

## **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	Next Call	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Date									
2/27/1997	2/27/2012	11/28/2011	6.58	102.175	102.175	102.175	102.119	101.788	101.460	101.134	100.809
4/8/1998	4/8/2013	1/9/2012	5.49	108.006	108.006	108.006	107.233	105.764	104.350	103.049	101.926
8/19/1998	8/19/2013	11/21/2011	5.49	110.034	110.034	110.034	108.903	107.060	105.314	103.734	102.383
8/19/1998	8/19/2013	11/21/2011	5.49	110.034	110.034	110.034	108.903	107.060	105.314	103.734	102.383
8/25/1998	8/19/2013	1/25/2012	5.49	110.034	110.034	110.034	108.903	107.060	105.313	103.733	102.378
8/27/1998	8/19/2013	1/27/2012	5.49	110.034	110.034	110.034	108.903	107.060	105.314	103.734	102.383
9/30/1998	9/30/2013	12/30/2011	5.22	110.149	110.149	110.149	108.903	106.950	105.125	103.506	102.153
12/14/1998	12/16/2013	12/14/2011	5.39	111.633	111.633	111.633	110.165	107.994	105.969	104.176	102.664
12/14/1998	12/16/2013	12/14/2011	4.89	110.554	110.554	110.554	109.092	106.941	104.967	103.263	101.892
12/15/1998	12/16/2013	12/15/2011	4.88	110.532	110.532	110.532	109.071	106.920	104.946	103.242	101.873
1/7/2000	1/7/2015	1/9/2012	5.95	119.237	119.237	119.237	116.379	113.128	110.173	107.577	105.373
6/3/2002	6/4/2012	12/3/2011	4.49	102.706	102.706	102.706	102.524	101.926	101.335	100.751	100.173
6/4/2002	6/4/2012	12/6/2011	4.49	102.706	102.706	102.706	102.524	101.926	101.335	100.751	100.173
12/5/2002	12/5/2012	12/6/2011	3.79	104.221	104.221	104.221	103.738	102.632	101.543	100.470	99.414
3/6/2003	3/6/2013	12/6/2011	2.99	104.086	104.086	104.086	103.405	102.080	100.969	100.238	99.923
7/2/2004	7/2/2014	1/3/2012	3.99	110.806	110.806	110.806	108.764	106.043	103.406	100.848	98.366
12/13/2004	12/15/2014	12/13/2011	3.32	110.522	110.522	110.522	107.904	105.086	102.857	101.265	100.316
9/1/2005	9/1/2015	12/1/2011	4.13	116.072	116.072	115.833	111.834	107.923	104.172	100.575	97.124
9/19/2005	9/19/2012	12/19/2011	3.82	103.438	103.438	103.438	103.095	102.206	101.353	100.612	100.111
9/26/2005	9/26/2012	12/27/2011	3.89	103.576	103.576	103.576	103.222	102.314	101.440	100.673	100.140
9/30/2005	9/30/2015	12/30/2011	4.44	117.636	117.636	117.290	113.185	109.170	105.323	101.635	98.100
10/26/2005	10/26/2015	1/26/2012	4.54	118.361	118.361	117.916	113.728	109.634	105.715	101.960	98.364
10/28/2005	10/28/2015	1/30/2012	4.31	117.454	117.454	117.022	113.057	109.471	106.455	104.028	102.196
10/28/2005	10/28/2015	1/30/2012	4.14	116.766	116.766	116.335	112.398	108.856	105.905	103.556	101.819
11/21/2005	11/21/2012	11/21/2011	4.29	104.611	104.611	104.611	104.154	103.087	102.059	101.151	100.438
1/17/2006	1/19/2016	1/17/2012	4.08	117.464	117.464	116.729	112.625	108.980	105.967	103.588	101.844
4/19/2006	4/19/2013	1/19/2012	4.63	106.893	106.893	106.893	106.096	104.609	103.204	101.968	100.981
4/24/2006	4/25/2016	1/24/2012	4.44	120.201	120.201	119.057	114.674	110.765	107.484	104.840	102.806
