

Parallel-Shift Sensitivity Analysis for HLB-Option and Knockout Advances

The Federal Home Loan Bank of Boston (Bank) is providing estimated valuations of the specific HLB-Option and Knockout advances set forth below for members' information and convenience only. The estimated valuations are generated by models obtained from external sources which are used for the Bank's own asset/liability management purposes. The models include the use of specific assumptions, for example, market volatility and discount curve adjusted for the Bank's spread, to estimate the value of the advance. The valuations represent theoretical market values only and should not be construed as a liquidation price for the HLB-Option or Knockout advance.

It is expressly understood that in providing this valuation information to members, the Bank is not performing any advisory service. The valuations are being provided without representation or warranty and the member shall be solely responsible for any decision it makes or actions it takes based on the valuations provided. It is recommended that institutions maintain independent capabilities to value their asset/liability positions, including HLB-Option and Knockout advances.

The table depicts valuation estimates resulting from immediate parallel interest-rate movements of plus/minus 400 basis points in 100 basis point increments. In order to rule out negative interest rates, our model applies an effective floor of plus ten basis points to the yield curve for all down-rate scenarios. As a result, large down-rate shocks will reflect valuation at the floor rate of ten basis points in place of any negative interest rates that would otherwise be produced by the indicated basis point shocks. Please note that the valuation estimates are from the Federal Home Loan Bank of Boston's perspective. Since the advance is held by the member as a liability, positive price changes in the table correspond to the advance having a negative impact on the member's estimated market value of portfolio equity (and vice versa). The theoretical argument follows that as interest rates rise, the value of the advance to the Bank falls. In the case of an HLB-Option advance, the Bank would be likely to exercise its option to cancel the advance as the value falls below 100. In the case of a Knockout advance, the Bank would automatically terminate the advance on any specified cancellation date if LIBOR is equal to or greater than a predetermined "strike rate" four London Business days prior to the scheduled cancellation date. In either case, the member's cost to prepay the advance increases as interest rates fall.

To identify your advance, locate the appropriate maturity date and then verify the coupon rate. The report is sorted in ascending order by start date, followed by coupon. Once the appropriate structure is determined, read across to view the sensitivity analysis that has been performed on the advance.

If you have any questions or would like further explanation of this analysis, contact the Money Desk at 1-800-357-3452.

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
4/8/1998	4/8/2013	10/9/2012	5.490	103.828	103.828	103.828	103.557	102.862	102.177	101.509	100.891
8/19/1998	8/19/2013	8/20/2012	5.490	105.856	105.856	105.856	105.388	104.321	103.275	102.275	101.371
