

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.

As of: 4/30/2012

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

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
4/8/1998	4/8/2013	7/9/2012	5.490	105.231	105.231	105.231	104.828	103.879	102.948	102.044	101.210
8/19/1998	8/19/2013	5/21/2012	5.490	107.259	107.259	107.259	106.612	105.284	103.982	102.737	101.615
8/19/1998	8/19/2013	5/21/2012	5.490	107.259	107.259	107.259	106.612	105.284	103.982	102.737	101.615
8/25/1998	8/19/2013	7/25/2012	5.490	107.259	107.259	107.259	106.612	105.284	103.983	102.737	101.615
8/27/1998	8/19/2013	7/27/2012	5.490	107.259	107.259	107.259	106.612	105.284	103.982	102.737	101.615
9/30/1998	9/30/2013	7/2/2012	5.220	107.511	107.511	107.511	106.781	105.335	103.926	102.602	101.449
12/14/1998	12/16/2013	6/14/2012	5.390	108.908	108.908	108.908	108.012	106.346	104.728	103.209	101.877
12/14/1998	12/16/2013	6/14/2012	4.890	108.082	108.082	108.082	107.189	105.531	103.932	102.467	101.244
12/15/1998	12/16/2013	6/15/2012	4.880	108.065	108.065	108.065	107.172	105.514	103.916	102.451	101.229
1/7/2000	1/7/2015	7/9/2012	5.950	116.230	116.230	116.230	114.352	111.551	108.889	106.437	104.288
6/3/2002	6/4/2012	6/4/2012	4.490	100.437	100.437	100.437	100.418	100.323	100.229	100.134	100.040
6/4/2002	6/4/2012	6/4/2012	4.490	100.437	100.437	100.437	100.418	100.323	100.229	100.134	100.040
12/5/2002	12/5/2012	6/6/2012	3.790	102.305	102.305	102.305	102.092	101.493	100.902	100.317	99.739
3/6/2003	3/6/2013	6/6/2012	2.990	102.575	102.575	102.575	102.229	101.383	100.605	100.073	99.891
7/2/2004	7/2/2014	7/3/2012	3.990	108.789	108.789	108.789	107.444	105.234	103.082	100.985	98.940
12/13/2004	12/15/2014	6/13/2012	3.320	108.843	108.843	108.843	107.094	104.561	102.423	100.873	100.061
9/1/2005	9/1/2015	6/1/2012	4.130	113.984	113.984	113.984	111.282	107.863	104.569	101.395	98.335
9/19/2005	9/19/2012	6/19/2012	3.820	101.507	101.507	101.507	101.396	101.009	100.624	100.248	99.984
9/26/2005	9/26/2012	6/26/2012	3.890	101.610	101.610	101.610	101.490	101.083	100.680	100.284	99.994
9/30/2005	9/30/2015	6/30/2012	4.440	115.391	115.391	115.391	112.543	109.024	105.636	102.373	99.230
10/26/2005	10/26/2015	7/26/2012	4.540	116.066	116.066	116.066	113.088	109.490	106.029	102.698	99.492
10/28/2005	10/28/2015	7/30/2012	4.310	115.276	115.276	115.276	112.333	108.905	105.878	103.384	101.518
10/28/2005	10/28/2015	7/30/2012	4.140	114.673	114.673	114.673	111.743	108.345	105.373	102.957	101.205
11/21/2005	11/21/2012	5/21/2012	4.290	102.443	102.443	102.443	102.248	101.687	101.132	100.598	100.148
1/17/2006	1/19/2016	7/17/2012	4.080	115.401	115.401	115.401	112.084	108.526	105.452	102.982	101.214
4/19/2006	4/19/2013	7/19/2012	4.630	104.553	104.553	104.553	104.133	103.157	102.204	101.303	100.544
4/24/2006	4/25/2016	7/24/2012	4.440	117.956	117.956	117.956	114.124	110.276	106.909	104.141	102.038
5/5/2006	5/5/2016	5/7/2012	4.350	117.713	117.713	117.713	113.844	110.003	106.663	103.943	101.907
5/5/2006	5/5/2016	5/7/2012	4.530	118.446	118.446	118.446	114.556	110.672	107.268	104.453	102.302
5/15/2006	5/16/2016	5/15/2012	4.350	117.846	117.846	117.846	113.920	110.051	106.688	103.946	101.890
