

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	102.897	102.897	102.897	102.722	102.196	101.675	101.160	100.666
8/19/1998	8/19/2013	11/19/2012	5.490	104.926	104.926	104.926	104.570	103.676	102.797	101.940	101.138
8/19/1998	8/19/2013	11/19/2012	5.490	104.926	104.926	104.926	104.570	103.676	102.797	101.940	101.138
12/14/1998	12/16/2013	12/14/2012	5.390	106.617	106.617	106.617	106.079	104.845	103.635	102.472	101.424
12/14/1998	12/16/2013	12/14/2012	4.890	106.004	106.004	106.004	105.466	104.237	103.034	101.900	100.929
12/15/1998	12/16/2013	12/17/2012	4.880	105.991	105.991	105.991	105.454	104.225	103.022	101.888	100.918
1/7/2000	1/7/2015	10/9/2012	5.950	113.701	113.701	113.701	112.443	110.080	107.804	105.672	103.767
12/5/2002	12/5/2012	12/5/2012	3.790	100.695	100.695	100.695	100.659	100.478	100.298	100.118	99.939
3/6/2003	3/6/2013	12/6/2012	2.990	101.304	101.304	101.304	101.170	100.737	100.315	100.001	99.793
7/2/2004	7/2/2014	10/3/2012	3.990	107.093	107.093	107.093	106.221	104.436	102.689	100.979	99.306
12/13/2004	12/15/2014	12/13/2012	3.320	107.433	107.433	107.433	106.253	104.072	102.166	100.753	100.004
9/1/2005	9/1/2015	12/1/2012	4.130	112.229	112.229	112.229	110.461	107.457	104.552	101.741	99.022
9/30/2005	9/30/2015	12/30/2012	4.440	113.504	113.504	113.504	111.653	108.554	105.559	102.663	99.863
10/26/2005	10/26/2015	10/26/2012	4.540	114.136	114.136	114.136	112.211	109.031	105.959	102.991	100.123
11/21/2005	11/21/2012	11/21/2012	4.290	100.620	100.620	100.620	100.594	100.451	100.310	100.168	100.028
1/17/2006	1/19/2016	10/17/2012	4.080	113.667	113.667	113.667	111.514	108.222	105.299	102.905	101.160
4/19/2006	4/19/2013	10/19/2012	4.630	102.585	102.585	102.585	102.395	101.840	101.290	100.754	100.276
4/24/2006	4/25/2016	10/24/2012	4.440	116.069	116.069	116.069	113.585	109.995	106.777	104.074	102.002
5/5/2006	5/5/2016	11/5/2012	4.350	115.864	115.864	115.864	113.351	109.754	106.549	103.888	101.875
5/5/2006	5/5/2016	11/5/2012	4.530	116.521	116.521	116.521	113.999	110.375	107.123	104.375	102.256
5/15/2006	5/16/2016	11/15/2012	4.350	115.997	115.997	115.997	113.446	109.818	106.587	103.901	101.864
5/15/2006	5/16/2016	11/15/2012	4.520	116.623	116.623	116.623	114.063	110.409	107.132	104.365	102.227
5/19/2006	5/19/2016	11/19/2012	4.510	116.623	116.623	116.623	114.054	110.393	107.111	104.342	102.202
6/12/2006	6/13/2016	12/12/2012	4.620	117.350	117.350	117.350	114.685	110.947	107.590	104.734	102.507
6/26/2006	6/27/2016	12/26/2012	4.730	117.947	117.947	117.947	115.224	111.432	108.012	105.080	102.752
6/28/2006	6/28/2013	12/28/2012	4.950	103.726	103.726	103.726	103.443	102.693	101.954	101.234	100.576
6/30/2006	7/1/2013	12/31/2012	4.890	103.722	103.722	103.722	103.435	102.676	101.930	101.206	100.550