8/19/1998	8/19/2013	8/20/2012	5.490	105.856	105.856	105.856	105.388	104.321	103.275	102.275	101.371
12/14/1998	12/16/2013	9/14/2012	5.390	107.531	107.531	107.531	106.894	105.487	104.119	102.835	101.705
12/14/1998	12/16/2013	9/14/2012	4.890	106.832	106.832	106.832	106.197	104.797	103.445	102.196	101.150
12/15/1998	12/16/2013	9/17/2012	4.880	106.818	106.818	106.818	106.183	104.783	103.431	102.183	101.136
1/7/2000	1/7/2015	10/9/2012	5.950	114.709	114.709	114.709	113.437	110.900	108.485	106.262	104.301
12/5/2002	12/5/2012	9/5/2012	3.790	101.337	101.337	101.337	101.243	100.895	100.549	100.206	99.866
3/6/2003	3/6/2013	9/6/2012	2.990	101.810	101.810	101.810	101.590	100.992	100.434	100.049	99.892
7/2/2004	7/2/2014	10/3/2012	3.990	107.769	107.769	107.769	106.845	104.890	102.981	101.116	99.293
12/13/2004	12/15/2014	9/13/2012	3.320	107.995	107.995	107.995	106.805	104.494	102.517	101.022	100.153
9/1/2005	9/1/2015	9/1/2012	4.130	112.928	112.928	112.928	111.141	107.965	104.898	101.936	99.074
9/19/2005	9/19/2012	9/19/2012	3.820	100.531	100.531	100.531	100.504	100.368	100.232	100.096	99.961
9/26/2005	9/26/2012	9/26/2012	3.890	100.616	100.616	100.616	100.586	100.430	100.274	100.119	99.965
9/30/2005	9/30/2015	9/30/2012	4.440	114.256	114.256	114.256	112.366	109.090	105.928	102.877	99.930
10/26/2005	10/26/2015	10/26/2012	4.540	114.905	114.905	114.905	112.917	109.562	106.326	103.205	100.193
11/21/2005	11/21/2012	8/21/2012	4.290	101.347	101.347	101.347	101.269	100.959	100.651	100.346	100.087
1/17/2006	1/19/2016	10/17/2012	4.080	114.358	114.358	114.358	112.085	108.727	105.800	103.401	101.606
4/19/2006	4/19/2013	10/19/2012	4.630	103.369	103.369	103.369	103.084	102.360	101.649	100.977	100.412
4/24/2006	4/25/2016	10/24/2012	4.440	116.822	116.822	116.822	114.115	110.481	107.277	104.606	102.518
5/5/2006	5/5/2016	11/5/2012	4.350	116.601	116.601	116.601	113.862	110.232	107.050	104.423	102.395
5/5/2006	5/5/2016	11/5/2012	4.530	117.288	117.288	117.288	114.534	110.867	107.632	104.920	102.791
5/15/2006	5/16/2016	8/15/2012	4.350	116.734	116.734	116.734	113.945	110.288	107.080	104.431	102.380
5/15/2006	5/16/2016	8/15/2012	4.520	117.388	117.388	117.388	114.585	110.893	107.636	104.904	102.758
5/19/2006	5/19/2016	8/20/2012	4.510	117.388	117.388	117.388	114.571	110.874	107.612	104.878	102.730
6/12/2006	6/13/2016	9/12/2012	4.620	118.132	118.132	118.132	115.198	111.427	108.097	105.279	103.048
6/26/2006	6/27/2016	9/26/2012	4.730	118.748	118.748	118.748	115.740	111.912	108.520	105.625	103.295
6/28/2006	6/28/2013	9/28/2012	4.950	104.565	104.565	104.565	104.175	103.256	102.358	101.502	100.750
6/30/2006	7/1/2013	10/1/2012	4.890	104.550	104.550	104.550	104.156	103.229	102.325	101.468	100.730
7/14/2006	7/15/2013	10/15/2012	4.890	104.740	104.740	104.740	104.325	103.361	102.420	101.531	100.767
7/24/2006	7/25/2016	10/24/2012	4.660	118.833	118.833	118.833	115.710	111.835	108.416	105.515	103.201
7/28/2006	7/28/2016	10/29/2012	4.490	118.183	118.183	118.183	115.064	111.217	107.840	105.018	102.802
8/1/2006	8/1/2016	11/1/2012	4.890	119.858	119.858	119.858	116.685	112.756	109.274	106.295	103.872
8/21/2006	8/21/2013	11/1/2012	4.750	105.093	105.093	105.093	104.624	103.555	102.504	101.470	100.452
8/25/2006	8/25/2016	8/27/2012	4.350	117.955	117.955	117.955	114.733	110.859	107.481	104.694	102.531
