43.0	63.0	77.0	60.0	54.0
Q2-2016	54.0	38.0	62.0	71.0	28.0	63.0	42.0	56.0	70.0	60.0	54.0
Q1 2016	55.0	37.0	60.0	74.0	24.0	63.0	44.0	55.0	74.0	64.0	56.0
AR 2015	59.0	39.0	60.0	72.0	26.0	57.0	43.0	55.0	74.0	62.0	55.0
Q3-2015	53.0	37.0	63.0	71.0	24.0	53.0	41.0	54.0	78.0	62.0	54.0
Q2-2015	56.0	36.0	62.0	74.0	24.0	52.0	42.0	53.0	74.0	64.0	52.0
Q1 2015	54.0	35.2	66.0	78.0	25.3	67.5	42.0	55.0	73.0	59.0	55.0
Dec' 2014	60.6	37.3	64.9	78.4	23.8	65.6	40.4	62.2	73.9	55.0	47.1
Net income											
Q2 2017	86	39	79	87	44	130	38	131	88	80	46
Q1 2017	75	37	73	65	35	140	32	70	87	148	54
AR-2016	278	173	327	268	79	649	113	401	260	712	162
Q3-2016	79	37	76	61	21	74	23	103	55	291	48
Q2-2016	60	47	104	61	21	232	23	92	67	63	32
Q1 2016	50	30	69	57	8	187	27	83	57	231	40
AR 2015	301	289	349	254	67	131	121	415	257	638	93
Q3-2015	61.0	30.5	72.0	66.8	5.6	38.9	28.0	83.0	50.3	46.0	15.0
Q2-2015	87.0	150.0	97.0	58.7	23.9	26.8	34.1	75.2	80.6	61.0	26.6
Q1 2015	82.0	33.6	83.0	64.9	23.1	34.6	30.6	88.2	71.1	474.0	31.1
2014	271.0	150.0	392.0	254.0	49.0	121.0	117.0	315.0	256.0	205.0	106.0
2013	338.0	212.0	343.0	240.0	88.0	110.0	203.0	305.0	148.0	308.0	119.0
2012	270.0	207.0	375.0	215.0	81.0	111.0	140.0	361.0	130.0	491.0	110.0
2011	184.0	159.6	224.0	138.3	47.8	77.8	110.1	244.5	38.0	216.0	77.3
Return on average assets (%)											
Q2 2017	0.25	0.26	0.39	0.35	0.30	0.31	0.25	0.36	0.37	0.33	0.35
Q1 2017	0.21	0.25	0.36	0.26	0.25	0.31	0.23	0.19	0.36	0.63	0.43
AR-2016	0.20	0.29	0.42	0.25	0.15	0.40	0.22	0.31	0.28	0.77	0.33
Q3-2016	0.22	0.25	0.38	0.23	0.15	0.17	0.18	0.32	0.24	1.20	0.39
Q2-2016	0.17	0.32	0.53	0.24	0.17	0.59	0.18	0.30	0.30	0.28	0.26
Q1 2016	0.15	0.20	0.38	0.20	0.07	0.50	0.21	0.27	0.24	1.08	0.34
AR 2015	0.23	0.52	0.49	0.24	0.16	0.12	0.27	0.34	0.29	0.76	0.21
Q3-2015	0.18	0.22	0.42	0.25	0.05	0.13	0.24	0.27	0.22	0.21	0.13
Q2-2015	0.27	1.11	0.56	0.23	0.22	0.10	0.31	0.25	0.37	0.29	0.25
Q1 2015	0.25	0.24	0.44	0.26	0.23	0.14	0.26	0.28	0.34	2.51	0.32
2014	0.21	0.29	0.55	0.25	0.14	0.14	0.30	0.25	0.36	0.24	0.30
2013	0.28	0.54	0.53	0.26	0.27	0.20	0.51	0.27	0.24	0.35	0.33
2012	0.22	0.45	0.54	0.32	0.23	0.23	0.34	0.35	0.23	0.48	0.32
2011	0.15	0.30	0.28	0.21	0.14	0.15	0.26	0.24	0.07	0.15	0.21

Peer Comparison For Federal Home Loan Banks (cont.)