5/15/2006	5/16/2016	5/15/2012	4.520	118.543	118.543	118.543	114.597	110.687	107.262	104.430	102.267
5/19/2006	5/19/2016	5/21/2012	4.510	118.540	118.540	118.540	114.580	110.664	107.236	104.402	102.238
6/12/2006	6/13/2016	6/12/2012	4.620	119.313	119.313	119.313	115.213	111.220	107.716	104.797	102.543
6/26/2006	6/27/2016	6/26/2012	4.730	119.957	119.957	119.957	115.770	111.716	108.144	105.140	102.788
6/28/2006	6/28/2013	6/28/2012	4.950	105.830	105.830	105.830	105.285	104.106	102.952	101.859	100.913
6/30/2006	7/1/2013	7/2/2012	4.890	105.800	105.800	105.800	105.250	104.063	102.903	101.812	100.884
7/14/2006	7/15/2013	7/16/2012	4.890	105.990	105.990	105.990	105.414	104.188	102.990	101.868	100.911
7/24/2006	7/25/2016	7/24/2012	4.660	120.024	120.024	120.024	115.701	111.602	108.007	105.006	102.676
7/28/2006	7/28/2016	7/30/2012	4.490	119.331	119.331	119.331	115.015	110.950	107.409	104.497	102.274
8/1/2006	8/1/2016	8/1/2012	4.890	121.107	121.107	121.106	116.722	112.562	108.889	105.784	103.318
8/21/2006	8/21/2013	5/1/2012	4.750	106.307	106.307	106.307	105.659	104.331	103.026	101.744	100.483
8/25/2006	8/25/2016	5/25/2012	4.350	119.066	119.066	119.024	114.626	110.541	107.011	104.144	101.990
10/10/2006	10/10/2013	7/10/2012	4.250	106.233	106.233	106.233	105.487	104.026	102.630	101.403	100.492
10/12/2006	10/15/2013	7/12/2012	4.500	106.662	106.662	106.662	105.904	104.426	103.004	101.723	100.710
11/6/2006	11/6/2013	5/7/2012	4.290	106.613	106.613	106.613	105.810	104.275	102.809	101.509	100.510
11/10/2006	11/13/2012	5/10/2012	4.390	102.402	102.402	102.402	102.218	101.679	101.146	100.631	100.180
11/17/2006	11/18/2013	5/17/2012	4.350	106.851	106.851	106.851	106.022	104.452	102.952	101.623	100.611
11/24/2006	11/25/2016	5/24/2012	4.190	119.436	119.436	119.154	114.538	110.318	106.725	103.853	101.740
11/30/2006	12/2/2013	5/28/2012	4.350	107.020	107.020	107.020	106.161	104.547	102.965	101.415	100.076
12/1/2006	12/1/2016	6/1/2012	4.090	119.040	119.040	118.743	114.138	109.950	106.413	103.616	101.596
12/4/2006	12/5/2016	6/4/2012	4.080	119.039	119.039	118.729	114.116	109.923	106.385	103.589	101.574
12/5/2006	12/5/2016	6/5/2012	4.260	119.879	119.879	119.568	114.916	110.662	107.033	104.125	101.973
12/6/2006	12/6/2013	6/6/2012	4.400	107.150	107.150	107.150	106.282	104.660	103.115	101.748	100.697
12/8/2006	12/8/2016	6/8/2012	3.990	118.652	118.652	118.334	113.732	109.565	106.068	103.321	101.374
12/12/2006	12/12/2016	6/12/2012	3.990	118.696	118.696	118.366	113.753	109.577	106.073	103.320	101.368
12/12/2006	12/12/2016	6/12/2012	4.050	118.977	118.977	118.646	114.021	109.822	106.286	103.494	101.490
12/19/2006	12/19/2016	6/19/2012	4.190	119.715	119.715	119.361	114.686	110.423	106.800	103.910	101.786
12/20/2006	12/20/2013	6/20/2012	4.500	107.487	107.487	107.487	106.588	104.926	103.337	101.917	100.795
12/28/2006	12/28/2016	6/28/2012	4.250	120.104	120.104	119.721	115.010	110.705	107.035	104.090	101.905
12/28/2006	12/28/2016	6/28/2012	4.400	120.813	120.813	120.429	115.687	111.333	107.592	104.555	102.263
1/12/2007	1/12/2017	7/12/2012	4.420	121.092	121.092	120.660	115.880	111.497	107.736	104.682	102.380
