

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
2/27/1997	2/27/2012	11/29/2010	6.580	108.846	108.846	108.846	108.029	106.667	105.332	104.036	102.813
4/8/1998	4/8/2013	1/10/2011	5.490	113.572	113.572	113.572	111.366	108.863	106.507	104.395	102.632
8/19/1998	8/19/2013	11/19/2010	5.490	115.600	115.600	115.596	112.788	109.921	107.256	104.902	102.949
8/19/1998	8/19/2013	11/19/2010	5.490	115.600	115.600	115.596	112.788	109.921	107.256	104.902	102.949
8/25/1998	8/19/2013	1/25/2011	5.490	115.600	115.600	115.596	112.788	109.921	107.256	104.898	102.944
8/27/1998	8/19/2013	1/27/2011	5.490	115.600	115.600	115.596	112.788	109.920	107.255	104.896	102.941
9/30/1998	9/30/2013	12/30/2010	5.220	115.442	115.442	115.437	112.439	109.478	106.763	104.405	102.492
12/14/1998	12/16/2013	12/14/2010	5.390	117.097	117.097	116.951	113.666	110.495	107.597	105.078	103.023
12/14/1998	12/16/2013	12/14/2010	4.890	115.511	115.511	115.365	112.104	108.983	106.184	103.830	102.000
12/15/1998	12/16/2013	12/15/2010	4.880	115.480	115.480	115.334	112.073	108.952	106.155	103.804	101.978
1/7/2000	1/7/2015	1/7/2011	5.950	125.270	125.270	123.494	119.059	114.919	111.212	107.996	105.314
12/5/2000	12/6/2010	12/6/2010	5.410	100.541	100.541	100.541	100.517	100.417	100.317	100.218	100.119
12/11/2000	12/13/2010	12/13/2010	5.170	100.617	100.617	100.617	100.588	100.469	100.351	100.233	100.115
12/12/2000	12/13/2010	12/13/2010	5.110	100.610	100.610	100.610	100.581	100.462	100.344	100.226	100.108
12/15/2000	12/15/2010	12/15/2010	5.120	100.640	100.640	100.640	100.609	100.485	100.361	100.238	100.115
12/20/2000	12/20/2010	12/20/2010	4.950	100.687	100.687	100.687	100.653	100.515	100.378	100.241	100.105
12/21/2000	12/21/2010	12/21/2010	4.860	100.688	100.688	100.688	100.653	100.513	100.373	100.234	100.095
1/11/2001	1/11/2011	1/11/2011	5.370	101.074	101.074	101.074	101.023	100.825	100.629	100.433	100.238
1/12/2001	1/12/2011	1/12/2011	5.300	101.075	101.075	101.075	101.022	100.823	100.624	100.425	100.228
2/5/2001	2/7/2011	1/15/2010	4.820	101.325	101.325	101.325	101.249	100.977	100.707	100.438	100.170
2/7/2001	2/7/2011	11/8/2010	4.820	101.325	101.325	101.325	101.249	100.977	100.707	100.438	100.170
2/26/2001	2/28/2011	11/26/2010	5.060	101.687	101.687	101.687	101.586	101.251	100.918	100.588	100.259
2/26/2001	2/28/2011	11/26/2010	5.450	101.817	101.817	101.817	101.716	101.381	101.048	100.717	100.388
2/26/2001	2/28/2011	11/26/2010	4.790	101.597	101.597	101.597	101.496	101.161	100.829	100.498	100.170
2/27/2001	2/28/2011	11/29/2010	5.020	101.673	101.673	101.673	101.573	101.238	100.905	100.574	100.246
2/27/2001	2/28/2011	11/29/2010	4.760	101.587	101.587	101.587	101.486	101.151	100.819	100.488	100.160
3/1/2001	3/1/2011	12/1/2010	5.270	101.771	101.771	101.771	101.669	101.332	100.996	100.662	100.333
3/14/2001	3/14/2011	12/14/2010	4.860	101.809	101.809	101.809	101.690	101.318	100.947	100.580	100.228
4/23/2001	4/25/2011	4/24/2006	5.350	102.615	102.615	102.615	102.436	101.947	101.462	100.982	100.506
6/1/2001	6/1/2011	12/1/2010	4.990	102.952	102.952	102.952	102.715	102.125	101.542	100.969	100.438
12/13/2001	12/13/2011	12/13/2010	4.920	105.576	105.576	105.576	104.965	103.835	102.731	101.686	100.791
6/3/2002	6/4/2012	12/3/2010	4.490	107.258	107.258	107.258	106.175	104.557	102.972	101.419	99.898
6/4/2002	6/4/2012	12/6/2010	4.490	107.258	107.258	107.258	106.175	104.557	102.972	101.419	99.898
12/5/2002	12/5/2012	12/6/2010	3.790	108.064	108.064	108.064	106.368	104.250	102.186	100.173	98.210
3/6/2003	3/6/2013	12/6/2010	2.990	107.117	107.117	107.117	105.094	102.891	101.183	100.192	99.884
2/5/2004	12/14/2010	12/14/2010	5.820	100.711	100.711	100.711	100.681	100.560	100.438	100.318	100.197
6/18/2004	6/20/2011	12/20/2010	4.120	102.655	102.655	102.655	102.386	101.745	101.112	100.487	99.869
7/2/2004	7/2/2014	1/3/2011	3.990	114.851	114.851	114.009	110.189	106.482	102.923	99.504	96.219
12/13/2004	12/15/2014	12/13/2010	3.320	113.888	113.888	112.320	108.387	105.061	102.523	100.836	100.033
9/1/2005	9/1/2015	12/1/2010	4.130	120.259	120.259	116.988	111.934	107.098	102.505	98.141	95.836
9/19/2005	9/19/2012	12/20/2010	3.820	107.311	107.311	107.311	105.885	103.998	102.293	100.958	100.136
9/26/2005	9/26/2012	12/27/2010	3.890	107.520	107.520	107.520	106.070	104.162	102.427	101.052	100.183