Information As Of June 2017 Unless Otherwise Indicated

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Duration gap (in months)											
Q2 2017	0.2	0.5	0.8	0	0.2	0.3	0.4	(0.4)	(0.2)	1.4	(0.3)
Q1 2017	0.4	0.9	1.1	0	(0.6)	0.7	0.4	(0.3)	0.1	1.1	(0.6)
AR-2016	0.4	1.2	1	0	(0.7)	0.4	0.3	(0.2)	(0.1)	1.2	(0.6)
Q3-2016	0.4	(1.7)	0.9	(0.2)	(1.0)	(0.7)	(1.3)	(0.6)	0.4	1.2	(1.3)
Q2-2016	0.1	(1.6)	0.8	(0.2)	(0.7)	(1.0)	(0.5)	(1.0)	(0.2)	1.1	(0.8)
Q1 2016	(0.1)	0.1	0.9	-	(0.6)	(0.9)	1.2	(0.9)	-	1.2	0.5
AR-2015	(0.1)	0.1	0.5	-	(0.6)	(1.1)	0.7	(0.8)	(0.6)	1.4	0.5
Q3-2015	(0.8)	-	1.0	-	(0.8)	(0.6)	1.2	(1.0)	(0.7)	1.1	0.7
Q2-2015	(0.1)	1.1	0.8	0.1	(0.1)	0.2	0.3	(0.6)	0.1	0.3	0.4
Q1 2015	(0.4)	0.6	0.5	-	(0.6)	(0.5)	0.9	(0.9)	(0.7)	0.4	(0.1)
2014	(0.4)	-	(0.2)	-	0.2	(0.6)	(0.9)	(0.8)	(0.5)	0.4	(0.6)
2013	(0.1)	1.0	0.7	0.1	3.1	0.2	(3.3)	-	0.4	1.0	(0.2)
Regulatory capital ratio (%)											
Q2 2017	4.95	6.08	6.09	4.72	4.82	4.72	4.60	5.29	4.78	6.16	4.48
Q1 2017	4.87	6.58	6.13	5.25	4.88	4.57	4.63	5.21	4.79	6.39	4.51
AR-2016	4.94	5.95	6.40	4.80	4.74	4.48	4.73	5.40	4.69	6.40	4.34
Q3-2016	4.86	5.86	6.52	5.00	4.60	4.38	4.69	5.49	4.70	6.22	4.41
Q2-2016	4.85	5.72	6.15	4.80	4.77	4.34	4.68	5.45	4.79	5.87	4.38
Q1 2016	4.89	5.92	6.81	4.87	4.77	4.21	4.78	5.57	4.59	6.39	4.48
AR 2015	4.89	6.04	6.63	4.38	5.49	4.23	4.70	5.58	4.60	6.26	4.19
Q3-2015	4.99	6.38	6.50	4.68	5.16	4.34	4.90	5.25	4.51	6.27	4.33
Q2-2015	4.93	6.40	6.33	5.11	5.06	4.19	4.89	5.40	4.55	6.45	4.31
Q1 2015	5.04	6.40	6.29	5.10	5.34	4.28	5.45	5.23	4.43	7.99	4.30
2014	5.00	6.60	6.00	4.68	5.10	4.41	5.60	5.00	4.50	8.38	4.40
2013	5.40	9.60	5.40	5.23	5.90	4.63	6.24	5.10	5.16	9.24	5.40
2012	5.20	10.60	4.80	5.81	5.00	5.69	6.50	5.60	5.90	12.44	5.20
2011	5.80	8.50	6.40	6.40	5.20	5.51	6.23	5.40	7.44	10.72	5.24
Private-label mortgage-backed securities (PLMBS)											
Residential PLMBS - available for sale - amortized cost	1,093	0	45	0	0	0	216	0	536	3,914	0
Other than temporary impairments in accumulated other comprehensive income	(2)	0	0	0	0	0	(0)	0	(1)	(60)	0

Peer Comparison For Federal Home Loan Banks (cont.)