1/16/2007	1/17/2017	7/16/2012	4.790	122.924	122.924	122.472	117.608	113.101	109.176	105.896	103.317
1/23/2007	1/23/2014	7/23/2012	4.490	107.894	107.894	107.894	106.920	105.164	103.493	102.007	100.840
1/23/2007	1/23/2017	7/23/2012	4.460	121.419	121.419	120.951	116.132	111.710	107.911	104.812	102.464
1/29/2007	1/29/2014	7/29/2012	4.790	108.502	108.502	108.502	107.511	105.729	103.985	102.278	100.607
2/2/2007	2/2/2017	5/2/2012	4.690	122.654	122.654	122.135	117.070	112.142	107.455	102.998	99.290
2/9/2007	2/9/2017	5/9/2012	4.470	121.678	121.678	121.157	116.293	111.840	108.019	104.904	102.547
2/20/2007	2/21/2017	5/21/2012	4.850	123.683	123.683	123.099	117.956	112.952	108.196	103.674	99.375
2/20/2007	2/21/2017	5/21/2012	4.390	121.436	121.436	120.878	115.996	111.542	107.734	104.649	102.333

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
2/23/2007	2/23/2017	5/23/2012	4.250	120.776	120.776	120.213	115.357	110.947	107.201	104.203	101.984
2/23/2007	2/23/2017	5/23/2012	4.350	121.265	121.265	120.701	115.822	111.376	107.581	104.518	102.225
3/16/2007	3/16/2017	6/18/2012	4.090	120.233	120.233	119.599	114.733	110.351	106.668	103.760	101.654
3/21/2007	3/21/2017	6/21/2012	4.220	120.935	120.935	120.278	115.368	110.925	107.162	104.162	101.947
3/23/2007	3/23/2017	6/25/2012	4.290	121.306	121.306	120.640	115.708	111.234	107.433	104.383	102.111
3/23/2007	3/23/2017	6/25/2012	4.290	121.306	121.306	120.640	115.708	111.234	107.433	104.383	102.111
4/9/2007	4/10/2017	7/9/2012	4.150	120.818	120.818	120.090	115.154	110.709	106.967	104.005	101.847
4/12/2007	4/12/2017	7/12/2012	4.250	121.343	121.343	120.605	115.638	111.150	107.349	104.316	102.074
4/13/2007	4/13/2017	7/13/2012	4.450	122.360	122.360	121.612	116.595	112.030	108.129	104.959	102.564
4/23/2007	4/23/2014	7/23/2012	4.620	109.278	109.278	109.278	108.094	106.079	104.175	102.489	101.152
4/27/2007	4/27/2017	7/27/2012	4.250	121.520	121.520	120.726	115.718	111.198	107.370	104.311	102.045
5/2/2007	5/2/2014	8/2/2012	4.590	109.332	109.332	109.332	108.127	106.090	104.171	102.486	101.163
5/4/2007	5/5/2014	8/6/2012	4.550	109.289	109.289	109.289	108.077	106.032	104.110	102.426	101.109
5/18/2007	5/18/2017	5/18/2012	4.190	121.461	121.461	120.584	115.547	111.018	107.202	104.171	101.944
5/22/2007	5/22/2012	5/22/2012	4.690	100.287	100.287	100.287	100.275	100.216	100.156	100.097	100.038
5/22/2007	5/22/2012	5/22/2012	4.690	100.287	100.287	100.287	100.275	100.216	100.156	100.097	100.038
5/22/2007	5/22/2017	5/22/2012	4.750	124.382	124.382	123.471	118.287	113.543	109.445	106.042	103.377
5/25/2007	5/25/2012	5/25/2012	4.650	100.323	100.323	100.323	100.310	100.242	100.175	100.108	100.041
5/29/2007	5/30/2017	5/29/2012	4.250	121.910	121.910	120.981	115.898	111.323	107.456	104.367	102.073
6/1/2007	6/1/2012	6/1/2012	5.230	100.465	100.465	100.465	100.448	100.362	100.275	100.189	100.103
6/1/2007	6/2/2014	6/1/2012	4.500	109.537	109.537	109.537	108.259	106.139	104.155	102.429	101.091
6/7/2007	6/7/2017	6/7/2012	4.820	124.955	124.955	123.974	118.740	113.949	109.806	106.359	103.644
6/8/2007	6/9/2014	6/8/2012	4.730	110.116	110.116	110.116	108.818	106.670	104.643	102.850	101.410