9/30/2005	9/30/2015	12/30/2010	4.440	122.137	122.137	118.656	113.484	108.537	103.841	99.382	95.726
10/26/2005	10/26/2015	1/26/2011	4.540	122.963	122.963	119.304	114.046	109.021	104.254	99.730	96.551
10/28/2005	10/28/2015	1/28/2011	4.310	121.824	121.824	118.340	113.567	109.419	106.000	103.340	101.449
10/28/2005	10/28/2015	1/28/2011	4.140	120.963	120.963	117.504	112.785	108.713	105.397	102.861	101.102
11/4/2005	11/4/2010	11/4/2010	4.520	100.050	100.050	100.050	100.048	100.036	100.025	100.014	100.003
11/21/2005	11/21/2012	11/22/2010	4.290	108.961	108.961	108.961	107.312	105.238	103.327	101.733	100.588
1/6/2006	1/6/2016	1/6/2011	4.020	121.137	121.137	117.238	112.456	108.380	105.099	102.639	100.978
1/17/2006	1/19/2016	1/18/2011	4.080	121.600	121.600	117.602	112.775	108.649	105.315	102.790	101.058
3/20/2006	3/21/2011	12/21/2010	4.760	101.864	101.864	101.864	101.737	101.345	100.956	100.571	100.188
4/11/2006	4/11/2011	1/11/2011	4.980	102.241	102.241	102.241	102.083	101.634	101.188	100.746	100.332
4/19/2006	4/19/2013	1/19/2011	4.630	111.587	111.587	111.587	109.357	106.866	104.588	102.661	101.209
4/24/2006	4/25/2016	1/24/2011	4.440	124.702	124.702	119.970	114.840	110.424	106.784	103.933	101.857
4/28/2006	4/28/2011	1/28/2011	5.090	102.531	102.531	102.531	102.347	101.849	101.357	100.869	100.386
5/5/2006	5/6/2013	2/7/2011	4.780	112.188	112.188	112.188	109.884	107.340	105.006	103.016	101.485
5/5/2006	5/5/2016	2/7/2011	4.980	127.845	127.834	122.937	117.607	112.934	108.990	105.777	103.299
5/5/2006	5/5/2016	2/7/2011	4.350	124.322	124.312	119.545	114.443	110.069	106.486	103.705	101.715
5/5/2006	5/5/2016	2/7/2011	4.530	125.329	125.318	120.512	115.338	110.874	107.180	104.270	102.133
5/9/2006	5/9/2011	11/9/2010	5.050	102.665	102.665	102.665	102.464	101.937	101.415	100.900	100.418
5/15/2006	5/16/2016	11/15/2010	4.350	124.455	124.421	119.593	114.471	110.079	106.482	103.690	101.687
5/15/2006	5/16/2016	11/15/2010	4.520	125.411	125.377	120.512	115.319	110.843	107.140	104.225	102.085
5/19/2006	5/19/2016	11/19/2010	4.510	125.392	125.352	120.472	115.277	110.800	107.098	104.186	102.047
6/12/2006	6/13/2016	12/13/2010	4.620	126.332	126.237	121.203	115.928	111.371	107.588	104.588	102.354
6/26/2006	6/27/2016	12/27/2010	4.730	127.143	127.017	121.880	116.536	111.900	108.035	104.941	102.602
6/28/2006	6/28/2013	12/28/2010	4.950	113.351	113.351	113.349	110.795	108.099	105.621	103.489	101.803
6/30/2006	7/1/2013	12/30/2010	4.890	113.229	113.229	113.227	110.662	107.965	105.493	103.376	101.710
7/14/2006	7/15/2013	1/14/2011	4.890	113.420	113.420	113.417	110.788	108.054	105.556	103.423	101.755
7/19/2006	7/19/2011	1/19/2011	5.250	103.806	103.806	103.806	103.487	102.764	102.051	101.352	100.702

Start Date	Maturity	Next Call	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Date									
7/20/2006	7/20/2011	1/20/2011	5.300	103.857	103.857	103.857	103.537	102.810	102.094	101.388	100.692
7/24/2006	7/25/2016	1/24/2011	4.660	127.104	126.918	121.654	116.290	111.658	107.811	104.750	102.457
7/28/2006	7/28/2016	1/28/2011	4.490	126.153	125.960	120.725	115.423	110.875	107.126	104.182	102.024
8/1/2006	8/1/2016	2/1/2011	4.890	128.537	128.336	122.986	117.532	112.790	108.815	105.604	103.148
8/11/2006	8/11/2011	11/12/2010	4.790	103.779	103.779	103.779	103.422	102.637	101.865	101.118	100.467
8/21/2006	8/21/2013	11/22/2010	4.750	113.524	113.524	113.520	110.723	107.849	105.067	102.373	99.763
8/25/2006	8/25/2016	11/26/2010	4.350	125.675	125.423	120.083	114.800	110.294	106.615	103.762	101.710
8/28/2006	8/29/2011	11/29/2010	4.890	104.102	104.102	104.102	103.714	102.881	102.061	101.254	100.460
9/22/2006	9/22/2011	12/22/2010	4.790	104.337	104.337	104.337	103.907	103.007	102.123	101.273	100.532
9/29/2006	9/29/2011	12/29/2010	4.590	104.246	104.246	104.246	103.803	102.884	101.983	101.122	100.411
10/10/2006	10/10/2013	1/10/2011	4.250	112.690	112.690	112.685	109.679	106.791	104.269	102.266	100.850
10/12/2006	10/15/2013	1/12/2011	4.500	113.499	113.499	113.494	110.455	107.524	104.926	102.800	101.241
10/30/2006	10/31/2011	1/30/2011	4.850	104.917	104.917	104.917	104.417	103.411	102.423	101.455	100.505
11/3/2006	11/3/2011	11/3/2010	4.690	104.794	104.794	104.794	104.287	103.272	102.277	101.301	100.344