7/14/2006	7/15/2013	10/15/2012	4.890	103.912	103.912	103.912	103.606	102.810	102.026	101.267	100.587
7/24/2006	7/25/2016	10/24/2012	4.660	118.044	118.044	118.044	115.223	111.370	107.913	104.967	102.652
7/28/2006	7/28/2016	10/29/2012	4.490	117.423	117.423	117.423	114.601	110.768	107.350	104.476	102.264
8/1/2006	8/1/2016	11/1/2012	4.890	119.029	119.029	119.029	116.171	112.271	108.749	105.723	103.277
8/21/2006	8/21/2013	11/1/2012	4.750	104.288	104.288	104.288	103.930	103.030	102.145	101.275	100.421
8/25/2006	8/25/2016	11/26/2012	4.350	117.218	117.218	117.218	114.300	110.423	106.995	104.155	102.000
10/10/2006	10/10/2013	10/10/2012	4.250	104.427	104.427	104.427	103.996	102.962	101.954	101.036	100.320
10/12/2006	10/15/2013	10/12/2012	4.500	104.750	104.750	104.750	104.311	103.260	102.235	101.273	100.497
11/6/2006	11/6/2013	11/6/2012	4.290	104.790	104.790	104.790	104.318	103.206	102.122	101.130	100.352
11/6/2006	11/6/2013	11/6/2012	4.290	104.790	104.790	104.790	104.318	103.206	102.123	101.138	100.383
11/10/2006	11/13/2012	11/13/2012	4.390	100.537	100.537	100.537	100.515	100.396	100.276	100.157	100.038
11/17/2006	11/18/2013	11/19/2012	4.350	105.002	105.002	105.002	104.511	103.364	102.246	101.221	100.423
11/24/2006	11/25/2016	11/26/2012	4.190	117.655	117.655	117.655	114.388	110.328	106.791	103.918	101.778
11/30/2006	12/2/2013	11/28/2012	4.350	105.171	105.171	105.171	104.658	103.469	102.300	101.148	100.049
12/1/2006	12/1/2016	12/3/2012	4.090	117.302	117.302	117.302	114.022	109.980	106.487	103.684	101.636
12/4/2006	12/5/2016	12/4/2012	4.080	117.305	117.305	117.305	114.009	109.960	106.463	103.659	101.614
12/5/2006	12/5/2016	12/5/2012	4.260	118.068	118.068	118.068	114.755	110.663	107.094	104.184	102.013
12/6/2006	12/6/2013	12/6/2012	4.400	105.280	105.280	105.280	104.760	103.562	102.397	101.330	100.501
12/8/2006	12/8/2016	12/10/2012	3.990	116.956	116.956	116.956	113.658	109.624	106.158	103.397	101.410
12/12/2006	12/12/2016	12/12/2012	3.990	117.001	117.001	117.001	113.685	109.641	106.167	103.398	101.406
12/12/2006	12/12/2016	12/12/2012	4.050	117.256	117.256	117.256	113.935	109.875	106.374	103.572	101.533
12/19/2006	12/19/2016	12/19/2012	4.190	117.934	117.934	117.934	114.570	110.458	106.883	103.985	101.835
12/20/2006	12/20/2013	12/20/2012	4.500	105.575	105.575	105.575	105.033	103.795	102.590	101.476	100.582
12/28/2006	12/28/2016	12/28/2012	4.250	118.297	118.297	118.297	114.889	110.740	107.121	104.168	101.959
12/28/2006	12/28/2016	12/28/2012	4.400	118.943	118.943	118.943	115.521	111.337	107.665	104.622	102.311
1/12/2007	1/12/2017	10/12/2012	4.420	119.214	119.214	119.214	115.727	111.509	107.813	104.750	102.425
1/16/2007	1/17/2017	10/16/2012	4.790	120.889	120.889	120.889	117.346	113.037	109.204	105.952	103.351
1/23/2007	1/23/2014	10/23/2012	4.490	105.986	105.986	105.986	105.390	104.058	102.766	101.576	100.624