5/5/2006	5/5/2016	11/7/2011	4.35	119.912	119.912	118.728	114.354	110.469	107.231	104.639	102.672
5/5/2006	5/5/2016	11/7/2011	4.53	120.736	120.736	119.546	115.130	111.191	107.873	105.191	103.110
5/15/2006	5/16/2016	11/15/2011	4.35	120.045	120.045	118.810	114.410	110.503	107.244	104.633	102.649
5/15/2006	5/16/2016	11/15/2011	4.52	120.828	120.828	119.587	115.149	111.188	107.853	105.158	103.065
5/19/2006	5/19/2016	11/21/2011	4.51	120.820	120.820	119.565	115.122	111.158	107.820	105.123	103.028
6/12/2006	6/13/2016	12/12/2011	4.62	121.649	121.649	120.277	115.759	111.727	108.317	105.548	103.371
6/26/2006	6/27/2016	12/27/2011	4.73	122.348	122.348	120.908	116.328	112.232	108.749	105.897	103.628
6/28/2006	6/28/2013	12/28/2011	4.95	108.332	108.332	108.332	107.349	105.661	104.068	102.653	101.491
6/30/2006	7/1/2013	12/30/2011	4.89	108.272	108.272	108.272	107.281	105.587	103.996	102.593	101.447
7/14/2006	7/15/2013	1/17/2012	4.89	108.462	108.462	108.462	107.433	105.701	104.076	102.647	101.488
7/24/2006	7/25/2016	1/24/2012	4.66	122.380	122.380	120.807	116.189	112.074	108.590	105.752	103.505
7/28/2006	7/28/2016	1/30/2012	4.49	121.601	121.601	120.023	115.437	111.371	107.958	105.201	103.062
8/1/2006	8/1/2016	2/1/2012	4.89	123.579	123.579	121.963	117.289	113.101	109.535	106.587	104.231
8/21/2006	8/21/2013	11/1/2011	4.75	108.708	108.708	108.708	107.577	105.733	103.929	102.164	100.438
8/25/2006	8/25/2016	11/25/2011	4.35	121.265	121.265	119.559	114.959	110.902	107.525	104.819	102.754
10/10/2006	10/10/2013	1/10/2012	4.25	108.381	108.381	108.381	107.116	105.175	103.428	101.982	100.902
10/12/2006	10/15/2013	11/2/2012	4.50	108.937	108.937	108.937	107.655	105.689	103.896	102.384	101.211
11/3/2006	11/3/2011	11/3/2011	4.69	100.039	100.039	100.039	100.038	100.030	100.022	100.013	100.005
11/6/2006	11/6/2013	11/7/2011	4.29	108.782	108.782	108.782	107.441	105.426	103.604	102.076	100.891
11/10/2006	11/13/2012	11/10/2011	4.39	104.621	104.621	104.621	104.179	103.135	102.128	101.232	100.523
11/17/2006	11/18/2013	11/17/2011	4.35	109.050	109.050	109.050	107.674	105.624	103.776	102.238	101.062
11/24/2006	11/25/2016	11/25/2011	4.19	121.554	121.554	119.399	114.678	110.564	107.176	104.489	102.475
11/30/2006	12/2/2013	11/28/2011	4.35	109.219	109.219	109.219	107.803	105.674	103.598	101.574	99.600
12/1/2006	12/1/2016	12/1/2011	4.09	121.108	121.108	118.940	114.251	110.184	106.864	104.252	102.326
12/4/2006	12/5/2016	12/5/2011	4.08	121.101	121.101	118.914	114.219	110.150	106.831	104.221	102.295
12/5/2006	12/5/2016	12/5/2011	4.26	122.032	122.032	119.821	115.071	110.928	107.512	104.799	102.750
12/6/2006	12/6/2013	12/6/2011	4.40	109.374	109.374	109.374	107.947	105.849	103.961	102.392	101.190
12/8/2006	12/8/2016	12/8/2011	3.99	120.669	120.669	118.477	113.804	109.770	106.489	103.925	102.053
12/12/2006	12/12/2016	12/12/2011	3.99	120.713	120.713	118.499	113.818	109.777	106.491	103.921	102.043
12/12/2006	12/12/2016	12/12/2011	4.05	121.025	121.025	118.803	114.102	110.033	106.717	104.110	102.193