11/6/2006	11/6/2013	11/8/2010	4.290	113.131	113.131	113.107	109.988	107.033	104.456	102.404	100.939
11/10/2006	11/13/2012	11/10/2010	4.390	109.072	109.072	109.072	107.452	105.397	103.494	101.891	100.712
11/17/2006	11/18/2013	11/17/2010	4.350	113.460	113.460	113.399	110.242	107.251	104.632	102.531	101.016
11/24/2006	11/25/2016	11/24/2010	4.190	125.802	125.256	119.593	114.252	109.746	106.116	103.345	101.402
11/30/2006	12/2/2013	11/30/2010	4.350	113.629	113.629	113.525	110.316	107.171	104.134	101.201	98.493
12/1/2006	12/1/2016	12/1/2010	4.090	125.254	124.675	119.052	113.761	109.326	105.778	103.104	101.267
12/4/2006	12/5/2016	12/6/2010	4.080	125.238	124.637	119.008	113.717	109.284	105.740	103.069	101.236
12/5/2006	12/5/2016	12/6/2010	4.260	126.351	125.749	120.049	114.665	110.117	106.442	103.621	101.626
12/6/2006	12/6/2013	12/6/2010	4.400	113.835	113.835	113.719	110.510	107.476	104.822	102.684	101.138
12/8/2006	12/8/2016	12/8/2010	3.990	124.714	124.098	118.500	113.251	108.870	105.391	102.796	101.042
12/12/2006	12/12/2016	12/13/2010	3.990	124.758	124.121	118.513	113.258	108.872	105.389	102.789	101.029
12/12/2006	12/12/2016	12/13/2010	4.050	125.131	124.492	118.859	113.571	109.148	105.616	102.966	101.149
12/19/2006	12/19/2011	12/20/2010	4.490	105.163	105.163	105.163	104.538	103.395	102.282	101.253	100.443
12/19/2006	12/19/2016	12/20/2010	4.190	126.081	125.403	119.695	114.322	109.799	106.158	103.378	101.429
12/20/2006	12/20/2013	12/20/2010	4.500	114.324	114.324	114.166	110.913	107.831	105.121	102.912	101.285
12/21/2006	12/21/2011	12/21/2010	4.530	105.234	105.234	105.234	104.604	103.455	102.336	101.299	100.472
12/27/2006	12/27/2013	12/27/2010	4.500	114.412	114.412	114.233	110.960	107.862	105.137	102.915	101.278
12/28/2006	12/28/2016	12/28/2010	4.250	126.561	125.834	120.080	114.659	110.086	106.389	103.550	101.541
12/28/2006	12/28/2016	12/28/2010	4.400	127.498	126.770	120.958	115.462	110.797	106.994	104.037	101.893
1/8/2007	1/9/2012	1/8/2011	4.750	105.739	105.739	105.739	105.060	103.857	102.676	101.517	100.380
1/12/2007	1/12/2017	1/12/2011	4.420	127.807	127.001	121.155	115.633	110.950	107.130	104.160	102.007
1/16/2007	1/17/2017	1/17/2012	4.790	130.202	129.362	123.372	117.667	112.765	108.692	105.402	102.796
1/23/2007	1/23/2014	1/24/2011	4.490	114.716	114.716	114.457	111.112	107.958	105.196	102.950	101.305
1/23/2007	1/23/2017	1/24/2011	4.460	128.195	127.333	121.440	115.878	111.155	107.294	104.279	102.077
1/29/2007	1/29/2014	1/29/2011	4.790	115.780	115.780	115.502	112.104	108.778	105.571	102.477	99.493
2/2/2007	2/2/2017	11/2/2010	4.690	129.780	128.807	122.224	115.639	109.431	103.935	101.402	99.458
2/9/2007	2/9/2012	11/9/2010	4.750	106.148	106.148	106.148	105.389	104.098	102.843	101.688	100.735
2/9/2007	2/9/2017	11/9/2010	4.470	128.470	127.510	121.584	115.996	111.257	107.385	104.361	102.158
2/12/2007	2/13/2012	11/12/2010	4.880	106.371	106.371	106.371	105.600	104.296	103.027	101.850	100.863
2/15/2007	2/15/2012	11/15/2010	4.990	106.542	106.542	106.542	105.765	104.454	103.167	101.905	100.666
2/20/2007	2/21/2017	11/22/2010	4.390	128.106	127.074	121.150	115.584	110.877	107.045	104.074	101.924
2/20/2007	2/21/2017	2/21/2012	4.850	131.052	129.952	123.288	116.686	110.971	106.620	103.562	101.357
2/23/2007	2/23/2017	11/23/2010	4.250	127.234	126.195	120.320	114.826	110.201	106.470	103.609	101.584
2/23/2007	2/23/2017	11/23/2010	4.350	127.874	126.832	120.917	115.369	110.682	106.876	103.935	101.817
3/2/2007	3/2/2012	12/2/2010	4.490	106.086	106.086	106.086	105.268	103.915	102.610	101.441	100.537
3/9/2007	3/10/2014	12/9/2010	4.450	115.154	115.154	114.749	111.273	108.028	105.215	102.950	101.304
3/16/2007	3/16/2017	12/16/2010	4.090	126.447	125.297	119.456	114.023	109.491	105.871	103.141	101.260
3/20/2007	3/20/2012	12/20/2010	4.550	106.395	106.395	106.395	105.531	104.126	102.748	101.397	100.070
3/21/2007	3/21/2017	12/21/2010	4.220	127.346	126.163	120.251	114.737	110.110	106.386	103.539	101.534
3/23/2007	3/23/2017	12/23/2010	4.290	127.824	126.627	120.680	115.124	110.449	106.670	103.761	101.690
3/23/2007	3/23/2017	12/23/2010	4.290	127.824	126.627	120.680	115.124	110.449	106.670	103.761	101.690
3/30/2007	3/30/2012	12/30/2010	4.670	106.693	106.693	106.693	105.803	104.369	102.963	101.584	100.230