6/8/2007	6/8/2017	6/8/2012	4.490	123.259	123.259	122.284	117.125	112.448	108.459	105.210	102.745
6/11/2007	6/12/2017	6/11/2012	4.490	123.309	123.309	122.316	117.147	112.462	108.466	105.212	102.744
6/18/2007	6/19/2017	6/18/2012	4.500	123.449	123.449	122.424	117.234	112.530	108.517	105.245	102.758
6/19/2007	6/19/2017	6/19/2012	4.650	124.230	124.230	123.200	117.973	113.215	109.127	105.758	103.150
6/20/2007	6/20/2012	6/20/2012	4.890	100.693	100.693	100.693	100.665	100.525	100.386	100.248	100.110
6/22/2007	6/22/2017	6/22/2012	4.500	123.486	123.486	122.448	117.250	112.540	108.520	105.241	102.746
6/26/2007	6/26/2012	6/26/2012	5.130	100.812	100.812	100.812	100.781	100.625	100.469	100.314	100.159
6/28/2007	6/28/2017	6/28/2012	4.500	123.561	123.561	122.496	117.283	112.559	108.528	105.240	102.738
7/13/2007	7/13/2012	7/13/2012	4.690	100.964	100.964	100.964	100.921	100.719	100.517	100.317	100.117
7/13/2007	7/13/2017	7/13/2012	4.290	122.640	122.640	121.516	116.332	111.674	107.743	104.599	102.265
7/19/2007	7/19/2012	7/19/2012	4.890	101.087	101.087	101.087	101.040	100.821	100.603	100.386	100.171
7/20/2007	7/20/2017	7/20/2012	4.290	122.724	122.724	121.567	116.365	111.694	107.750	104.596	102.251
7/23/2007	7/23/2012	7/23/2012	5.050	101.178	101.178	101.178	101.129	100.899	100.670	100.443	100.216
7/27/2007	7/27/2012	7/27/2012	4.590	101.122	101.122	101.122	101.069	100.829	100.590	100.352	100.115
7/27/2007	7/28/2014	7/27/2012	4.350	109.896	109.896	109.896	108.484	106.215	104.110	102.305	100.938
7/27/2007	7/27/2017	7/27/2012	4.250	122.594	122.594	121.408	116.200	111.533	107.598	104.460	102.137
7/30/2007	1/30/2019	7/30/2012	3.990	127.330	127.330	123.033	116.980	111.783	107.537	104.243	101.879
7/31/2007	7/31/2017	7/31/2012	3.990	121.256	121.256	120.070	114.935	110.379	106.595	103.629	101.516
7/31/2007	7/31/2017	7/31/2012	3.990	121.256	121.256	120.070	114.935	110.379	106.595	103.629	101.516
7/31/2007	7/31/2017	7/31/2012	4.060	121.629	121.629	120.438	115.281	110.694	106.868	103.853	101.676
8/2/2007	8/4/2014	8/2/2012	4.490	110.301	110.301	110.301	108.870	106.578	104.447	102.608	101.193
8/2/2007	8/2/2017	8/2/2012	4.150	122.132	122.132	120.927	115.743	111.122	107.252	104.201	101.978
8/2/2007	8/2/2017	8/2/2012	4.050	121.599	121.599	120.400	115.246	110.670	106.862	103.880	101.740
8/6/2007	8/6/2012	5/7/2012	4.490	101.222	101.222	101.222	101.161	100.894	100.628	100.363	100.100
8/9/2007	8/9/2017	5/9/2012	3.990	121.356	121.356	120.127	114.977	110.414	106.631	103.681	101.582
8/13/2007	8/13/2012	5/14/2012	4.590	101.339	101.339	101.339	101.270	100.984	100.699	100.416	100.135
8/16/2007	8/16/2017	5/16/2012	3.990	121.434	121.434	120.170	115.004	110.429	106.633	103.671	101.560
8/17/2007	8/17/2012	5/17/2012	4.350	101.317	101.317	101.317	101.245	100.948	100.652	100.359	100.088
8/17/2007	8/17/2012	5/17/2012	4.150	101.256	101.256	101.256	101.184	100.887	100.592	100.299	100.053
8/17/2007	8/17/2017	5/17/2012	4.000	121.499	121.499	120.230	115.058	110.476	106.673	103.701	101.578
8/20/2007	8/20/2014	8/20/2012	4.250	109.940	109.940	109.940	108.471	106.134	103.953	102.058	100.692