Information As Of June 2017 Unless Otherwise Indicated

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
Gross unrealized gains	134	0	9	0	0	0	29	0	75	310	0
Gross unrealized losses	0	0	0	0	0	0	0	0	(0)	0	0
Estimated fair value	1,225	0	54	0	0	0	244	0	610	4,164	0
Residential PLMBS - held to maturity - amortized cost	679	914	759	0	104	14	45	11	336	1,010	94
Other than temporary impairments in accumulated other comprehensive income	0	(175)	(160)	0	(15)	0	0	(0)	0	(7)	(5)
Carrying value	679	739	599	0	89	14	45	11	336	1,003	89
Gross unrealized gains	8	259	286	0	15	0	0	0	4	15	5
Gross unrealized losses	(2)	(6)		0	(1)	0	(0)	(0)	(1)	(15)	(3)
Estimated fair value	685	993	885	0	103	14	45	11	338	1,003	92
Capital											
Total regulatory capital	6,617	3,691	4,982	5,146	3,027	7,787	2,794	8,226	4,815	6,280	2,230
Minimum required risk-based capital	1,616	646	1,033	782	779	940	851	821	950	2,094	345
Excess over risk-based capital	5,001	3,046	3,949	4,364	2,248	6,847	1,943	7,405	3,865	4,186	1,885
Other than temporary impairments in accumulated other comprehensive income											
Q2 2017	132.0	(175.1)	(160.0)	0.0	(15.2)	0.0	29	(23)	74	243	(5)
Q1 2017	124	(184)	(168)	-	(16)	-	27	(24)	66	159	(5)
Ar-2016	124	(192)	(177)	-	(17)	-	27	(30)	67	127	(6)
Q3-2016	119	(202)	(187)	0	(18)	0	24	(32)	68	99	(6)
Q2-2016	112	(210)	(196)	-	(19)	-	24	(33)	65	27	(7)
Q1 2016	86	(220)	(206)	-	(20)	-	24	(35)	60	(25)	(7)
AR-2015	95	(230)	(217)		(21)		30	(37)	73	29	(8)
Q3-2015	92	(240)	(227)		(23)		34	(39)	81	53	(9)
Q2-2015	99	(251)	(238)	-	(24)	-	36	(40)	84	79	(10)
Q1 2015	102	(264)	(251)	-	(26)	-	36	(42)	97	88	(11)

Peer Comparison For Federal Home Loan Banks (cont.)