4/2/2007	4/2/2012	1/3/2011	4.590	106.617	106.617	106.617	105.719	104.279	102.890	101.645	100.664
4/9/2007	4/10/2017	1/10/2011	4.150	127.123	125.840	119.921	114.425	109.834	106.156	103.366	101.429
4/12/2007	4/12/2017	1/12/2011	4.250	127.800	126.501	120.532	114.975	110.313	106.556	103.680	101.649
4/13/2007	4/13/2017	1/13/2011	4.450	129.121	127.806	121.751	116.082	111.288	107.384	104.343	102.130
4/23/2007	4/23/2012	1/25/2011	4.650	106.975	106.975	106.975	106.021	104.519	103.045	101.600	100.182
4/23/2007	4/23/2014	1/24/2011	4.620	116.297	116.297	115.758	112.146	108.775	105.831	103.429	101.632
4/27/2007	4/27/2012	1/27/2011	4.550	106.875	106.875	106.875	105.912	104.400	102.945	101.647	100.632
4/27/2007	4/27/2017	1/27/2011	4.250	127.977	126.600	120.589	115.008	110.325	106.550	103.656	101.610
5/2/2007	5/2/2014	2/2/2011	4.590	116.306	116.306	115.736	112.104	108.725	105.788	103.403	101.639
5/4/2007	5/5/2014	2/4/2011	4.550	116.202	116.202	115.619	111.983	108.604	105.675	103.305	101.561
5/14/2007	5/16/2011	11/15/2010	4.500	102.462	102.462	102.462	102.250	101.705	101.165	100.639	100.178
5/18/2007	5/18/2017	11/18/2010	4.190	127.827	126.327	120.309	114.739	110.079	106.344	103.496	101.503
5/22/2007	5/22/2012	11/22/2010	4.690	107.412	107.412	107.412	106.370	104.787	103.264	101.899	100.805

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
5/22/2007	5/22/2012	11/22/2010	4.690	107.412	107.412	107.412	106.370	104.787	103.264	101.899	100.805
5/22/2007	5/22/2012	11/22/2010	4.710	107.444	107.444	107.444	106.401	104.818	103.295	101.927	100.828
5/22/2007	5/22/2017	5/22/2012	4.750	131.599	130.040	123.775	117.889	112.869	108.708	105.320	102.553
5/25/2007	5/25/2012	11/26/2010	4.650	107.388	107.388	107.388	106.336	104.745	103.217	101.850	100.760
5/29/2007	5/30/2017	11/29/2010	4.250	128.367	126.788	120.719	115.097	110.382	106.585	103.675	101.610
6/1/2007	6/1/2012	12/2/2010	5.230	108.411	108.411	108.411	107.332	105.713	104.127	102.573	101.050
6/1/2007	6/2/2014	12/1/2010	4.500	116.374	116.374	115.669	111.965	108.544	105.597	103.229	101.497
6/7/2007	6/7/2012	12/7/2010	4.940	108.027	108.027	108.027	106.930	105.299	103.729	102.300	101.136
6/7/2007	6/7/2017	12/7/2010	4.820	132.279	130.617	124.300	118.359	113.288	109.093	105.737	103.188
6/8/2007	6/8/2012	12/8/2010	5.300	108.627	108.627	108.627	107.524	105.884	104.277	102.703	101.161
6/8/2007	6/9/2014	12/8/2010	4.730	117.303	117.303	116.566	112.822	109.341	106.304	103.814	101.929
6/8/2007	6/8/2017	12/8/2010	4.490	130.081	128.433	122.248	116.481	111.612	107.641	104.542	102.277
6/11/2007	6/12/2017	12/13/2010	4.490	130.131	128.458	122.264	116.490	111.616	107.641	104.539	102.269
6/15/2007	6/16/2014	12/15/2010	5.550	120.411	120.411	119.637	115.776	112.010	108.391	104.913	101.569
6/18/2007	6/19/2017	12/20/2010	4.500	130.286	128.569	122.352	116.561	111.671	107.680	104.562	102.276
6/18/2007	6/19/2017	12/20/2010	4.840	132.574	130.835	124.479	118.506	113.407	109.182	105.797	103.218
6/19/2007	6/19/2017	12/20/2010	4.650	131.295	129.568	123.289	117.415	112.428	108.333	105.094	102.673
6/20/2007	6/20/2012	12/20/2010	4.890	108.122	108.122	108.122	106.983	105.316	103.713	102.262	101.082
6/20/2007	6/20/2012	12/20/2010	4.960	108.239	108.239	108.239	107.099	105.430	103.824	102.363	101.165
6/22/2007	6/22/2017	12/22/2010	4.500	130.323	128.588	122.363	116.567	111.671	107.676	104.554	102.265
6/26/2007	6/26/2012	12/27/2010	5.130	108.607	108.607	108.607	107.445	105.757	104.127	102.630	101.378
6/28/2007	6/28/2017	12/28/2010	4.500	130.398	128.627	122.386	116.579	111.674	107.674	104.545	102.250
7/13/2007	7/13/2012	1/13/2011	4.690	108.090	108.090	108.090	106.877	105.149	103.502	102.045	100.896
7/13/2007	7/13/2017	1/13/2011	4.290	129.158	127.321	121.152	115.452	110.680	106.835	103.882	101.783
7/13/2007	7/13/2017	7/13/2011	4.900	133.304	131.420	124.988	118.951	113.791	109.510	106.069	103.419
7/18/2007	7/18/2017	1/18/2011	4.780	132.555	130.649	124.250	118.268	113.172	108.967	105.611	103.068
7/19/2007	7/19/2012	1/19/2011	4.890	108.516	108.516	108.516	107.282	105.534	103.860	102.354	101.141
7/20/2007	7/20/2017	1/20/2011	4.290	129.242	127.365	121.178	115.466	110.684	106.831	103.871	101.764
7/23/2007	7/23/2012	1/24/2011	5.050	108.851	108.851	108.851	107.602	105.841	104.148	102.608	101.341