8/24/2007	8/24/2012	5/24/2012	4.050	101.305	101.305	101.305	101.225	100.910	100.596	100.284	100.038
8/28/2007	8/28/2014	5/29/2012	4.350	110.270	110.270	110.270	108.781	106.429	104.252	102.388	100.974
8/30/2007	8/30/2012	5/30/2012	4.390	101.488	101.488	101.488	101.402	101.070	100.740	100.412	100.112
8/30/2007	9/2/2014	5/30/2012	3.890	109.238	109.238	109.238	107.745	105.409	103.301	101.598	100.428
9/4/2007	9/4/2012	6/4/2012	4.220	101.489	101.489	101.489	101.397	101.051	100.708	100.367	100.072
9/4/2007	9/5/2017	6/4/2012	3.890	121.113	121.113	119.763	114.598	110.048	106.308	103.417	101.399
9/7/2007	9/7/2012	6/7/2012	4.090	101.477	101.477	101.477	101.381	101.027	100.676	100.328	100.041
9/10/2007	9/11/2017	6/11/2012	3.690	120.089	120.089	118.728	113.622	109.163	105.546	102.813	100.997
9/11/2007	9/11/2017	6/11/2012	3.590	119.544	119.544	118.193	113.125	108.722	105.172	102.533	100.832
9/12/2007	9/12/2014	6/12/2012	3.690	108.866	108.866	108.866	107.351	105.007	102.932	101.314	100.298
9/13/2007	9/15/2014	6/13/2012	3.990	109.620	109.620	109.620	108.092	105.716	103.566	101.811	100.599
9/13/2007	9/13/2017	6/13/2012	3.990	121.744	121.744	120.345	115.129	110.515	106.696	103.716	101.592
9/17/2007	9/17/2012	6/18/2012	4.220	101.641	101.641	101.641	101.533	101.151	100.771	100.397	100.072
9/27/2007	9/29/2014	9/27/2010	4.490	111.000	111.000	111.000	109.426	106.953	104.548	102.210	99.937
9/27/2007	9/27/2017	6/27/2012	3.650	120.033	120.033	118.597	113.472	109.008	105.392	102.673	100.886

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
9/28/2007	9/28/2012	6/28/2012	3.850	101.615	101.615	101.615	101.493	101.080	100.671	100.273	99.984
10/3/2007	10/3/2012	7/3/2012	3.830	101.660	101.660	101.660	101.531	101.105	100.682	100.281	99.985
10/9/2007	10/9/2012	10/9/2009	4.400	101.980	101.980	101.980	101.843	101.400	100.961	100.526	100.094
10/11/2007	10/14/2014	7/11/2012	4.180	110.415	110.415	110.415	108.809	106.342	104.095	102.221	100.857
10/11/2007	10/11/2017	7/11/2012	3.990	122.054	122.054	120.518	115.248	110.599	106.755	103.757	101.624
10/15/2007	10/16/2017	7/16/2012	3.990	122.110	122.110	120.547	115.267	110.610	106.759	103.755	101.615
10/22/2007	10/22/2012	7/23/2012	3.990	101.939	101.939	101.939	101.785	101.308	100.835	100.378	100.018
10/25/2007	10/27/2014	7/25/2012	4.360	111.020	111.020	111.020	109.377	106.862	104.551	102.583	101.097
10/26/2007	10/26/2017	7/26/2012	3.390	118.879	118.879	117.338	112.274	107.929	104.484	102.006	100.481
10/29/2007	10/29/2012	7/30/2012	3.990	102.017	102.017	102.017	101.853	101.357	100.866	100.391	100.015
11/2/2007	11/3/2014	8/2/2012	3.990	110.163	110.163	110.163	108.509	106.006	103.759	101.934	100.674
11/2/2007	11/3/2014	8/2/2012	4.190	110.672	110.672	110.672	109.014	106.495	104.207	102.303	100.914
11/5/2007	11/5/2014	5/7/2012	3.990	110.185	110.185	110.185	108.526	106.017	103.765	101.934	100.668
11/5/2007	11/6/2017	11/5/2012	4.390	124.582	124.582	122.877	117.423	112.555	108.448	105.143	102.654
11/6/2007	11/6/2017	5/7/2012	3.480	119.486	119.486	117.884	112.770	108.369	104.860	102.305	100.687
11/9/2007	11/10/2014	5/9/2012	4.330	111.113	111.113	111.113	109.433	106.884	104.552	102.580	101.102