10/10/2006	10/10/2013	10/10/2012	4.250	105.147	105.147	105.147	104.608	103.403	102.248	101.233	100.466
10/12/2006	10/15/2013	10/12/2012	4.500	105.512	105.512	105.512	104.966	103.744	102.565	101.501	100.656
11/6/2006	11/6/2013	11/6/2012	4.290	105.517	105.517	105.517	104.941	103.660	102.433	101.349	100.494
11/10/2006	11/13/2012	8/10/2012	4.390	101.280	101.280	101.280	101.211	100.924	100.638	100.354	100.094
11/17/2006	11/18/2013	8/17/2012	4.350	105.739	105.739	105.739	105.146	103.831	102.569	101.453	100.579
11/24/2006	11/25/2016	8/24/2012	4.190	118.365	118.365	118.365	114.778	110.752	107.287	104.470	102.320
11/30/2006	12/2/2013	8/28/2012	4.350	105.908	105.908	105.908	105.295	103.937	102.603	101.292	100.068
12/1/2006	12/1/2016	9/4/2012	4.090	117.995	117.995	117.995	114.405	110.406	106.993	104.243	102.176
12/4/2006	12/5/2016	9/4/2012	4.080	117.996	117.996	117.996	114.390	110.385	106.969	104.218	102.152
12/5/2006	12/5/2016	9/5/2012	4.260	118.790	118.790	118.790	115.155	111.097	107.602	104.755	102.573
12/6/2006	12/6/2013	9/6/2012	4.400	106.025	106.025	106.025	105.406	104.041	102.733	101.578	100.669
12/8/2006	12/8/2016	9/10/2012	3.990	117.632	117.632	117.632	114.027	110.042	106.660	103.947	101.931
12/12/2006	12/12/2016	9/12/2012	3.990	117.677	117.677	117.677	114.053	110.058	106.668	103.948	101.925
12/12/2006	12/12/2016	9/12/2012	4.050	117.943	117.943	117.943	114.309	110.296	106.877	104.125	102.065
12/19/2006	12/19/2016	9/19/2012	4.190	118.644	118.644	118.644	114.956	110.884	107.385	104.547	102.384
12/20/2006	12/20/2013	9/20/2012	4.500	106.337	106.337	106.337	105.698	104.292	102.942	101.730	100.762
12/28/2006	12/28/2016	9/28/2012	4.250	119.018	119.018	119.018	115.279	111.166	107.623	104.732	102.512
12/28/2006	12/28/2016	9/28/2012	4.400	119.689	119.689	119.689	115.926	111.771	108.172	105.195	102.878
1/12/2007	1/12/2017	10/12/2012	4.420	119.962	119.962	119.962	116.135	111.949	108.331	105.337	103.008
1/16/2007	1/17/2017	10/16/2012	4.790	121.700	121.700	121.700	117.793	113.498	109.738	106.554	103.980
1/23/2007	1/23/2014	10/23/2012	4.490	106.747	106.747	106.747	106.060	104.561	103.127	101.843	100.822
1/29/2007	1/29/2014	10/29/2012	4.790	107.278	107.278	107.278	106.581	105.057	103.563	102.098	100.660
2/2/2007	2/2/2017	11/2/2012	4.690	121.455	121.455	121.455	117.317	112.609	108.124	103.849	99.772
2/20/2007	2/21/2017	8/20/2012	4.390	120.315	120.315	120.315	116.311	112.046	108.370	105.338	102.982
2/20/2007	2/21/2017	8/21/2012	4.850	122.443	122.443	122.443	118.197	113.414	108.858	104.518	100.381
2/23/2007	2/23/2017	8/23/2012	4.250	119.690	119.690	119.690	115.703	111.475	107.849	104.893	102.624
2/23/2007	2/23/2017	8/23/2012	4.350	120.154	120.154	120.154	116.148	111.889	108.223	105.207	102.872
3/16/2007	3/16/2017	9/17/2012	4.090	119.188	119.188	119.188	115.139	110.925	107.344	104.463	102.291
3/21/2007	3/21/2017	9/21/2012	4.220	119.856	119.856	119.856	115.757	111.488	107.837	104.871	102.603
3/23/2007	3/23/2017	9/24/2012	4.290	120.209	120.209	120.209	116.087	111.791	108.107	105.095	102.774
3/23/2007	3/23/2017	9/24/2012	4.290	120.209	120.209	120.209	116.087	111.791	108.107	105.095	102.774
4/9/2007	4/10/2017	10/9/2012	4.150	119.757	119.757	119.757	115.585	111.306	107.666	104.731	102.510
4/12/2007	4/12/2017	10/12/2012	4.250	120.257	120.257	120.257	116.053	111.736	108.046	105.046	102.749