1/29/2007	1/29/2014	10/29/2012	4.790	106.466	106.466	106.466	105.858	104.502	103.170	101.861	100.574
2/2/2007	2/2/2017	11/2/2012	4.690	120.661	120.661	120.661	117.002	112.460	108.124	103.985	100.032
2/20/2007	2/21/2017	11/20/2012	4.850	121.622	121.622	121.622	117.855	113.245	108.848	104.651	100.645
2/20/2007	2/21/2017	11/20/2012	4.390	119.571	119.571	119.571	115.902	111.599	107.840	104.740	102.389
2/23/2007	2/23/2017	11/23/2012	4.250	118.970	118.970	118.970	115.308	111.033	107.324	104.305	102.043
2/23/2007	2/23/2017	11/23/2012	4.350	119.417	119.417	119.417	115.742	111.443	107.694	104.612	102.283
3/16/2007	3/16/2017	12/17/2012	4.090	118.495	118.495	118.495	114.762	110.488	106.817	103.877	101.724
3/21/2007	3/21/2017	12/21/2012	4.220	119.141	119.141	119.141	115.371	111.047	107.309	104.277	102.022
3/23/2007	3/23/2017	12/24/2012	4.290	119.483	119.483	119.483	115.695	111.348	107.577	104.497	102.187
3/23/2007	3/23/2017	12/24/2012	4.290	119.483	119.483	119.483	115.695	111.348	107.577	104.497	102.187
4/9/2007	4/10/2017	10/9/2012	4.150	119.054	119.054	119.054	115.205	110.863	107.130	104.130	101.922
4/12/2007	4/12/2017	10/12/2012	4.250	119.537	119.537	119.537	115.665	111.289	107.509	104.438	102.150
4/13/2007	4/13/2017	10/15/2012	4.450	120.469	120.469	120.469	116.566	112.136	108.272	105.074	102.636
4/23/2007	4/23/2014	10/23/2012	4.620	107.315	107.315	107.315	106.563	104.972	103.438	102.038	100.899
4/27/2007	4/27/2017	10/29/2012	4.250	119.714	119.714	119.714	115.768	111.356	107.543	104.442	102.125

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
5/2/2007	5/2/2014	11/2/2012	4.590	107.382	107.382	107.382	106.615	104.999	103.446	102.040	100.911
5/4/2007	5/5/2014	11/5/2012	4.550	107.355	107.355	107.355	106.583	104.960	103.401	101.993	100.869
5/18/2007	5/18/2017	11/19/2012	4.190	119.680	119.680	119.680	115.644	111.208	107.393	104.315	102.030
5/22/2007	5/22/2017	11/23/2012	4.750	122.363	122.363	122.363	118.235	113.638	109.588	106.177	103.465
5/29/2007	5/30/2017	11/29/2012	4.250	120.104	120.104	120.104	116.001	111.520	107.656	104.516	102.169
6/1/2007	6/2/2014	12/3/2012	4.500	107.625	107.625	107.625	106.804	105.104	103.477	102.018	100.869
6/7/2007	6/7/2017	12/7/2012	4.820	122.907	122.907	122.907	118.692	114.046	109.951	106.499	103.741
6/8/2007	6/9/2014	12/10/2012	4.730	108.106	108.106	108.106	107.272	105.546	103.886	102.377	101.145
6/8/2007	6/8/2017	12/10/2012	4.490	121.351	121.351	121.351	117.173	112.611	108.642	105.353	102.832
6/11/2007	6/12/2017	12/11/2012	4.490	121.401	121.401	121.401	117.202	112.630	108.653	105.358	102.832
6/18/2007	6/19/2017	12/18/2012	4.500	121.536	121.536	121.536	117.299	112.707	108.711	105.396	102.849
6/19/2007	6/19/2017	12/19/2012	4.650	122.254	122.254	122.254	117.996	113.364	109.307	105.913	103.249