11/13/2007	11/13/2012	5/14/2012	3.680	102.014	102.014	102.014	101.830	101.292	100.762	100.280	99.999
11/13/2007	11/13/2014	5/14/2012	3.350	108.626	108.626	108.626	106.961	104.501	102.409	100.882	100.115
11/19/2007	11/19/2014	5/21/2012	4.270	111.066	111.066	111.066	109.362	106.792	104.447	102.472	101.002
11/19/2007	11/19/2014	5/21/2012	3.750	109.718	109.718	109.718	108.027	105.502	103.269	101.521	100.362
11/19/2007	11/19/2014	5/21/2012	3.750	109.718	109.718	109.718	108.027	105.502	103.269	101.521	100.362
11/19/2007	11/20/2017	11/19/2012	4.290	124.189	124.189	122.237	116.326	110.682	105.815	102.367	100.613
11/20/2007	11/20/2017	5/21/2012	3.740	121.088	121.088	119.377	114.124	109.551	105.834	103.002	101.091
11/23/2007	11/24/2017	5/23/2012	3.990	122.542	122.542	120.569	114.684	109.045	103.726	98.706	93.968
11/23/2007	11/24/2017	5/23/2012	3.990	122.542	122.542	120.569	114.684	109.045	103.726	98.706	93.968
11/29/2007	11/29/2017	5/29/2012	2.950	116.707	116.707	115.082	110.189	106.107	103.023	100.976	100.060
11/30/2007	11/30/2017	5/30/2012	3.190	118.075	118.075	116.398	111.378	107.134	103.835	101.526	100.246
12/7/2007	12/7/2012	6/7/2012	3.450	102.118	102.118	102.118	101.902	101.298	100.710	100.209	99.946
12/10/2007	12/11/2017	6/11/2012	3.450	119.654	119.654	117.880	112.725	108.302	104.788	102.238	100.652
12/11/2007	12/11/2012	6/11/2012	3.760	102.350	102.350	102.350	102.128	101.513	100.909	100.359	100.008
12/20/2007	12/20/2012	5/29/2012	3.750	102.437	102.437	102.437	102.203	101.564	100.933	100.310	99.695
12/20/2007	12/20/2012	6/20/2012	3.600	102.340	102.340	102.340	102.106	101.467	100.841	100.288	99.959
12/24/2007	12/26/2017	12/24/2012	3.990	122.897	122.897	120.715	114.740	109.127	104.545	101.777	100.240
12/26/2007	12/26/2012	6/26/2012	3.960	102.640	102.640	102.640	102.397	101.741	101.096	100.489	100.049
12/26/2007	12/26/2012	6/26/2012	3.460	102.307	102.307	102.307	102.064	101.410	100.770	100.226	99.914
1/2/2008	1/2/2013	7/2/2012	3.490	102.394	102.394	102.394	102.142	101.469	100.813	100.264	99.925
1/3/2008	1/5/2015	7/3/2012	3.650	109.935	109.935	109.935	108.118	105.491	103.206	101.456	100.358
1/4/2008	1/4/2018	7/5/2012	3.360	119.365	119.365	117.486	112.343	107.958	104.501	102.036	100.538
1/7/2008	1/7/2013	7/9/2012	2.990	102.093	102.093	102.093	101.834	101.149	100.503	100.040	99.788
1/7/2008	1/7/2013	7/9/2012	3.590	102.513	102.513	102.513	102.253	101.566	100.896	100.317	99.944
1/7/2008	1/7/2015	7/9/2012	3.490	109.519	109.519	109.519	107.701	105.090	102.853	101.179	100.184
1/7/2008	1/8/2018	7/9/2012	2.590	114.956	114.956	113.236	108.536	104.726	102.014	100.445	99.783
1/8/2008	1/8/2013	7/9/2012	3.150	102.214	102.214	102.214	101.953	101.265	100.608	100.101	99.823
1/8/2008	1/8/2018	7/9/2012	2.570	114.840	114.840	113.126	108.439	104.646	101.959	100.413	99.771
1/8/2008	1/8/2018	7/9/2012	2.640	115.244	115.244	113.510	108.774	104.923	102.152	100.522	99.815
1/11/2008	1/11/2018	7/11/2012	2.720	115.729	115.729	113.959	109.166	105.240	102.378	100.644	99.858
1/14/2008	1/16/2018	7/16/2012	3.240	118.781	118.781	116.863	111.759	107.438	104.073	101.709	100.324
1/16/2008	1/16/2013	7/16/2012	2.550	101.849	101.849	101.849	101.577	100.872	100.256	99.888	99.667