12/19/2006	12/19/2011	12/19/2011	4.49	100.611	100.611	100.611	100.596	100.462	100.327	100.193	100.059
12/19/2006	12/19/2016	12/19/2011	4.19	121.833	121.833	119.556	114.794	110.653	107.250	104.552	102.530
12/20/2006	12/20/2013	12/20/2011	4.50	109.762	109.762	109.762	108.294	106.152	104.213	102.583	101.320
12/21/2006	12/21/2011	12/21/2011	4.53	100.642	100.642	100.642	100.626	100.486	100.346	100.207	100.068
12/27/2006	12/27/2013	12/27/2011	4.50	109.849	109.849	109.849	108.362	106.200	104.242	102.596	101.318
12/28/2006	12/28/2016	12/28/2011	4.25	122.252	122.252	119.920	115.117	110.935	107.483	104.736	102.658
12/28/2006	12/28/2016	12/28/2011	4.40	123.037	123.037	120.686	115.838	111.598	108.067	105.234	103.053
1/8/2007	1/9/2012	1/9/2012	4.75	100.924	100.924	100.924	100.901	100.709	100.518	100.328	100.138
1/12/2007	1/12/2017	1/12/2012	4.42	123.326	123.326	120.892	116.021	111.764	108.221	105.381	103.192
1/16/2007	1/17/2017	1/17/2012	4.79	125.346	125.346	122.840	117.850	113.440	109.710	106.649	104.208
1/23/2007	1/23/2014	1/23/2012	4.49	110.164	110.164	110.164	108.601	106.370	104.359	102.677	101.378

Start Date	Maturity	Next Call	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Date									
1/23/2007	1/23/2017	1/23/2012	4.46	123.674	123.674	121.169	116.263	111.971	108.389	105.508	103.274
1/29/2007	1/29/2014	1/29/2012	4.79	110.923	110.923	110.923	109.337	107.035	104.794	102.610	100.484
2/2/2007	2/2/2017	11/2/2011	4.69	125.025	125.025	122.150	116.554	111.183	106.100	101.629	99.537
2/9/2007	2/9/2012	11/9/2011	4.75	101.333	101.333	101.333	101.292	101.015	100.739	100.465	100.192
2/9/2007	2/9/2017	11/9/2011	4.47	123.938	123.938	121.340	116.408	112.098	108.504	105.616	103.376
2/12/2007	2/13/2012	11/14/2011	4.88	101.423	101.423	101.423	101.379	101.091	100.803	100.518	100.234
2/15/2007	2/15/2012	11/15/2011	4.99	101.483	101.483	101.483	101.438	101.143	100.850	100.558	100.269
2/20/2007	2/21/2017	11/21/2011	4.39	123.656	123.656	120.998	116.067	111.765	108.193	105.335	103.133
2/20/2007	2/21/2017	2/21/2012	4.85	126.135	126.135	123.126	117.451	112.006	107.070	103.379	101.284
2/23/2007	2/23/2017	11/23/2011	4.25	122.925	122.925	120.276	115.386	111.139	107.638	104.854	102.750
2/23/2007	2/23/2017	11/23/2011	4.35	123.464	123.464	120.801	115.877	111.587	108.031	105.192	103.015
3/2/2007	3/2/2012	12/2/2011	4.49	101.534	101.534	101.534	101.474	101.134	100.796	100.460	100.161
3/16/2007	3/16/2017	12/16/2011	4.09	122.300	122.300	119.564	114.697	110.501	107.077	104.381	102.382
3/20/2007	3/20/2012	12/30/2011	4.55	101.782	101.782	101.782	101.700	101.311	100.924	100.541	100.161
3/21/2007	3/21/2017	12/21/2011	4.22	123.068	123.068	120.280	115.357	111.094	107.588	104.808	102.711
3/23/2007	3/23/2017	12/23/2011	4.29	123.474	123.474	120.663	115.712	111.416	107.868	105.041	102.891
3/23/2007	3/23/2017	12/23/2011	4.29	123.474	123.474	120.663	115.712	111.416	107.868	105.041	102.891