4/13/2007	4/13/2017	10/15/2012	4.450	121.223	121.223	121.223	116.974	112.590	108.818	105.689	103.249

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
4/23/2007	4/23/2014	10/23/2012	4.620	108.097	108.097	108.097	107.279	105.519	103.850	102.357	101.157
4/27/2007	4/27/2017	10/29/2012	4.250	120.434	120.434	120.434	116.156	111.802	108.080	105.050	102.724
5/2/2007	5/2/2014	11/2/2012	4.590	108.160	108.160	108.160	107.327	105.544	103.861	102.367	101.179
5/4/2007	5/5/2014	11/5/2012	4.550	108.126	108.126	108.126	107.290	105.499	103.811	102.316	101.131
5/18/2007	5/18/2017	8/20/2012	4.190	120.390	120.390	120.390	116.027	111.658	107.939	104.928	102.633
5/22/2007	5/22/2017	8/22/2012	4.750	123.168	123.168	123.168	118.672	114.114	110.153	106.818	104.134
5/29/2007	5/30/2017	8/29/2012	4.250	120.824	120.824	120.824	116.386	111.970	108.203	105.133	102.774
6/1/2007	6/2/2014	9/4/2012	4.500	108.387	108.387	108.387	107.508	105.641	103.890	102.348	101.132
6/7/2007	6/7/2017	9/7/2012	4.820	123.724	123.724	123.724	119.138	114.534	110.529	107.156	104.435
6/8/2007	6/9/2014	9/10/2012	4.730	108.908	108.908	108.908	108.015	106.123	104.333	102.737	101.437
6/8/2007	6/8/2017	9/10/2012	4.490	122.112	122.112	122.112	117.585	113.080	109.209	105.993	103.471
6/11/2007	6/12/2017	9/11/2012	4.490	122.162	122.162	122.162	117.613	113.099	109.220	105.998	103.471
6/18/2007	6/19/2017	9/18/2012	4.500	122.299	122.299	122.299	117.710	113.175	109.278	106.036	103.488
6/19/2007	6/19/2017	9/19/2012	4.650	123.042	123.042	123.042	118.423	113.841	109.877	106.560	103.908
6/22/2007	6/22/2017	9/24/2012	4.500	122.336	122.336	122.336	117.731	113.189	109.283	106.034	103.478
6/28/2007	6/28/2017	9/28/2012	4.500	122.411	122.411	122.411	117.774	113.216	109.298	106.037	103.471
7/13/2007	7/13/2017	10/15/2012	4.290	121.544	121.544	121.544	116.883	112.377	108.540	105.409	103.001
7/20/2007	7/20/2017	10/22/2012	4.290	121.627	121.627	121.627	116.928	112.406	108.554	105.410	102.989
7/27/2007	7/28/2014	10/29/2012	4.350	108.784	108.784	108.784	107.815	105.797	103.918	102.283	101.014
7/27/2007	7/27/2017	10/29/2012	4.250	121.508	121.508	121.508	116.781	112.257	108.409	105.278	102.874
7/30/2007	1/30/2019	10/30/2012	3.990	126.310	126.310	124.230	118.357	113.153	108.847	105.431	102.863
7/31/2007	7/31/2017	10/31/2012	3.990	120.237	120.237	120.237	115.564	111.138	107.413	104.437	102.213
7/31/2007	7/31/2017	10/31/2012	3.990	120.237	120.237	120.237	115.564	111.138	107.413	104.437	102.213
7/31/2007	7/31/2017	10/31/2012	4.060	120.592	120.592	120.592	115.900	111.446	107.684	104.665	102.392
8/2/2007	8/4/2014	11/2/2012	4.490	109.154	109.154	109.154	108.172	106.133	104.233	102.574	101.270
8/2/2007	8/2/2017	11/2/2012	4.150	121.071	121.071	121.071	116.349	111.866	108.074	105.024	102.715
8/2/2007	8/2/2017	11/2/2012	4.050	120.564	120.564	120.564	115.868	111.424	107.683	104.695	102.459
8/6/2007	8/6/2012	8/6/2012	4.490	100.075	100.075	100.075	100.072	100.056	100.040	100.023	100.007
8/9/2007	8/9/2017	8/9/2012	3.990	120.337	120.337	120.337	115.619	111.183	107.460	104.493	102.287
8/13/2007	8/13/2012	8/13/2012	4.590	100.166	100.166	100.166	100.159	100.124	100.089	100.054	100.019
8/16/2007	8/16/2017	8/16/2012	3.990	120.414	120.414	120.414	115.657	111.205	107.468	104.487	102.266
8/17/2007	8/17/2012	8/17/2012	4.350	100.205	100.205	100.205	100.197	100.151	100.106	100.060	100.014