7/24/2007	7/24/2012	1/24/2011	4.820	108.461	108.461	108.461	107.211	105.451	103.769	102.262	101.057
7/27/2007	7/27/2012	1/27/2011	4.590	108.096	108.096	108.096	106.838	105.074	103.399	101.929	100.780
7/27/2007	7/28/2014	1/27/2011	4.350	116.505	116.505	115.556	111.728	108.232	105.260	102.900	101.215
7/27/2007	7/27/2017	1/27/2011	4.250	129.052	127.140	120.953	115.255	110.492	106.661	103.728	101.650
7/27/2007	7/27/2017	1/27/2011	4.180	128.573	126.668	120.516	114.861	110.146	106.372	103.498	101.489
7/30/2007	1/30/2019	1/31/2011	3.990	133.392	128.022	121.074	114.961	109.989	106.100	103.212	101.262
7/31/2007	7/31/2017	1/31/2011	3.990	127.318	125.415	119.357	113.817	109.234	105.609	102.914	101.096
7/31/2007	7/31/2017	1/31/2011	3.990	127.318	125.415	119.357	113.817	109.234	105.609	102.914	101.096
7/31/2007	7/31/2017	1/31/2011	4.060	127.798	125.886	119.792	114.207	109.573	105.892	103.127	101.243
8/2/2007	8/4/2014	2/2/2011	4.490	117.123	117.123	116.143	112.285	108.753	105.728	103.307	101.543
8/2/2007	8/2/2017	2/2/2011	4.150	128.437	126.505	120.368	114.734	110.046	106.306	103.472	101.508
8/2/2007	8/2/2017	2/2/2011	4.050	127.752	125.831	119.745	114.174	109.558	105.900	103.155	101.282
8/6/2007	8/6/2012	11/8/2010	4.490	108.044	108.044	108.044	106.755	104.967	103.280	101.822	100.713
8/9/2007	8/11/2014	8/9/2011	4.860	118.629	118.629	117.614	113.695	110.067	106.899	104.283	102.234
8/9/2007	8/9/2017	11/9/2010	3.990	127.418	125.460	119.392	113.846	109.266	105.647	102.956	101.129
8/13/2007	8/13/2012	11/15/2010	4.590	108.313	108.313	108.313	107.000	105.190	103.477	101.982	100.821
8/16/2007	8/16/2017	11/16/2010	3.990	127.496	125.493	119.411	113.853	109.265	105.638	102.940	101.106
8/17/2007	8/17/2012	11/17/2010	4.350	107.926	107.926	107.926	106.603	104.788	103.085	101.632	100.570
8/17/2007	8/17/2012	11/17/2010	4.150	107.562	107.562	107.562	106.240	104.431	102.751	101.350	100.381
8/17/2007	8/17/2017	11/17/2010	4.000	127.576	125.565	119.476	113.910	109.313	105.677	102.968	101.123
8/20/2007	8/20/2014	8/22/2011	4.250	116.397	116.397	115.339	111.439	107.891	104.866	102.514	100.780
8/24/2007	8/24/2012	11/24/2010	4.050	107.458	107.458	107.458	106.115	104.290	102.604	101.221	100.274
8/28/2007	8/28/2014	11/29/2010	4.350	116.879	116.879	115.795	111.889	108.338	105.324	102.937	101.223
8/30/2007	8/30/2012	11/30/2010	4.390	108.158	108.158	108.158	106.792	104.941	103.200	101.708	100.598
8/30/2007	9/2/2014	11/30/2010	3.890	115.148	115.148	114.050	110.200	106.773	103.959	101.859	100.501
8/31/2007	8/31/2012	11/30/2010	4.370	108.133	108.133	108.133	106.764	104.910	103.169	101.680	100.579
9/4/2007	9/4/2012	12/6/2010	4.190	107.844	107.844	107.844	106.464	104.606	102.884	101.449	100.459
9/4/2007	9/4/2012	12/6/2010	4.220	107.900	107.900	107.900	106.520	104.661	102.934	101.492	100.485
9/4/2007	9/5/2017	12/6/2010	3.890	127.023	124.913	118.863	113.353	108.830	105.286	102.679	100.959
9/7/2007	9/7/2012	12/7/2010	4.090	107.691	107.691	107.691	106.302	104.439	102.722	101.314	100.373
9/10/2007	9/11/2017	12/10/2010	3.690	125.695	123.577	117.635	112.257	107.884	104.510	102.100	100.618
9/11/2007	9/11/2017	12/13/2010	3.590	124.998	122.895	117.019	111.711	107.419	104.140	101.835	100.467
9/12/2007	9/12/2014	12/13/2010	3.690	114.472	114.472	113.334	109.497	106.129	103.427	101.482	100.330
9/13/2007	9/15/2014	12/13/2010	3.990	115.682	115.682	114.524	110.630	107.156	104.290	102.125	100.698
9/13/2007	9/13/2017	12/13/2010	3.990	127.806	125.635	119.508	113.919	109.311	105.671	102.963	101.123
9/14/2007	9/14/2011	12/14/2010	4.090	103.613	103.613	103.613	103.198	102.323	101.467	100.682	100.115
9/14/2007	9/14/2012	12/14/2010	4.390	108.341	108.341	108.341	106.925	105.032	103.262	101.754	100.638
9/17/2007	9/17/2012	12/17/2010	4.220	108.053	108.053	108.053	106.629	104.733	102.974	101.502	100.479
9/27/2007	9/29/2014	9/27/2010	4.490	117.822	117.822	116.580	112.470	108.488	104.673	101.016	97.511
9/27/2007	9/27/2017	12/27/2010	3.650	125.578	123.374	117.423	112.049	107.690	104.340	101.958	100.511

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
9/28/2007	9/28/2012	12/28/2010	3.850	107.464	107.464	107.464	106.008	104.096	102.364	101.000	100.150