3/30/2007	3/30/2012	12/30/2011	4.67	101.959	101.959	101.959	101.864	101.448	101.035	100.625	100.219
4/2/2007	4/2/2012	1/3/2012	4.59	101.963	101.963	101.963	101.865	101.440	101.019	100.608	100.252
4/9/2007	4/10/2017	1/9/2012	4.15	122.916	122.916	120.030	115.106	110.860	107.388	104.649	102.606
4/12/2007	4/12/2017	1/12/2012	4.25	123.492	123.492	120.575	115.611	111.316	107.781	104.979	102.859
4/13/2007	4/13/2017	1/13/2012	4.45	124.609	124.609	121.653	116.618	112.235	108.588	105.663	103.392
4/23/2007	4/23/2012	1/23/2012	4.65	102.260	102.260	102.260	102.133	101.650	101.171	100.697	100.227
4/23/2007	4/23/2014	1/23/2012	4.62	111.614	111.614	111.614	109.785	107.303	105.084	103.218	101.767
4/27/2007	4/27/2012	1/27/2012	4.55	102.262	102.262	102.262	102.130	101.636	101.146	100.671	100.260
4/27/2007	4/27/2017	1/27/2012	4.25	123.669	123.669	120.658	115.666	111.344	107.786	104.958	102.816
5/2/2007	5/2/2014	2/2/2012	4.59	111.653	111.653	111.653	109.798	107.299	105.078	103.224	101.794
5/4/2007	5/5/2014	11/4/2011	4.55	111.589	111.589	111.589	109.725	107.222	105.000	103.150	101.727
5/18/2007	5/18/2017	11/18/2011	4.19	123.579	123.579	120.457	115.462	111.150	107.614	104.815	102.711
5/22/2007	5/22/2012	11/22/2011	4.69	102.658	102.658	102.658	102.492	101.930	101.373	100.837	100.358
5/22/2007	5/22/2012	11/22/2011	4.69	102.658	102.658	102.658	102.492	101.930	101.373	100.837	100.358
5/22/2007	5/22/2017	5/22/2012	4.75	126.783	126.783	123.537	118.335	113.771	109.924	106.775	104.258
5/25/2007	5/25/2012	11/25/2011	4.65	102.674	102.674	102.674	102.504	101.934	101.369	100.826	100.340
5/29/2007	5/30/2017	11/29/2011	4.25	124.058	124.058	120.850	115.813	111.457	107.867	105.014	102.848
6/1/2007	6/1/2012	12/1/2011	5.23	103.109	103.109	103.109	102.930	102.339	101.755	101.177	100.606
6/1/2007	6/2/2014	12/1/2011	4.50	111.812	111.812	111.812	109.862	107.292	105.023	103.147	101.709
6/7/2007	6/7/2017	12/7/2011	4.82	127.392	127.392	124.042	118.796	114.191	110.309	107.118	104.578
6/8/2007	6/9/2014	12/8/2011	4.73	112.508	112.508	112.508	110.529	107.920	105.592	103.637	102.100
6/8/2007	6/8/2017	12/8/2011	4.49	125.529	125.529	122.230	117.096	112.632	108.915	105.926	103.596
6/11/2007	6/12/2017	12/12/2011	4.49	125.579	125.579	122.254	117.112	112.642	108.919	105.926	103.591
6/15/2007	6/16/2014	12/15/2011	5.55	114.784	114.784	114.784	112.762	110.032	107.384	104.814	102.320
6/18/2007	6/19/2017	12/19/2011	4.50	125.723	125.723	122.353	117.191	112.704	108.964	105.953	103.600
6/18/2007	6/19/2017	12/19/2011	4.84	127.667	127.667	124.234	118.956	114.320	110.409	107.186	104.615
6/19/2007	6/19/2017	12/19/2011	4.65	126.581	126.581	123.181	117.966	113.411	109.591	106.487	104.029
6/20/2007	6/20/2012	12/20/2011	4.89	103.165	103.165	103.165	102.960	102.316	101.681	101.069	100.520
6/22/2007	6/22/2017	12/22/2011	4.50	125.761	125.761	122.371	117.202	112.708	108.962	105.944	103.587
6/26/2007	6/26/2012	12/27/2011	5.13	103.406	103.406	103.406	103.192	102.531	101.879	101.243	100.664