6/22/2007	6/22/2017	12/24/2012	4.500	121.574	121.574	121.574	117.321	112.721	108.718	105.396	102.842
6/28/2007	6/28/2017	12/28/2012	4.500	121.649	121.649	121.649	117.364	112.749	108.733	105.400	102.836
7/13/2007	7/13/2017	10/15/2012	4.290	120.817	120.817	120.817	116.492	111.913	107.972	104.766	102.370
7/20/2007	7/20/2017	10/22/2012	4.290	120.901	120.901	120.901	116.540	111.944	107.988	104.768	102.359
7/27/2007	7/27/2017	10/29/2012	4.250	120.788	120.788	120.788	116.398	111.798	107.846	104.639	102.246
7/30/2007	1/30/2019	10/30/2012	3.990	125.634	125.634	123.970	117.938	112.569	108.125	104.642	102.115
7/31/2007	7/31/2017	10/31/2012	3.990	119.561	119.561	119.561	115.199	110.683	106.852	103.818	101.612
7/31/2007	7/31/2017	10/31/2012	3.990	119.561	119.561	119.561	115.199	110.683	106.852	103.818	101.612
7/31/2007	7/31/2017	10/31/2012	4.060	119.904	119.904	119.904	115.529	110.988	107.122	104.040	101.783
8/2/2007	8/4/2014	11/2/2012	4.490	108.393	108.393	108.393	107.458	105.581	103.797	102.214	100.969
8/2/2007	8/2/2017	11/2/2012	4.150	120.368	120.368	120.368	115.970	111.400	107.501	104.379	102.082
8/2/2007	8/2/2017	11/2/2012	4.050	119.877	119.877	119.877	115.497	110.961	107.112	104.059	101.839
8/9/2007	8/9/2017	11/9/2012	3.990	119.660	119.660	119.660	115.254	110.723	106.890	103.865	101.678
8/16/2007	8/16/2017	11/16/2012	3.990	119.738	119.738	119.738	115.295	110.748	106.900	103.861	101.660
8/17/2007	8/17/2017	11/19/2012	4.000	119.799	119.799	119.799	115.348	110.795	106.940	103.893	101.683
8/20/2007	8/20/2014	8/20/2013	4.250	108.134	108.134	108.134	107.170	105.248	103.412	101.784	100.441
8/28/2007	8/28/2014	11/28/2012	4.350	108.422	108.422	108.422	107.442	105.502	103.664	102.045	100.792
8/30/2007	9/2/2014	11/30/2012	3.890	107.585	107.585	107.585	106.600	104.661	102.861	101.364	100.347
9/4/2007	9/5/2017	12/4/2012	3.890	119.459	119.459	119.459	114.937	110.396	106.586	103.608	101.495
9/10/2007	9/11/2017	12/10/2012	3.690	118.520	118.520	118.520	114.010	109.536	105.835	102.987	101.075
9/11/2007	9/11/2017	12/11/2012	3.590	118.018	118.018	118.018	113.531	109.099	105.459	102.699	100.909
9/12/2007	9/12/2014	12/12/2012	3.690	107.297	107.297	107.297	106.295	104.338	102.550	101.117	100.205
9/13/2007	9/15/2014	12/13/2012	3.990	107.924	107.924	107.924	106.912	104.934	103.095	101.553	100.483
9/13/2007	9/13/2017	12/13/2012	3.990	120.048	120.048	120.048	115.461	110.863	106.980	103.919	101.708
9/27/2007	9/29/2014	9/27/2010	4.490	109.092	109.092	109.092	108.048	106.006	104.013	102.068	100.169
9/27/2007	9/27/2017	12/27/2012	3.650	118.482	118.482	118.482	113.895	109.402	105.694	102.853	100.968
10/3/2007	10/3/2012	10/3/2012	3.830	100.032	100.032	100.032	100.031	100.023	100.015	100.006	99.998