8/17/2007	8/17/2012	8/17/2012	4.150	100.196	100.196	100.196	100.188	100.142	100.096	100.050	100.005
8/17/2007	8/17/2017	8/17/2012	4.000	120.476	120.476	120.476	115.711	111.253	107.509	104.519	102.288
8/20/2007	8/20/2014	8/20/2012	4.250	108.854	108.854	108.854	107.846	105.759	103.801	102.062	100.648
8/24/2007	8/24/2012	8/24/2012	4.050	100.270	100.270	100.270	100.258	100.194	100.129	100.065	100.000
8/28/2007	8/28/2014	8/28/2012	4.350	109.159	109.159	109.159	108.137	106.035	104.083	102.385	101.066
8/30/2007	8/30/2012	8/30/2012	4.390	100.366	100.366	100.366	100.351	100.270	100.190	100.109	100.029
8/30/2007	9/2/2014	8/30/2012	3.890	108.244	108.244	108.244	107.220	105.129	103.224	101.668	100.543
9/4/2007	9/4/2012	9/4/2012	4.220	100.410	100.410	100.410	100.393	100.298	100.204	100.109	100.015
9/4/2007	9/5/2017	9/4/2012	3.890	120.119	120.119	120.113	115.294	110.858	107.162	104.238	102.089
9/7/2007	9/7/2012	9/7/2012	4.090	100.432	100.432	100.432	100.413	100.310	100.207	100.104	100.002
9/10/2007	9/11/2017	9/10/2012	3.690	119.146	119.146	119.132	114.352	109.990	106.399	103.590	101.579
9/11/2007	9/11/2017	9/11/2012	3.590	118.627	118.627	118.614	113.866	109.549	106.018	103.276	101.354
9/12/2007	9/12/2014	9/12/2012	3.690	107.923	107.923	107.923	106.884	104.781	102.904	101.408	100.418
9/13/2007	9/15/2014	9/13/2012	3.990	108.600	108.600	108.600	107.553	105.422	103.479	101.878	100.721
9/13/2007	9/13/2017	9/13/2012	3.990	120.724	120.724	120.709	115.823	111.327	107.557	104.555	102.317
9/17/2007	9/17/2012	9/17/2012	4.220	100.563	100.563	100.563	100.538	100.407	100.276	100.146	100.016
9/27/2007	9/29/2014	9/27/2010	4.490	109.852	109.852	109.852	108.775	106.557	104.395	102.288	100.235
9/27/2007	9/27/2017	9/27/2012	3.650	119.100	119.100	119.068	114.231	109.852	106.253	103.440	101.434
9/28/2007	9/28/2012	9/28/2012	3.850	100.631	100.631	100.631	100.600	100.438	100.277	100.117	99.957
10/3/2007	10/3/2012	10/3/2012	3.830	100.681	100.681	100.681	100.646	100.471	100.296	100.122	99.949
10/9/2007	10/9/2012	10/9/2012	4.400	100.856	100.856	100.856	100.816	100.625	100.434	100.244	100.055
10/11/2007	10/14/2014	10/11/2012	4.180	109.346	109.346	109.346	108.248	106.028	103.996	102.273	100.984
10/11/2007	10/11/2017	10/11/2012	3.990	121.035	121.035	120.957	115.986	111.446	107.644	104.619	102.367
10/15/2007	10/16/2017	10/15/2012	3.990	121.090	121.090	120.994	116.012	111.462	107.652	104.619	102.360
10/22/2007	10/22/2012	10/22/2012	3.990	100.920	100.920	100.920	100.871	100.645	100.419	100.195	99.971
10/25/2007	10/27/2014	10/25/2012	4.360	109.906	109.906	109.906	108.784	106.517	104.426	102.621	101.221
10/26/2007	10/26/2017	10/26/2012	3.390	118.013	118.013	117.882	113.095	108.804	105.338	102.732	100.988
10/29/2007	10/29/2012	10/29/2012	3.990	100.997	100.997	100.997	100.944	100.698	100.454	100.211	99.969
11/2/2007	11/3/2014	11/2/2012	3.990	109.143	109.143	109.143	108.014	105.754	103.710	102.030	100.819
11/2/2007	11/3/2014	11/2/2012	4.190	109.601	109.601	109.601	108.470	106.197	104.123	102.368	101.048
11/5/2007	11/5/2014	11/5/2012	3.990	109.165	109.165	109.165	108.033	105.767	103.717	102.032	100.814
11/5/2007	11/6/2017	11/5/2012	4.390	123.461	123.461	123.288	118.146	113.405	109.371	106.056	103.485
11/6/2007	11/6/2017	11/6/2012	3.480	118.597	118.597	118.430	113.597	109.258	105.742	103.051	101.224