6/28/2007	6/28/2017	12/28/2011	4.50	125.836	125.836	122.409	117.225	112.720	108.964	105.938	103.572
7/13/2007	7/13/2012	1/13/2012	4.69	103.335	103.335	103.335	103.097	102.391	101.696	101.037	100.482
7/13/2007	7/13/2017	1/13/2012	4.90	128.337	128.337	124.742	119.405	114.717	110.758	107.487	104.876
7/13/2007	7/13/2017	1/13/2012	4.29	124.809	124.809	121.336	116.219	111.803	108.166	105.275	103.074
7/18/2007	7/18/2017	1/18/2012	4.78	127.709	127.709	124.102	118.796	114.148	110.238	107.030	104.474
7/19/2007	7/19/2012	1/19/2012	4.89	103.559	103.559	103.559	103.312	102.589	101.877	101.194	100.597
7/20/2007	7/20/2017	1/20/2012	4.29	124.892	124.892	121.373	116.243	111.815	108.167	105.264	103.054
7/23/2007	7/23/2012	1/23/2012	5.05	103.731	103.731	103.731	103.479	102.744	102.021	101.321	100.698
7/27/2007	7/27/2012	1/27/2012	4.59	103.442	103.442	103.442	103.184	102.440	101.708	101.021	100.446
7/27/2007	7/28/2014	1/27/2012	4.35	112.095	112.095	112.095	109.962	107.261	104.898	102.967	101.508
7/27/2007	7/27/2017	1/27/2012	4.25	124.743	124.743	121.187	116.059	111.637	108.002	105.115	102.924
7/30/2007	1/30/2019	1/30/2012	3.99	129.347	128.137	122.341	116.632	111.833	107.966	104.944	102.709
7/31/2007	7/31/2017	1/31/2012	3.99	123.273	123.273	119.763	114.740	110.444	106.957	104.223	102.217
7/31/2007	7/31/2017	1/31/2012	3.99	123.273	123.273	119.763	114.740	110.444	106.957	104.223	102.217
7/31/2007	7/31/2017	1/31/2012	4.06	123.682	123.682	120.154	115.101	110.770	107.240	104.462	102.406
8/2/2007	8/4/2014	2/2/2012	4.49	112.571	112.571	112.571	110.411	107.685	105.298	103.331	101.833
8/2/2007	8/2/2017	2/2/2012	4.15	124.230	124.230	120.672	115.589	111.225	107.664	104.861	102.767
8/2/2007	8/2/2017	2/2/2012	4.05	123.646	123.646	120.113	115.071	110.757	107.257	104.517	102.497
8/6/2007	8/6/2012	11/7/2011	4.49	103.492	103.492	103.492	103.219	102.448	101.693	100.996	100.423
8/9/2007	8/11/2014	11/9/2011	4.86	113.702	113.702	113.702	111.506	108.726	106.247	104.159	102.498
8/9/2007	8/9/2017	11/9/2011	3.99	123.373	123.373	119.809	114.780	110.486	107.011	104.296	102.309
8/13/2007	8/13/2012	11/14/2011	4.59	103.659	103.659	103.659	103.375	102.585	101.810	101.089	100.485

Start Date	Maturity	Next Call	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Date									
8/16/2007	8/16/2017	11/16/2011	3.99	123.451	123.451	119.841	114.799	110.493	107.007	104.279	102.281
8/17/2007	8/17/2012	11/17/2011	4.35	103.516	103.516	103.516	103.226	102.426	101.644	100.927	100.343
8/17/2007	8/17/2012	11/17/2011	4.15	103.354	103.354	103.354	103.064	102.265	101.487	100.781	100.228
8/17/2007	8/17/2017	11/17/2011	4.00	123.521	123.521	119.902	114.854	110.542	107.047	104.311	102.303
8/20/2007	8/20/2014	8/20/2012	4.25	112.088	112.088	112.088	109.872	107.090	104.654	102.656	101.102
8/24/2007	8/24/2012	11/25/2011	4.05	103.352	103.352	103.352	103.051	102.233	101.439	100.721	100.193
8/28/2007	8/28/2014	11/28/2011	4.35	112.469	112.469	112.469	110.228	107.451	105.031	103.051	101.550