10/9/2007	10/9/2012	10/9/2012	4.400	100.110	100.110	100.110	100.106	100.082	100.058	100.034	100.009
10/11/2007	10/14/2014	10/11/2012	4.180	108.638	108.638	108.638	107.569	105.504	103.576	101.922	100.711
10/11/2007	10/11/2017	10/11/2012	3.990	120.359	120.359	120.359	115.625	110.977	107.060	103.973	101.743
10/15/2007	10/16/2017	10/15/2012	3.990	120.414	120.414	120.414	115.653	110.995	107.069	103.974	101.736
10/22/2007	10/22/2012	10/22/2012	3.990	100.244	100.244	100.244	100.235	100.175	100.116	100.057	99.998
10/25/2007	10/27/2014	10/25/2012	4.360	109.168	109.168	109.168	108.072	105.964	103.981	102.246	100.909
10/26/2007	10/26/2017	10/26/2012	3.390	117.438	117.438	117.438	112.779	108.360	104.788	102.177	100.530
10/29/2007	10/29/2012	10/29/2012	3.990	100.321	100.321	100.321	100.309	100.231	100.153	100.075	99.998
11/2/2007	11/3/2014	11/2/2012	3.990	108.467	108.467	108.467	107.362	105.251	103.303	101.680	100.554
11/2/2007	11/3/2014	11/2/2012	4.190	108.892	108.892	108.892	107.784	105.665	103.691	102.002	100.759
11/5/2007	11/5/2014	11/5/2012	3.990	108.489	108.489	108.489	107.380	105.264	103.310	101.682	100.552
11/5/2007	11/6/2017	11/5/2012	4.390	122.717	122.717	122.717	117.758	112.922	108.771	105.374	102.807
11/6/2007	11/6/2017	11/6/2012	3.480	118.008	118.008	118.008	113.272	108.802	105.174	102.476	100.778
11/9/2007	11/10/2014	11/9/2012	4.330	109.273	109.273	109.273	108.150	106.005	103.995	102.250	100.919
11/13/2007	11/13/2012	11/13/2012	3.680	100.450	100.450	100.450	100.429	100.309	100.190	100.070	99.952
11/13/2007	11/13/2014	11/13/2012	3.350	107.202	107.202	107.202	106.084	103.984	102.135	100.749	100.039
11/19/2007	11/19/2014	11/19/2012	4.270	109.251	109.251	109.251	108.111	105.942	103.914	102.161	100.835
11/19/2007	11/19/2014	11/19/2012	3.750	108.124	108.124	108.124	106.990	104.846	102.893	101.322	100.302
11/19/2007	11/19/2014	11/19/2012	3.750	108.124	108.124	108.124	106.990	104.846	102.893	101.322	100.302
11/19/2007	11/20/2017	11/19/2012	4.290	122.366	122.366	122.366	117.119	111.793	106.748	102.432	100.351
11/20/2007	11/20/2017	11/20/2012	3.740	119.499	119.499	119.499	114.608	109.991	106.169	103.214	101.179
11/23/2007	11/24/2017	11/23/2012	3.990	120.846	120.846	120.846	115.600	110.302	105.285	100.532	96.028
11/23/2007	11/24/2017	11/23/2012	3.990	120.846	120.846	120.846	115.600	110.302	105.285	100.532	96.028
11/29/2007	11/29/2017	11/29/2012	2.950	115.453	115.453	115.453	110.775	106.555	103.310	101.100	100.018
11/30/2007	11/30/2017	11/30/2012	3.190	116.720	116.720	116.720	111.945	107.587	104.137	101.696	100.272
12/7/2007	12/7/2012	12/7/2012	3.450	100.652	100.652	100.652	100.615	100.429	100.244	100.059	99.875
12/10/2007	12/11/2017	12/10/2012	3.450	118.188	118.188	118.188	113.274	108.766	105.118	102.421	100.734