10/3/2007	10/3/2012	1/3/2011	3.830	107.479	107.479	107.479	106.007	104.084	102.355	101.011	100.178
10/9/2007	10/9/2012	10/9/2009	4.400	108.665	108.665	108.665	107.167	105.195	103.270	101.390	99.554
10/11/2007	10/14/2014	1/11/2011	4.180	116.765	116.765	115.477	111.486	107.907	104.924	102.613	101.009
10/11/2007	10/11/2017	1/11/2011	3.990	128.116	125.787	119.608	113.989	109.359	105.706	102.986	101.146
10/15/2007	10/16/2017	1/18/2011	3.990	128.172	125.815	119.623	113.998	109.362	105.704	102.978	101.133
10/22/2007	10/22/2012	1/24/2011	3.990	108.002	108.002	108.002	106.466	104.485	102.683	101.236	100.291
10/25/2007	10/27/2014	10/25/2011	4.360	117.645	117.645	116.296	112.245	108.589	105.499	103.028	101.142
10/26/2007	10/26/2017	1/26/2011	3.390	124.029	121.724	115.900	110.699	106.545	103.436	101.329	100.143
10/29/2007	10/29/2012	1/31/2011	3.990	108.079	108.079	108.079	106.521	104.521	102.702	101.240	100.282
11/2/2007	11/3/2014	2/2/2011	3.990	116.225	116.225	114.853	110.851	107.306	104.394	102.201	100.760
11/2/2007	11/3/2014	2/2/2011	4.190	117.038	117.038	115.661	111.624	108.013	105.008	102.684	101.065
11/5/2007	11/5/2014	2/7/2011	3.990	116.247	116.247	114.864	110.857	107.308	104.392	102.196	100.747
11/5/2007	11/6/2017	11/5/2012	4.390	131.252	128.719	122.275	116.363	111.414	107.343	103.982	101.155
11/6/2007	11/6/2017	11/8/2010	3.480	124.774	122.389	116.497	111.223	106.992	103.799	101.599	100.336
11/9/2007	11/10/2014	11/9/2011	4.330	117.692	117.692	116.271	112.195	108.529	105.447	102.983	101.093
11/13/2007	11/14/2011	11/15/2010	3.760	103.958	103.958	103.958	103.425	102.384	101.381	100.521	100.047
11/13/2007	11/13/2012	11/15/2010	3.680	107.605	107.605	107.605	105.995	103.974	102.192	100.848	100.116
11/13/2007	11/13/2014	11/15/2010	3.350	113.715	113.715	112.312	108.425	105.118	102.577	100.877	100.087
11/19/2007	11/19/2014	11/19/2010	3.750	115.416	115.416	113.963	109.972	106.484	103.682	101.644	100.372
11/19/2007	11/19/2014	11/19/2010	3.750	115.416	115.416	113.963	109.972	106.484	103.682	101.644	100.372
11/19/2007	11/19/2014	11/21/2011	4.270	117.553	117.553	116.084	111.996	108.332	105.260	102.810	100.931
11/19/2007	11/20/2017	11/19/2012	4.290	130.707	127.786	120.406	113.912	108.885	105.147	102.205	99.778
11/20/2007	11/20/2017	11/22/2010	3.740	126.770	124.242	118.148	112.654	108.193	104.734	102.242	100.662
11/23/2007	11/24/2017	11/23/2011	3.990	128.604	125.658	118.244	111.269	106.073	102.898	101.030	99.733
11/23/2007	11/24/2017	11/23/2011	3.990	128.604	125.658	118.244	111.269	106.073	102.898	101.030	99.733
11/29/2007	11/29/2017	11/29/2010	2.950	121.189	118.786	113.292	108.436	104.683	102.039	100.457	99.896
11/30/2007	11/30/2017	11/30/2010	3.190	122.922	120.449	114.750	109.683	105.698	102.778	100.883	100.037
12/6/2007	12/6/2017	12/6/2010	3.250	123.407	120.890	115.140	110.022	105.985	103.018	101.071	100.094
12/7/2007	12/7/2012	12/7/2010	3.450	107.359	107.359	107.359	105.662	103.601	101.841	100.590	100.006
12/10/2007	12/10/2010	12/10/2010	3.870	100.430	100.430	100.430	100.403	100.292	100.182	100.072	99.962
12/10/2007	12/11/2017	12/10/2010	3.450	124.895	122.300	116.386	111.102	106.877	103.698	101.520	100.294
12/11/2007	12/11/2012	12/13/2010	3.760	108.063	108.063	108.063	106.346	104.249	102.398	100.987	100.144
12/14/2007	12/14/2010	12/14/2010	3.690	100.451	100.451	100.451	100.421	100.300	100.179	100.058	99.938
12/20/2007	12/20/2012	12/21/2009	3.750	108.135	108.135	108.135	106.384	104.226	102.123	100.074	98.076
12/20/2007	12/20/2012	12/20/2010	3.600	107.809	107.809	107.809	106.062	103.954	102.122	100.769	100.041
12/24/2007	12/26/2017	12/24/2012	3.990	128.959	125.775	118.401	112.202	107.553	104.066	101.301	98.928
12/26/2007	12/26/2012	12/27/2010	3.960	108.656	108.656	108.656	106.880	104.731	102.803	101.276	100.298
12/26/2007	12/26/2012	12/27/2010	3.460	107.563	107.563	107.563	105.796	103.684	101.880	100.590	99.972
1/2/2008	1/2/2013	1/3/2011	3.490	107.697	107.697	107.697	105.903	103.776	101.963	100.666	100.010
1/3/2008	1/5/2015	1/3/2011	3.650	115.481	115.481	113.786	109.736	106.242	103.472	101.501	100.342
1/4/2008	1/4/2018	1/4/2011	3.360	124.470	121.765	115.886	110.657	106.503	103.410	101.334	100.190
1/7/2008	1/7/2013	1/7/2011	2.990	106.636	106.636	106.636	104.834	102.758	101.125	100.169	99.797