1/16/2008	1/16/2018	7/16/2012	2.380	113.796	113.796	112.106	107.543	103.915	101.449	100.133	99.663
1/17/2008	1/17/2018	7/17/2012	2.250	113.048	113.048	111.400	106.939	103.439	101.131	100.018	99.618
1/18/2008	1/18/2013	7/18/2012	2.550	101.863	101.863	101.863	101.588	100.878	100.257	99.885	99.659
1/18/2008	1/20/2015	7/18/2012	2.350	106.494	106.494	106.494	104.699	102.336	100.690	99.928	99.620
1/18/2008	1/18/2018	7/18/2012	2.290	113.287	113.287	111.619	107.124	103.582	101.223	100.046	99.625
1/24/2008	1/24/2013	7/24/2012	2.500	101.868	101.868	101.868	101.584	100.859	100.233	99.861	99.621
1/25/2008	1/25/2013	1/26/2009	2.250	101.687	101.687	101.687	101.403	100.671	99.951	99.240	98.540
1/25/2008	1/25/2013	1/25/2011	2.650	101.987	101.987	101.987	101.702	100.970	100.248	99.536	98.835
1/28/2008	1/28/2013	1/28/2011	2.990	102.267	102.267	102.267	101.978	101.236	100.505	99.785	99.075
1/30/2008	1/30/2013	7/30/2012	2.670	102.039	102.039	102.039	101.747	101.003	100.333	99.907	99.638
2/7/2008	2/7/2013	5/7/2012	2.490	101.957	101.957	101.957	101.653	100.891	100.245	99.988	99.969
2/13/2008	2/13/2013	5/14/2012	2.920	102.344	102.344	102.344	102.030	101.244	100.517	100.059	99.956
2/14/2008	2/14/2018	5/14/2012	3.190	118.749	118.749	116.244	110.235	104.514	99.130	94.062	89.290
2/19/2008	2/19/2013	2/19/2010	2.590	102.122	102.122	102.122	101.800	100.996	100.204	99.425	98.658
2/25/2008	2/25/2013	5/25/2012	3.090	102.583	102.583	102.583	102.251	101.428	100.617	99.819	99.034
2/25/2008	2/26/2018	5/25/2012	2.420	114.303	114.303	112.430	107.787	104.085	101.546	100.202	99.886
3/7/2008	3/9/2015	6/7/2012	2.890	108.372	108.372	108.372	106.405	103.773	101.704	100.417	99.914
3/7/2008	3/7/2018	3/7/2013	3.550	121.072	121.072	118.838	113.505	108.933	105.274	102.531	100.558
3/10/2008	3/11/2013	6/11/2012	2.390	102.091	102.091	102.091	101.738	100.891	100.209	99.919	99.802
3/12/2008	3/12/2013	6/12/2012	2.010	101.764	101.764	101.764	101.410	100.583	100.034	99.868	99.752
3/14/2008	3/14/2018	6/14/2012	2.400	114.292	114.292	112.354	107.722	104.040	101.527	100.186	99.800

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
3/17/2008	3/18/2013	6/18/2012	2.690	102.406	102.406	102.406	102.042	101.168	100.401	99.976	99.808
3/17/2008	3/19/2018	3/18/2013	3.300	119.698	119.698	117.452	112.229	107.806	104.336	101.791	99.982
3/28/2008	3/28/2013	6/28/2012	2.820	102.600	102.600	102.600	102.220	101.314	100.424	99.549	98.689
4/14/2008	4/14/2015	7/14/2012	2.750	108.242	108.242	108.242	106.132	103.168	100.303	97.533	94.854
4/28/2008	4/28/2015	7/30/2012	3.250	109.867	109.867	109.867	107.722	104.890	102.549	100.885	99.987
4/28/2008	4/30/2018	7/30/2012	2.150	113.084	113.084	111.061	106.588	103.137	100.916	99.909	99.519
4/30/2008	4/30/2018	4/30/2013	3.740	122.760	122.760	119.716	113.447	107.909	103.948	101.387	99.818
5/2/2008	5/4/2015	8/2/2012	3.990	112.180	112.180	112.180	109.982	107.016	104.406	102.313	100.858
5/5/2008	5/5/2015	5/7/2012	3.170	109.685	109.685	109.685	107.524	104.704	102.406	100.814	100.090
5/8/2008	5/8/2015	5/8/2012	2.960	109.068	109.068	109.068	106.911	104.138	101.943	100.532	99.982