Information As Of June 2017 Unless Otherwise Indicated

(Mil. US\$)	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis	New York	Pittsburgh	San Francisco	Topeka
2014	118	(276)	(264)	-	(27)	-	38	(44)	94	68	(12)
2013	125	(325)	(320)	-	(33)	-	26	(53)	78	(138)	(16)
2012	(41)	(385)	(389)	-	(41)	-	(10)	(63)	19	(782)	(21)
2011	(398)	(451)	(492)	-	(51)	-	(120)	(76)	(168)	(1,882)	(24)
Retained earnings											
Q2 2017	1,935	1,245	3,153	891	890	1,684	925	1,449	1,077	3,189	790
Q1 2017	1,910	1,231	3,083	853	853	1,590	903	1,395	1,031	3,150	768
Ar-2016	1,892	1,217	3,020	834	824	1,450	887	1,412	986	3,056	735
Q3-2016	1,863	1,180	2,951	788	801	1,294	862	1,361	942	3,067	713
Q2-2016	1,839	1,165	2,884	768	784	1,220	853	1,323	925	2,828	685
Q1 2016	1,838	1,139	2,790	751	767	988	845	1,292	898	2,814	673
AR-2015	1,840	1,129	2,730	737	762	801	835	1,270	881	2,628	652
Q3-2015	1,824	1,074	2,640	717	749	770	822	1,156	867	2,627	650
Q2-2015	1,813	1,064	2,575	694	745	731	810	1,126	855	2,653	654
Q1 2015	1,777	925	2,484	677	722	729	791	1,107	809	2,774	644
2014	1,746	902	2,406	656	701	720	778	1,083	838	2,359	628
2013	1,657	789	2,028	578	655	678	730	999	686	2,394	567
2012	1,435	588	1,691	516	572	622	584	894	559	2,247	482
2011	1,254	398	1,321	444	495	569	498	746	435	1,803	402
Other than temporary impairments in accumulated other comprehensive income/retained earnings (%)											
Q2 2017	6.8	(14.1)	(5.1)	0.0	(1.7)	0.0	3.1	(1.6)	6.9	7.6	(0.6)
Q1 2017	6.5	(14.9)	(5.4)	0.0	(1.9)	0.0	3.0	(1.7)	6.4	5.0	(0.7)
AR-2016	6.6	(15.8)	(5.9)	0.0	(2.1)	0.0	3.0	(2.1)	6.8	4.2	(0.8)
Q3-2016	6.4	(17.1)	(6.3)	0.0	(2.3)	0.0	2.8	(2.3)	7.2	3.2	(0.9)
Q2-2016	6.1	(18.0)	(6.8)	0.0	(2.5)	0.0	2.8	(2.5)	7.0	1.0	(1.0)
Q1 2016	4.7	(19.3)	(7.4)	0.0	(2.7)	0.0	2.9	(2.7)	6.7	(0.9)	(1.1)
AR-2015	5.2	(20.4)	(7.9)	0.0	(2.8)	0.0	3.6	(2.9)	8.3	1.1	(1.2)
Q3-2015	5.0	(22.4)	(8.6)	0.0	(3.0)	0.0	4.1	(3.3)	9.4	2.0	(1.4)
Q2-2015	5.5	(23.6)	(9.2)	0.0	(3.2)	0.0	4.5	(3.6)	9.9	3.0	(1.5)
Q1 2015	5.7	(28.6)	(10.1)	0.0	(3.6)	0.0	4.5	(3.8)	11.9	3.2	(1.7)
2014	6.8	(30.6)	(11.0)	0.0	(3.9)	0.0	4.9	(4.1)	11.3	2.9	(1.9)
2013	7.5	(41.2)	(15.8)	0.0	(5.1)	0.0	3.5	(5.3)	11.3	(5.8)	(2.8)
2012	(2.9)	(65.5)	(23.0)	0.0	(7.2)	0.0	(1.7)	(7.1)	3.4	(34.8)	(4.3)
2011	(31.7)	(113.3)	(37.2)	0.0	(10.4)	0.0	(24.0)	(10.2)	(38.6)	(104.4)	(5.9)

Related Criteria

- Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Bank Hybrid Capital And Nondeferrable Subordinated Debt Methodology And Assumptions, Jan, 29, 2015
- Sovereign Rating Methodology, Dec. 23, 2014
- Issue Credit Rating Methodology For Nonbank Financial Institutions And Nonbank Financial Services Companies, Dec. 9, 2014
- Nonbank Financial Institutions Rating Methodology, Dec. 9, 2014
- Quantitative Metrics For Rating Banks Globally: Methodology And Assumptions, July 17, 2013
- Revised Market Risk Charges For Banks In Our Risk-Adjusted Capital Framework, June 22, 2012
- Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- Bank Capital Methodology And Assumptions, Dec. 6, 2010
- Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Commercial Paper I: Banks, March 23, 2004

Related Research

- Federal Home Loan Bank of Des Moines, Aug. 29, 2017
- Federal Home Loan Bank of Pittsburgh, Aug. 29, 2017
- Federal Home Loan Bank of New York, Aug. 21, 2017
- Federal Home Loan Bank of San Francisco, Aug. 18, 2017

Ratings Detail (As Of August 29, 2017)

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 of America	AA+/Stable/A-1+
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Related Entities

Federal Home Loan Bank of Atlanta

Issuer Credit Rating	AA+/Stable/A-1+
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Federal Home Loan Bank of Boston

Issuer Credit Rating	AA+/Stable/A-1+
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Federal Home Loan Bank of Chicago

Issuer Credit Rating	AA+/Stable/A-1+
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Federal Home Loan Bank of Cincinnati

Issuer Credit Rating	AA+/Stable/A-1+
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Federal Home Loan Bank of Dallas

Issuer Credit Rating	AA+/Stable/A-1+
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Federal Home Loan Bank of Des Moines

Issuer Credit Rating	AA+/Stable/A-1+
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Ratings Detail (As Of August 29, 2017) (cont.)**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.

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