1/7/2008	1/7/2013	1/7/2011	3.590	107.967	107.967	107.967	106.153	104.004	102.150	100.794	100.052
1/7/2008	1/7/2015	1/7/2011	3.490	114.822	114.822	113.127	109.112	105.683	103.014	101.177	100.148
1/7/2008	1/8/2018	1/7/2011	2.590	118.891	116.408	111.240	106.704	103.338	101.152	100.077	99.721
1/8/2008	1/8/2013	1/10/2011	3.150	106.999	106.999	106.999	105.190	103.088	101.382	100.314	99.834
1/8/2008	1/8/2018	1/10/2011	2.570	118.745	116.272	111.123	106.607	103.264	101.105	100.057	99.702
1/8/2008	1/8/2018	1/10/2011	2.640	119.255	116.755	111.530	106.945	103.521	101.267	100.114	99.722
1/10/2008	1/10/2011	1/10/2011	3.100	100.611	100.611	100.611	100.561	100.367	100.174	99.982	99.790
1/11/2008	1/11/2018	1/11/2011	2.720	119.862	117.316	112.002	107.336	103.822	101.459	100.200	99.741
1/14/2008	1/16/2018	1/14/2011	3.240	123.704	120.964	115.160	110.018	105.966	102.987	101.042	100.048
1/16/2008	1/16/2013	1/18/2011	2.690	106.037	106.037	106.037	104.210	102.173	100.691	99.972	99.681
1/16/2008	1/16/2013	1/18/2011	2.550	105.723	105.723	105.723	103.901	101.899	100.506	99.901	99.648
1/16/2008	1/16/2015	1/18/2011	2.640	111.278	111.278	109.618	105.875	102.933	100.975	100.022	99.678
1/16/2008	1/16/2018	1/18/2011	2.380	117.412	114.982	110.038	105.716	102.594	100.688	99.905	99.612
1/17/2008	1/17/2018	1/18/2011	2.250	116.467	114.093	109.312	105.126	102.170	100.467	99.826	99.583
1/18/2008	1/18/2013	1/18/2011	2.550	105.737	105.737	105.737	103.908	101.902	100.506	99.901	99.648
1/18/2008	1/20/2015	1/18/2011	2.350	110.065	110.065	108.434	104.820	102.108	100.478	99.849	99.605
1/18/2008	1/18/2018	1/18/2011	2.290	116.766	114.368	109.534	105.305	102.296	100.527	99.848	99.592
1/24/2008	1/24/2012	1/24/2011	2.440	103.050	103.050	103.050	102.341	101.139	100.231	99.833	99.596
1/24/2008	1/24/2013	1/24/2011	2.500	105.666	105.666	105.666	103.817	101.813	100.443	99.865	99.610
1/25/2008	1/25/2013	1/26/2009	2.250	105.106	105.106	105.106	103.246	101.028	98.870	96.769	94.722
1/25/2008	1/25/2013	1/25/2011	2.650	106.013	106.013	106.013	104.147	101.922	100.315	99.874	99.641
1/28/2008	1/28/2013	1/28/2011	2.990	106.810	106.810	106.810	104.926	102.682	100.752	99.987	99.713
1/30/2008	1/30/2013	1/31/2011	2.670	106.096	106.096	106.096	104.219	102.156	100.671	100.030	99.996
2/7/2008	2/7/2013	11/8/2010	2.490	105.740	105.740	105.740	103.840	101.820	100.455	99.983	99.961
2/13/2008	2/13/2013	2/14/2011	2.920	106.780	106.780	106.780	104.841	102.696	101.049	100.088	99.644
2/14/2008	2/14/2018	2/14/2012	3.190	123.595	120.053	112.592	106.704	103.216	101.205	99.705	98.411

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
2/19/2008	2/19/2013	2/19/2010	2.590	106.057	106.057	106.057	104.092	101.795	99.560	97.386	95.270
2/22/2008	2/22/2011	2/23/2009	2.500	100.792	100.792	100.792	100.699	100.383	100.070	99.758	99.448
2/25/2008	2/25/2013	2/25/2011	3.090	107.278	107.278	107.278	105.280	102.952	100.960	100.015	99.626
2/25/2008	2/26/2018	11/26/2010	2.420	117.980	115.317	110.295	105.908	102.724	100.753	99.976	99.869
3/7/2008	3/9/2015	3/7/2011	2.890	112.763	112.763	110.811	106.899	103.750	101.526	100.240	99.587
3/7/2008	3/7/2018	3/7/2013	3.550	126.465	123.338	117.228	111.788	107.363	103.752	100.714	98.053
3/10/2008	3/11/2013	12/10/2010	2.390	105.722	105.722	105.722	103.705	101.660	100.351	99.915	99.799
3/11/2008	3/11/2011	12/13/2010	2.090	100.760	100.760	100.760	100.646	100.284	99.991	99.866	99.749
3/12/2008	3/12/2013	12/13/2010	2.010	104.818	104.818	104.818	102.826	100.965	100.041	99.857	99.739
3/14/2008	3/14/2018	12/14/2010	2.400	117.938	115.207	110.202	105.834	102.676	100.735	99.969	99.781
3/17/2008	3/18/2013	3/17/2011	2.690	106.493	106.493	106.493	104.436	102.275	100.726	99.888	99.415
3/17/2008	3/17/2015	3/17/2011	2.620	111.629	111.629	109.473	105.028	101.450	100.197	99.749	99.376
3/17/2008	3/19/2018	3/18/2013	3.300	124.711	121.587	115.656	110.410	106.182	102.740	99.818	97.242
3/25/2008	3/27/2023	3/25/2013	3.150	132.215	119.604	111.753	106.985	103.667	100.987	98.602	96.352
3/26/2008	3/26/2018	3/26/2012	2.980	122.373	118.533	111.089	105.793	102.735	100.797	99.296	97.924
3/28/2008	3/28/2013	3/28/2011	2.820	106.885	106.885	106.885	104.776	102.387	100.583	99.847	99.410
3/28/2008	3/28/2013	3/28/2011	2.800	106.836	106.836	106.836	104.728	102.340	100.561	99.834	99.402