5/19/2008	5/19/2015	5/21/2012	4.700	114.543	114.543	114.543	112.258	109.108	106.064	103.123	100.812
5/23/2008	5/23/2013	5/23/2012	4.040	104.354	104.354	104.354	103.877	102.807	101.771	100.849	100.188
5/23/2008	5/23/2018	5/23/2012	3.270	120.109	120.109	117.532	112.233	107.771	104.289	101.833	100.376
5/27/2008	5/28/2013	5/27/2011	3.490	103.810	103.810	103.810	103.325	102.244	101.180	100.132	99.100
6/6/2008	6/6/2013	6/6/2012	3.990	104.455	104.455	104.455	103.954	102.843	101.750	100.674	99.614
6/10/2008	6/11/2012	6/10/2010	3.940	100.460	100.460	100.460	100.437	100.323	100.209	100.095	99.982
6/16/2008	6/17/2013	6/16/2012	4.070	104.669	104.669	104.669	104.147	103.005	101.881	100.774	99.685
6/24/2008	6/24/2015	6/25/2012	3.830	112.234	112.234	112.234	109.857	106.790	104.127	102.037	100.640
6/30/2008	7/1/2013	7/2/2012	2.920	103.463	103.463	103.463	102.919	101.759	100.743	100.087	99.804
6/30/2008	7/1/2013	7/2/2012	3.450	104.092	104.092	104.092	103.546	102.374	101.279	100.430	99.961
6/30/2008	6/30/2015	7/2/2012	3.370	110.821	110.821	110.821	108.448	105.457	102.974	101.182	100.165
6/30/2008	7/2/2018	6/30/2012	3.690	123.102	123.102	119.587	113.113	106.967	101.202	95.793	90.717
7/1/2008	7/1/2015	7/1/2012	4.600	114.783	114.783	114.783	112.334	109.064	105.908	102.862	99.921
7/7/2008	7/8/2013	7/7/2012	4.590	105.533	105.533	105.533	104.971	103.766	102.581	101.415	100.267
7/8/2008	7/8/2013	7/8/2012	4.250	105.123	105.123	105.123	104.562	103.360	102.177	101.013	99.868
7/10/2008	7/10/2014	7/10/2012	4.800	110.679	110.679	110.679	109.305	107.053	104.860	102.758	101.071
7/11/2008	7/11/2018	7/11/2012	3.750	123.571	123.571	119.985	113.477	107.309	102.438	100.326	99.936
7/14/2008	7/14/2015	7/15/2013	4.900	115.924	115.924	115.924	113.411	110.076	106.814	103.591	100.472
7/14/2008	7/16/2018	7/16/2012	2.500	115.748	115.748	113.209	108.386	104.536	101.850	100.329	99.710
7/14/2008	7/16/2018	7/16/2012	3.250	120.473	120.473	117.612	112.264	107.778	104.292	101.840	100.386
7/17/2008	7/17/2018	7/17/2013	3.750	123.634	123.634	120.002	113.568	108.115	104.175	101.540	99.724
7/21/2008	7/22/2013	7/23/2012	3.000	103.733	103.733	103.733	103.150	101.919	100.749	100.059	99.743
8/15/2008	8/15/2018	5/15/2012	3.830	124.446	124.446	121.229	115.516	110.598	106.611	103.555	101.432
8/19/2008	8/19/2013	8/19/2010	3.440	104.548	104.548	104.548	103.909	102.599	101.311	100.045	98.800
9/8/2008	9/9/2013	6/8/2012	2.890	103.989	103.989	103.989	103.312	101.973	100.824	100.105	99.876
5/13/2009	5/13/2014	5/13/2013	4.000	108.255	108.255	108.255	107.015	104.785	102.321	99.567	97.034
9/28/2009	9/30/2013	9/28/2012	2.920	104.201	104.201	104.201	103.459	101.819	100.278	99.171	98.539
5/11/2010	5/11/2015	5/11/2015	3.700	111.366	111.366	111.366	109.101	105.738	101.889	97.380	92.347
5/24/2010	5/26/2015	5/24/2012	2.250	107.005	107.005	107.005	104.764	101.711	98.866	98.762	95.915
6/15/2010	6/15/2015	6/15/2012	2.280	107.226	107.226	107.226	104.909	101.800	99.286	98.799	95.903
4/27/2012	4/27/2016	4/29/2013	0.006	104.354	104.354	104.354	101.570	100.222	99.738	99.463	99.220
4/30/2012	5/2/2016	4/30/2013	0.006	104.209	104.209	104.209	101.439	100.175	99.721	99.452	99.213