12/11/2007	12/11/2012	12/11/2012	3.760	100.752	100.752	100.752	100.712	100.515	100.319	100.124	99.930
12/20/2007	12/20/2012	12/20/2012	3.600	100.810	100.810	100.810	100.763	100.542	100.322	100.103	99.885
12/20/2007	12/20/2012	12/20/2012	3.750	100.844	100.844	100.844	100.797	100.576	100.356	100.137	99.919
12/24/2007	12/26/2017	12/24/2012	3.990	121.201	121.201	121.201	115.745	110.360	105.338	101.562	100.134

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
12/26/2007	12/26/2012	12/26/2012	3.960	100.957	100.957	100.957	100.906	100.668	100.432	100.197	99.963
12/26/2007	12/26/2012	12/26/2012	3.460	100.836	100.836	100.836	100.785	100.548	100.312	100.077	99.843
1/2/2008	1/2/2013	10/2/2012	3.490	100.911	100.911	100.911	100.854	100.598	100.343	100.090	99.997
1/3/2008	1/5/2015	10/3/2012	3.650	108.384	108.384	108.384	107.160	104.900	102.873	101.283	100.281
1/4/2008	1/4/2018	10/4/2012	3.360	117.937	117.937	117.927	112.933	108.439	104.835	102.224	100.603
1/7/2008	1/7/2013	10/9/2012	2.990	100.822	100.822	100.822	100.760	100.491	100.223	100.011	99.974
1/7/2008	1/7/2013	10/9/2012	3.590	100.987	100.987	100.987	100.925	100.655	100.387	100.120	99.989
1/7/2008	1/7/2015	10/9/2012	3.490	108.036	108.036	108.036	106.810	104.557	102.562	101.036	100.176
1/7/2008	1/8/2018	10/9/2012	2.590	113.855	113.855	113.835	109.168	105.161	102.246	100.526	99.964
1/8/2008	1/8/2013	10/9/2012	3.150	100.875	100.875	100.875	100.811	100.539	100.269	100.035	99.978
1/8/2008	1/8/2018	10/9/2012	2.570	113.748	113.748	113.728	109.071	105.079	102.186	100.489	99.964
1/8/2008	1/8/2018	10/9/2012	2.640	114.123	114.123	114.103	109.408	105.362	102.393	100.608	99.966
1/11/2008	1/11/2018	10/11/2012	2.720	114.573	114.573	114.546	109.802	105.692	102.637	100.738	100.000
1/14/2008	1/16/2018	10/15/2012	3.240	117.405	117.405	117.364	112.377	107.928	104.398	101.893	100.399
1/16/2008	1/16/2013	10/16/2012	2.550	100.765	100.765	100.765	100.693	100.400	100.108	99.978	99.935
1/16/2008	1/16/2018	10/16/2012	2.380	112.784	112.784	112.744	108.178	104.331	101.657	100.233	99.927
1/17/2008	1/17/2018	10/17/2012	2.250	112.092	112.092	112.050	107.566	103.831	101.317	100.128	99.917
1/18/2008	1/18/2013	10/18/2012	2.550	100.779	100.779	100.779	100.705	100.407	100.110	99.975	99.927
1/18/2008	1/20/2015	10/18/2012	2.350	105.496	105.496	105.496	104.269	102.152	100.617	99.986	99.917
1/18/2008	1/18/2018	10/18/2012	2.290	112.314	112.314	112.269	107.756	103.984	101.417	100.154	99.914
1/24/2008	1/24/2013	10/24/2012	2.500	100.805	100.805	100.805	100.725	100.411	100.098	99.963	99.899
1/25/2008	1/25/2013	1/26/2009	2.250	100.731	100.731	100.731	100.650	100.333	100.018	99.705	99.393
1/25/2008	1/25/2013	1/25/2011	2.650	100.861	100.861	100.861	100.780	100.463	100.147	99.834	99.522
1/28/2008	1/28/2013	1/28/2011	2.990	100.997	100.997	100.997	100.912	100.586	100.263	99.941	99.622