8/30/2007	8/30/2012	11/30/2011	4.39	103.707	103.707	103.707	103.396	102.561	101.744	100.993	100.370
8/30/2007	9/2/2014	11/30/2011	3.89	111.205	111.205	111.205	108.961	106.235	103.927	102.136	100.859
8/31/2007	8/31/2012	11/30/2011	4.37	103.702	103.702	103.702	103.390	102.552	101.733	100.980	100.359
9/4/2007	9/4/2012	12/5/2011	4.22	103.622	103.622	103.622	103.303	102.455	101.632	100.890	100.325
9/4/2007	9/5/2017	12/5/2011	3.89	123.079	123.079	119.387	114.367	110.103	106.674	104.015	102.090
9/7/2007	9/7/2012	12/7/2011	4.09	103.544	103.544	103.544	103.221	102.365	101.537	100.797	100.254
9/10/2007	9/11/2017	12/12/2011	3.69	121.954	121.954	118.285	113.345	109.188	105.874	103.363	101.573
9/11/2007	9/11/2017	12/12/2011	3.59	121.359	121.359	117.721	112.829	108.732	105.486	103.059	101.348
9/12/2007	9/12/2014	12/12/2011	3.69	110.731	110.731	110.731	108.459	105.747	103.504	101.810	100.679
9/13/2007	9/15/2014	12/13/2011	3.99	111.637	111.637	111.637	109.342	106.577	104.228	102.387	101.056
9/13/2007	9/13/2017	12/13/2011	3.99	123.761	123.761	119.988	114.907	110.575	107.072	104.333	102.323
9/14/2007	9/14/2012	12/14/2011	4.39	103.890	103.890	103.890	103.555	102.677	101.823	101.045	100.426
9/17/2007	9/17/2012	12/19/2011	4.22	103.774	103.774	103.774	103.434	102.549	101.691	100.918	100.329
9/27/2007	9/29/2014	9/27/2010	4.49	113.270	113.270	113.270	110.894	107.903	105.011	102.212	99.503
9/27/2007	9/27/2017	12/27/2011	3.65	121.878	121.878	118.125	113.171	109.013	105.701	103.202	101.421
9/28/2007	9/28/2012	12/28/2011	3.85	103.561	103.561	103.561	103.203	102.290	101.412	100.645	100.120
10/3/2007	10/3/2012	1/3/2012	3.83	103.596	103.596	103.596	103.229	102.303	101.419	100.664	100.146
10/9/2007	10/9/2012	10/9/2009	4.40	104.204	104.204	104.204	103.826	102.880	101.951	101.038	100.142
10/11/2007	10/14/2014	1/11/2012	4.18	112.528	112.528	112.528	110.116	107.259	104.810	102.855	101.409
10/11/2007	10/11/2017	1/11/2012	3.99	124.071	124.071	120.131	115.012	110.655	107.131	104.380	102.364
10/15/2007	10/16/2017	1/17/2012	3.99	124.127	124.127	120.153	115.026	110.662	107.133	104.374	102.350
10/22/2007	10/22/2012	1/23/2012	3.99	103.957	103.957	103.957	103.556	102.577	101.640	100.818	100.222
10/25/2007	10/27/2014	1/25/2012	4.36	113.225	113.225	113.225	110.754	107.838	105.315	103.255	101.700
10/26/2007	10/26/2017	1/26/2012	3.39	120.593	120.593	116.763	111.914	107.893	104.764	102.482	100.957
10/29/2007	10/29/2012	1/30/2012	3.99	104.034	104.034	104.034	103.621	102.624	101.668	100.829	100.218
11/2/2007	11/3/2014	2/2/2012	3.99	112.180	112.180	112.180	109.698	106.831	104.411	102.523	101.156
11/2/2007	11/3/2014	2/2/2012	4.19	112.790	112.790	112.790	110.300	107.402	104.923	102.947	101.487
11/5/2007	11/5/2014	11/7/2011	3.99	112.202	112.202	112.202	109.712	106.840	104.415	102.520	101.146
11/5/2007	11/6/2017	11/5/2012	4.39	126.802	126.802	122.579	117.258	112.675	108.884	105.824	103.360
11/6/2007	11/6/2017	11/7/2011	3.48	121.246	121.246	117.327	112.430	108.358	105.167	102.816	101.200