11/9/2007	11/10/2014	8/9/2012	4.330	110.007	110.007	110.007	108.861	106.559	104.446	102.634	101.238
11/13/2007	11/13/2012	8/13/2012	3.680	101.073	101.073	101.073	101.004	100.717	100.432	100.148	99.987
11/13/2007	11/13/2014	8/13/2012	3.350	107.770	107.770	107.770	106.634	104.399	102.476	101.014	100.199
11/19/2007	11/19/2014	8/20/2012	4.270	109.975	109.975	109.975	108.814	106.490	104.360	102.537	101.141

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
11/19/2007	11/19/2014	8/20/2012	3.750	108.760	108.760	108.760	107.607	105.320	103.276	101.650	100.513
11/19/2007	11/19/2014	8/20/2012	3.750	108.760	108.760	108.760	107.607	105.320	103.276	101.650	100.513
11/19/2007	11/20/2017	11/19/2012	4.290	123.093	123.093	122.856	117.233	111.746	106.708	102.891	100.819
11/20/2007	11/20/2017	8/20/2012	3.740	120.132	120.132	119.920	114.949	110.455	106.748	103.839	101.735
11/23/2007	11/24/2017	8/23/2012	3.990	121.522	121.522	121.269	115.664	110.206	105.045	100.164	95.545
11/23/2007	11/24/2017	8/23/2012	3.990	121.522	121.522	121.269	115.664	110.206	105.045	100.164	95.545
11/29/2007	11/29/2017	8/29/2012	2.950	115.953	115.953	115.731	111.076	107.001	103.836	101.588	100.313
11/30/2007	11/30/2017	8/30/2012	3.190	117.260	117.260	117.029	112.259	108.040	104.682	102.235	100.629
12/7/2007	12/7/2012	9/7/2012	3.450	101.236	101.236	101.236	101.139	100.786	100.436	100.122	99.938
12/10/2007	12/11/2017	9/10/2012	3.450	118.772	118.772	118.500	113.601	109.228	105.692	103.000	101.172
12/11/2007	12/11/2012	9/11/2012	3.760	101.389	101.389	101.389	101.286	100.923	100.561	100.218	99.987
12/20/2007	12/20/2012	9/20/2012	3.600	101.420	101.420	101.420	101.305	100.917	100.532	100.181	99.946
12/20/2007	12/20/2012	9/20/2012	3.750	101.479	101.479	101.479	101.364	100.976	100.591	100.209	99.829
12/24/2007	12/26/2017	12/24/2012	3.990	121.877	121.877	121.486	115.784	110.251	105.418	102.024	100.390
12/26/2007	12/26/2012	9/26/2012	3.960	101.628	101.628	101.628	101.505	101.100	100.699	100.311	100.018
12/26/2007	12/26/2012	9/26/2012	3.460	101.422	101.422	101.422	101.299	100.895	100.495	100.140	99.906
1/2/2008	1/2/2013	10/2/2012	3.490	101.503	101.503	101.503	101.370	100.947	100.530	100.168	99.912
1/3/2008	1/5/2015	10/3/2012	3.650	109.003	109.003	109.003	107.770	105.375	103.270	101.625	100.530
1/4/2008	1/4/2018	10/4/2012	3.360	118.507	118.507	118.156	113.255	108.904	105.410	102.799	101.070
1/7/2008	1/7/2013	10/9/2012	2.990	101.329	101.329	101.329	101.189	100.753	100.332	100.012	99.787
1/7/2008	1/7/2013	10/9/2012	3.590	101.595	101.595	101.595	101.456	101.019	100.588	100.207	99.926
1/7/2008	1/7/2015	10/9/2012	3.490	108.627	108.627	108.627	107.395	105.009	102.944	101.354	100.340
1/7/2008	1/8/2018	10/9/2012	2.590	114.294	114.294	113.957	109.464	105.604	102.735	100.912	99.982
1/8/2008	1/8/2013	10/9/2012	3.150	101.409	101.409	101.409	101.268	100.829	100.402	100.056	99.821
1/8/2008	1/8/2018	10/9/2012	2.570	114.184	114.184	113.848	109.367	105.522	102.670	100.876	99.966
1/8/2008	1/8/2018	10/9/2012	2.640	114.570	114.570	114.230	109.704	105.806	102.895	100.997	100.020
1/11/2008	1/11/2018	10/11/2012	2.720	115.034	115.034	114.680	110.098	106.138	103.153	101.134	100.072
1/14/2008	1/16/2018	10/15/2012	3.240	117.954	117.954	117.558	112.694	108.393	104.962	102.456	100.829