1/30/2008	1/30/2013	10/30/2012	2.670	100.905	100.905	100.905	100.818	100.487	100.159	99.968	99.888
2/7/2008	2/7/2013	11/7/2012	2.490	100.899	100.899	100.899	100.802	100.448	100.113	99.939	99.835
2/13/2008	2/13/2013	11/13/2012	2.920	101.103	101.103	101.103	100.997	100.625	100.257	99.994	99.859
2/14/2008	2/14/2018	11/14/2012	3.190	117.393	117.393	117.250	111.661	106.251	101.141	96.311	91.746
2/19/2008	2/19/2013	2/19/2010	2.590	101.022	101.022	101.022	100.907	100.517	100.131	99.747	99.366
2/25/2008	2/25/2013	11/25/2012	3.090	101.270	101.270	101.270	101.147	100.739	100.334	99.933	99.534
2/25/2008	2/26/2018	11/26/2012	2.420	113.275	113.275	113.096	108.449	104.525	101.766	100.239	99.749
3/7/2008	3/9/2015	12/7/2012	2.890	107.144	107.144	107.144	105.804	103.466	101.560	100.359	99.822
3/7/2008	3/7/2018	3/7/2013	3.550	119.563	119.563	119.344	114.140	109.460	105.661	102.798	100.898
3/10/2008	3/11/2013	12/10/2012	2.390	101.075	101.075	101.075	100.936	100.490	100.096	99.856	99.662
3/12/2008	3/12/2013	12/12/2012	2.010	100.910	100.910	100.910	100.769	100.324	99.986	99.773	99.576
3/14/2008	3/14/2018	12/14/2012	2.400	113.272	113.272	113.055	108.395	104.481	101.748	100.241	99.686
3/17/2008	3/19/2018	3/18/2013	3.300	118.295	118.295	118.045	112.906	108.340	104.705	102.087	100.396
3/28/2008	3/28/2013	12/28/2012	2.820	101.402	101.402	101.402	101.242	100.750	100.263	99.780	99.303
4/14/2008	4/14/2015	10/14/2012	2.750	107.073	107.073	107.073	105.656	103.103	100.626	98.220	95.884
4/28/2008	4/28/2015	10/29/2012	3.250	108.485	108.485	108.485	107.035	104.515	102.361	100.789	100.052
4/28/2008	4/30/2018	10/29/2012	2.150	112.170	112.170	111.826	107.270	103.544	101.092	100.039	99.850
4/30/2008	4/30/2018	4/30/2013	3.740	121.171	121.171	120.706	114.830	109.172	104.415	101.498	100.022
5/2/2008	5/4/2015	11/2/2012	3.990	110.484	110.484	110.484	109.006	106.399	104.044	102.106	100.748
5/5/2008	5/5/2015	11/5/2012	3.170	108.338	108.338	108.338	106.875	104.355	102.233	100.734	100.031
5/8/2008	5/8/2015	11/8/2012	2.960	107.810	107.810	107.810	106.347	103.851	101.807	100.482	99.935
5/19/2008	5/19/2015	11/21/2012	4.700	112.546	112.546	112.546	111.020	108.301	105.664	103.105	100.623
5/23/2008	5/23/2013	11/23/2012	4.040	102.637	102.637	102.637	102.404	101.756	101.118	100.514	100.067
5/23/2008	5/23/2018	11/23/2012	3.270	118.719	118.719	118.222	112.979	108.348	104.674	102.048	100.469
5/27/2008	5/28/2013	5/27/2011	3.490	102.326	102.326	102.326	102.088	101.428	100.777	100.134	99.499
6/6/2008	6/6/2013	12/6/2012	3.990	102.760	102.760	102.760	102.508	101.822	101.146	100.478	99.819
6/16/2008	6/17/2013	12/16/2012	4.070	102.939	102.939	102.939	102.672	101.956	101.249	100.552	99.865
6/24/2008	6/24/2015	12/24/2012	3.830	110.606	110.606	110.606	109.016	106.285	103.845	101.884	100.570