3/28/2008	3/28/2018	12/28/2010	2.020	115.176	112.598	108.088	104.146	101.487	100.144	99.814	99.654
3/28/2008	3/28/2018	3/28/2011	2.770	120.811	117.834	112.386	107.625	104.021	101.570	100.175	99.464
3/31/2008	3/31/2011	12/31/2010	1.990	100.835	100.835	100.835	100.695	100.279	99.964	99.797	99.632
4/14/2008	4/14/2015	4/14/2011	2.750	112.420	112.420	110.103	105.574	101.891	100.354	99.753	99.302
4/28/2008	4/28/2015	4/28/2011	3.250	114.804	114.804	112.554	108.428	105.003	102.426	100.722	99.717
4/28/2008	4/30/2018	1/28/2011	2.150	116.350	113.559	108.832	104.720	101.870	100.314	99.764	99.506
4/30/2008	4/30/2018	4/30/2013	3.740	128.443	124.314	116.943	111.139	106.742	103.268	100.386	97.818
5/2/2008	5/4/2015	5/2/2011	3.990	118.242	118.242	115.884	111.524	107.740	104.645	102.167	99.877
5/5/2008	5/5/2015	5/5/2011	3.170	114.502	114.502	112.227	108.128	104.755	102.251	100.625	99.645
5/8/2008	5/8/2015	11/8/2010	2.960	113.565	113.565	111.307	107.285	104.041	101.723	100.370	99.972
5/19/2008	5/19/2015	5/21/2012	4.700	121.684	121.684	119.115	114.321	109.906	105.962	102.124	98.213
5/19/2008	5/21/2018	5/20/2013	3.890	129.810	125.510	118.036	112.077	107.482	103.874	100.844	98.175
5/23/2008	5/23/2013	5/23/2011	4.040	110.492	110.492	110.491	108.129	105.597	103.334	101.373	99.429
5/23/2008	5/23/2018	5/23/2011	3.270	125.077	121.588	115.595	110.325	106.180	103.126	101.080	99.825
5/27/2008	5/27/2011	5/27/2010	3.220	101.860	101.860	101.860	101.632	101.059	100.493	99.933	99.379
5/27/2008	5/28/2013	5/27/2011	3.490	109.112	109.112	109.111	106.737	104.152	101.875	100.446	99.602
5/29/2008	5/29/2018	5/31/2011	3.460	126.592	122.244	114.375	107.081	102.565	100.824	100.094	99.508
6/6/2008	6/6/2013	6/6/2011	3.990	110.517	110.517	110.516	108.088	105.457	103.001	101.051	99.576
6/10/2008	6/11/2012	6/10/2010	3.940	106.446	106.446	106.446	105.343	103.710	102.026	100.033	97.891
6/16/2008	6/17/2013	6/16/2011	4.070	110.853	110.853	110.851	108.370	105.705	103.222	101.355	100.121
6/24/2008	6/24/2015	6/24/2011	3.830	118.053	118.053	115.396	110.991	107.212	104.186	101.952	100.412
6/30/2008	7/1/2013	12/30/2010	2.920	107.900	107.900	107.897	105.404	102.982	101.162	100.132	99.799
6/30/2008	7/1/2013	12/30/2010	3.450	109.333	109.333	109.331	106.813	104.273	102.181	100.713	99.992
6/30/2008	6/30/2015	12/30/2010	3.370	115.941	115.941	113.309	109.052	105.510	102.810	100.983	100.040
6/30/2008	7/2/2018	6/30/2011	3.690	128.708	124.073	116.064	108.596	103.490	101.321	100.284	99.583
7/1/2008	7/1/2015	7/1/2011	4.600	121.772	121.772	118.909	113.981	109.290	105.226	102.095	99.921
7/7/2008	7/8/2013	7/7/2011	4.590	112.507	112.507	112.505	109.913	107.168	104.539	102.110	100.107
7/8/2008	7/8/2013	7/8/2011	4.250	111.581	111.581	111.578	108.996	106.266	103.700	101.562	99.885
7/10/2008	7/10/2014	7/10/2012	4.800	117.972	117.972	117.092	113.207	109.515	106.137	102.810	99.396
7/11/2008	7/11/2018	7/11/2012	3.750	129.269	124.559	116.634	110.231	105.819	102.846	100.617	98.784
7/14/2008	7/14/2015	7/15/2013	4.900	123.369	123.369	120.419	115.577	111.161	106.960	102.520	97.831
7/14/2008	7/16/2018	1/14/2011	2.500	119.546	116.145	110.913	106.382	103.067	100.969	100.003	99.665
7/14/2008	7/16/2018	7/14/2011	3.250	125.411	121.617	115.580	110.294	106.147	103.099	101.036	99.691
7/17/2008	7/17/2018	7/17/2013	3.750	129.331	124.575	117.249	111.411	106.959	103.346	100.292	97.538
7/21/2008	7/22/2013	1/21/2011	3.000	108.291	108.291	108.288	105.677	102.955	100.716	99.990	99.736
8/15/2008	8/15/2018	8/15/2011	3.830	130.265	126.061	119.494	113.675	108.964	105.307	102.618	100.729
8/19/2008	8/19/2013	8/19/2010	3.440	109.775	109.775	109.771	107.022	104.206	101.481	98.841	96.284
9/8/2008	9/9/2013	12/8/2010	2.890	108.380	108.380	108.376	105.585	103.049	101.188	100.160	99.867
5/13/2009	5/13/2014	5/13/2013	4.000	114.332	114.332	113.717	110.104	106.554	102.497	97.683	92.887
9/28/2009	9/30/2013	9/28/2012	2.920	108.638	108.638	108.632	105.616	102.003	98.225	95.057	92.557
5/11/2010	5/11/2015	5/11/2015	3.700	116.988	116.988	114.408	109.225	103.838	98.122	91.964	85.525
5/24/2010	5/26/2015	5/24/2011	2.250	110.424	110.424	107.853	103.253	98.859	94.678	92.311	92.306
6/15/2010	6/15/2015	6/15/2011	2.280	110.689	110.689	107.983	103.328	98.884	94.656	93.713	93.704