1/16/2008	1/16/2013	10/16/2012	2.550	101.197	101.197	101.197	101.045	100.586	100.173	99.883	99.668
1/16/2008	1/16/2018	10/16/2012	2.380	113.188	113.188	112.834	108.468	104.766	102.108	100.527	99.785
1/17/2008	1/17/2018	10/17/2012	2.250	112.474	112.474	112.124	107.851	104.255	101.752	100.308	99.683
1/18/2008	1/18/2013	10/18/2012	2.550	101.211	101.211	101.211	101.056	100.592	100.175	99.880	99.659
1/18/2008	1/20/2015	10/18/2012	2.350	105.894	105.894	105.894	104.671	102.461	100.846	100.010	99.639
1/18/2008	1/18/2018	10/18/2012	2.290	112.702	112.702	112.347	108.043	104.410	101.858	100.369	99.706
1/24/2008	1/24/2013	10/24/2012	2.500	101.229	101.229	101.229	101.066	100.585	100.158	99.857	99.622
1/25/2008	1/25/2013	1/26/2009	2.250	101.112	101.112	101.112	100.948	100.465	99.986	99.512	99.043
1/25/2008	1/25/2013	1/25/2011	2.650	101.310	101.310	101.310	101.145	100.662	100.183	99.708	99.238
1/28/2008	1/28/2013	1/28/2011	2.990	101.503	101.503	101.503	101.334	100.842	100.354	99.872	99.394
1/30/2008	1/30/2013	10/30/2012	2.670	101.357	101.357	101.357	101.185	100.689	100.233	99.896	99.638
2/7/2008	2/7/2013	11/7/2012	2.490	101.321	101.321	101.321	101.138	100.620	100.166	99.989	99.970
2/13/2008	2/13/2013	8/13/2012	2.920	101.598	101.598	101.598	101.406	100.868	100.364	100.040	99.959
2/14/2008	2/14/2018	8/14/2012	3.190	117.933	117.933	117.314	111.550	105.990	100.746	95.799	91.130
2/19/2008	2/19/2013	2/19/2010	2.590	101.460	101.460	101.460	101.261	100.705	100.155	99.611	99.073
2/25/2008	2/25/2013	8/25/2012	3.090	101.794	101.794	101.794	101.586	101.011	100.443	99.881	99.326
2/25/2008	2/26/2018	8/27/2012	2.420	113.685	113.685	113.209	108.751	104.971	102.229	100.549	99.913
3/7/2008	3/9/2015	9/7/2012	2.890	107.634	107.634	107.634	106.306	103.863	101.886	100.596	99.991
3/7/2008	3/7/2018	3/7/2013	3.550	120.164	120.164	119.583	114.486	109.951	106.267	103.412	101.341
3/10/2008	3/11/2013	9/10/2012	2.390	101.480	101.480	101.480	101.253	100.649	100.152	99.922	99.808
3/12/2008	3/12/2013	9/12/2012	2.010	101.251	101.251	101.251	101.022	100.427	100.024	99.869	99.753
3/14/2008	3/14/2018	9/14/2012	2.400	113.678	113.678	113.161	108.699	104.931	102.215	100.595	99.907
3/17/2008	3/19/2018	3/18/2013	3.300	118.854	118.854	118.244	113.233	108.822	105.290	102.649	100.772
3/28/2008	3/28/2013	9/28/2012	2.820	101.880	101.880	101.880	101.628	100.970	100.321	99.680	99.047
4/14/2008	4/14/2015	10/14/2012	2.750	107.539	107.539	107.539	106.126	103.401	100.761	98.201	95.719
4/28/2008	4/28/2015	10/29/2012	3.250	109.036	109.036	109.036	107.598	104.964	102.752	101.100	100.108
4/28/2008	4/30/2018	10/29/2012	2.150	112.534	112.534	111.885	107.568	103.975	101.524	100.137	99.565
4/30/2008	4/30/2018	4/30/2013	3.740	121.805	121.805	120.812	114.763	109.147	104.728	101.931	100.221
5/2/2008	5/4/2015	11/2/2012	3.990	111.160	111.160	111.160	109.689	106.950	104.522	102.528	101.080
5/5/2008	5/5/2015	11/5/2012	3.170	108.875	108.875	108.875	107.426	104.798	102.622	101.031	100.201
5/8/2008	5/8/2015	11/8/2012	2.960	108.312	108.312	108.312	106.864	104.269	102.164	100.740	100.088
5/19/2008	5/19/2015	8/21/2012	4.700	113.342	113.342	113.342	111.817	108.918	106.110	103.389	100.754
5/23/2008	5/23/2013	8/23/2012	4.040	103.322	103.322	103.322	102.986	102.172	101.382	100.664	100.160
5/23/2008	5/23/2018	8/23/2012	3.270	119.273	119.273	118.410	113.313	108.841	105.274	102.642	100.891