6/30/2008	6/30/2015	12/31/2012	3.370	109.388	109.388	109.388	107.795	105.102	102.793	101.076	100.172
6/30/2008	7/2/2018	12/30/2012	3.690	121.534	121.534	120.763	114.704	108.854	103.346	98.158	93.270
7/1/2008	7/1/2015	10/1/2012	4.600	112.828	112.828	112.828	111.203	108.363	105.610	102.943	100.357
7/7/2008	7/8/2013	10/7/2012	4.590	103.583	103.583	103.583	103.286	102.510	101.746	100.992	100.250
7/8/2008	7/8/2013	10/8/2012	4.250	103.317	103.317	103.317	103.021	102.246	101.483	100.731	99.990
7/10/2008	7/10/2014	10/10/2012	4.800	108.640	108.640	108.640	107.747	105.929	104.150	102.410	100.708
7/11/2008	7/11/2018	10/11/2012	3.750	121.978	121.978	121.163	115.069	109.186	103.648	98.433	93.519
7/14/2008	7/14/2015	7/15/2013	4.900	113.842	113.842	113.842	112.179	109.273	106.386	103.537	100.904
7/14/2008	7/16/2018	10/15/2012	2.500	114.686	114.686	114.057	109.152	105.043	102.109	100.413	99.937
7/14/2008	7/16/2018	10/15/2012	3.250	119.092	119.092	118.397	113.060	108.385	104.693	102.068	100.463
7/17/2008	7/17/2018	7/17/2013	3.750	122.040	122.040	121.196	115.087	109.316	104.672	101.787	100.072
7/21/2008	7/22/2013	10/22/2012	3.000	102.458	102.458	102.458	102.145	101.337	100.541	100.011	99.938
8/15/2008	8/15/2018	11/15/2012	3.830	122.819	122.819	121.948	116.314	111.261	107.097	103.878	101.599
8/19/2008	8/19/2013	8/19/2010	3.440	103.086	103.086	103.086	102.734	101.848	100.978	100.123	99.282
9/8/2008	9/9/2013	12/10/2012	2.890	102.761	102.761	102.761	102.379	101.443	100.595	100.040	99.768
5/13/2009	5/13/2014	5/13/2013	4.000	106.555	106.555	106.555	105.772	104.087	102.268	100.348	98.736
9/28/2009	9/30/2013	12/28/2012	2.920	102.960	102.960	102.960	102.546	101.552	100.649	100.038	99.716
5/11/2010	5/11/2015	5/11/2015	3.700	109.794	109.794	109.794	108.298	105.518	102.329	98.428	94.182

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
5/24/2010	5/26/2015	11/24/2012	2.250	106.049	106.049	106.049	104.550	101.894	99.318	98.682	96.820
6/15/2010	6/15/2015	12/15/2012	2.280	106.257	106.257	106.257	104.713	102.001	99.373	99.110	96.826
4/27/2012	4/27/2016	4/29/2013	-0.012	104.356	104.356	104.356	102.166	100.272	99.855	99.752	99.676
4/30/2012	5/2/2016	4/30/2013	-0.013	104.212	104.212	104.212	102.025	100.215	99.842	99.745	99.668
5/15/2012	5/15/2017	5/15/2014	-0.026	105.939	105.939	105.939	102.728	100.622	99.709	99.311	99.112
5/15/2012	5/15/2017	11/17/2014	-0.026	106.048	106.048	106.048	102.796	100.617	99.551	99.009	98.714
7/16/2012	7/17/2017	7/16/2014	0.005	105.240	105.240	105.240	102.024	100.292	99.663	99.441	99.357
7/18/2012	7/18/2018	7/20/2015	0.005	108.225	108.225	107.381	102.820	100.610	99.540	99.024	98.746
7/19/2012	7/19/2017	7/21/2014	0.005	105.289	105.289	105.289	102.053	100.295	99.642	99.402	99.300