5/27/2008	5/28/2013	5/27/2011	3.490	102.918	102.918	102.918	102.576	101.750	100.937	100.137	99.350
6/6/2008	6/6/2013	9/6/2012	3.990	103.436	103.436	103.436	103.080	102.227	101.388	100.563	99.752
6/16/2008	6/17/2013	9/16/2012	4.070	103.629	103.629	103.629	103.256	102.373	101.504	100.650	99.811
6/24/2008	6/24/2015	9/24/2012	3.830	111.255	111.255	111.255	109.672	106.818	104.314	102.302	100.880
6/30/2008	7/1/2013	10/1/2012	2.920	102.717	102.717	102.717	102.326	101.418	100.611	100.081	99.811
6/30/2008	7/1/2013	10/1/2012	3.450	103.210	103.210	103.210	102.818	101.902	101.043	100.373	99.967
6/30/2008	6/30/2015	10/1/2012	3.370	109.959	109.959	109.959	108.378	105.580	103.221	101.448	100.356

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
6/30/2008	7/2/2018	9/30/2012	3.690	122.159	122.159	120.823	114.588	108.589	102.950	97.647	92.658
7/1/2008	7/1/2015	10/1/2012	4.600	113.608	113.608	113.608	111.981	108.960	106.038	103.211	100.475
7/7/2008	7/8/2013	10/7/2012	4.590	104.360	104.360	104.360	103.956	103.012	102.085	101.175	100.281
7/8/2008	7/8/2013	10/8/2012	4.250	104.037	104.037	104.037	103.634	102.691	101.766	100.857	99.965
7/10/2008	7/10/2014	10/10/2012	4.800	109.453	109.453	109.453	108.509	106.516	104.570	102.669	100.812
7/11/2008	7/11/2018	10/11/2012	3.750	122.613	122.613	121.225	114.955	108.923	103.254	97.924	92.911
7/14/2008	7/14/2015	7/15/2013	4.900	114.672	114.672	114.672	113.003	109.889	106.797	103.769	101.014
7/14/2008	7/16/2018	10/15/2012	2.500	115.110	115.110	114.153	109.478	105.525	102.615	100.819	99.912
7/14/2008	7/16/2018	10/15/2012	3.250	119.643	119.643	118.568	113.406	108.895	105.308	102.675	100.949
7/17/2008	7/17/2018	7/17/2013	3.750	122.675	122.675	121.253	114.995	109.373	105.082	102.218	100.305
7/21/2008	7/22/2013	10/22/2012	3.000	102.966	102.966	102.966	102.545	101.571	100.661	100.080	99.759
8/15/2008	8/15/2018	8/15/2012	3.830	123.468	123.468	122.191	116.688	111.793	107.764	104.599	102.276
8/19/2008	8/19/2013	8/19/2010	3.440	103.669	103.669	103.669	103.206	102.151	101.113	100.093	99.090
9/8/2008	9/9/2013	9/10/2012	2.890	103.251	103.251	103.251	102.760	101.666	100.719	100.106	99.872
5/13/2009	5/13/2014	5/13/2013	4.000	107.233	107.233	107.233	106.359	104.380	102.318	100.067	97.986
9/28/2009	9/30/2013	9/28/2012	2.920	103.455	103.455	103.455	102.934	101.739	100.646	99.892	99.564
5/11/2010	5/11/2015	5/11/2015	3.700	110.421	110.421	110.421	108.918	105.856	102.341	98.283	93.770
5/24/2010	5/26/2015	8/24/2012	2.250	106.431	106.431	106.431	104.937	102.116	99.386	98.838	96.743
6/15/2010	6/15/2015	9/15/2012	2.280	106.643	106.643	106.643	105.102	102.226	99.443	99.283	96.750
4/27/2012	4/27/2016	4/29/2013	-0.012	104.363	104.363	104.363	102.222	100.415	99.746	99.432	99.180
4/30/2012	5/2/2016	4/30/2013	-0.013	104.219	104.219	104.219	102.083	100.358	99.734	99.427	99.177
5/15/2012	5/15/2017	5/15/2014	0.007	105.936	105.936	105.945	102.577	100.776	99.993	99.633	99.469
5/15/2012	5/15/2017	11/17/2014	0.007	106.288	106.288	106.297	102.834	100.936	100.006	99.498	99.227
7/16/2012	7/17/2017	7/16/2014	0.005	105.241	105.241	105.313	101.941	100.249	99.432	99.007	98.717
7/18/2012	7/18/2018	7/20/2015	0.005	107.925	107.925	106.584	102.577	100.540	99.427	98.757	98.295
7/19/2012	7/19/2017	7/21/2014	0.005	104.920	104.920	104.990	101.711	100.096	99.342	98.927	98.638