11/9/2007	11/10/2014	11/9/2011	4.33	113.302	113.302	113.302	110.776	107.838	105.309	103.257	101.718
11/13/2007	11/14/2011	11/14/2011	3.76	100.146	100.146	100.146	100.142	100.103	100.064	100.025	99.987
11/13/2007	11/13/2012	11/14/2011	3.68	103.874	103.874	103.874	103.433	102.394	101.417	100.611	100.126
11/13/2007	11/13/2014	11/14/2011	3.35	110.319	110.319	110.319	107.830	105.063	102.861	101.281	100.328
11/19/2007	11/19/2014	11/21/2011	4.27	113.224	113.224	113.224	110.662	107.711	105.173	103.123	101.586
11/19/2007	11/19/2014	11/21/2011	3.75	111.614	111.614	111.614	109.077	106.211	103.838	102.036	100.784
11/19/2007	11/19/2014	11/21/2011	3.75	111.614	111.614	111.614	109.077	106.211	103.838	102.036	100.784
11/19/2007	11/20/2017	11/19/2012	4.29	126.358	126.358	121.204	114.911	109.553	105.696	102.968	101.014
11/20/2007	11/20/2017	11/21/2011	3.74	122.979	122.979	118.871	113.819	109.564	106.162	103.562	101.695
11/23/2007	11/24/2017	11/23/2011	3.99	124.559	124.559	119.387	113.045	107.035	101.934	100.057	99.993
11/23/2007	11/24/2017	11/23/2011	3.99	124.559	124.559	119.387	113.045	107.035	101.934	100.057	99.993
11/29/2007	11/29/2017	11/29/2011	2.95	118.198	118.198	114.380	109.756	106.016	103.227	101.317	100.267
11/30/2007	11/30/2017	11/30/2011	3.19	119.688	119.688	115.747	110.982	107.069	104.084	101.950	100.570
12/7/2007	12/7/2012	12/7/2011	3.45	103.862	103.862	103.862	103.375	102.271	101.256	100.472	100.032
12/10/2007	12/11/2017	12/12/2011	3.45	121.398	121.398	117.290	112.367	108.282	105.088	102.744	101.135
12/11/2007	12/11/2012	12/12/2011	3.76	104.251	104.251	104.251	103.755	102.636	101.588	100.719	100.149
12/20/2007	12/20/2012	12/21/2009	3.75	104.333	104.333	104.333	103.819	102.672	101.543	100.432	99.338
12/20/2007	12/20/2012	12/20/2011	3.60	104.160	104.160	104.160	103.646	102.505	101.445	100.593	100.063
12/24/2007	12/26/2017	12/24/2012	3.99	124.914	124.914	119.463	113.235	108.222	104.625	102.130	100.339
12/26/2007	12/26/2012	12/27/2011	3.96	104.642	104.642	104.642	104.114	102.952	101.853	100.920	100.267
12/26/2007	12/26/2012	12/27/2011	3.46	104.056	104.056	104.056	103.530	102.374	101.311	100.488	100.009
1/2/2008	1/2/2013	1/3/2012	3.49	104.159	104.159	104.159	103.618	102.445	101.374	100.549	100.048
1/3/2008	1/5/2015	1/3/2012	3.65	111.781	111.781	111.781	109.048	106.123	103.738	101.957	100.771
1/4/2008	1/4/2018	1/4/2012	3.36	121.064	121.064	116.867	111.965	107.926	104.798	102.530	101.028
1/7/2008	1/7/2013	1/9/2012	2.99	103.604	103.604	103.604	103.054	101.880	100.870	100.192	99.837
1/7/2008	1/7/2013	1/9/2012	3.59	104.328	104.328	104.328	103.776	102.588	101.495	100.627	100.078
1/7/2008	1/7/2015	1/9/2012	3.49	111.283	111.283	111.283	108.554	105.658	103.335	101.631	100.546
1/7/2008	1/8/2018	1/9/2012	2.59	116.265	116.265	112.471	108.051	104.596	102.168	100.697	99.948
1/8/2008	1/8/2013	1/9/2012	3.15	103.806	103.806	103.806	103.253	102.072	101.030	100.305	99.900
1/8/2008	1/8/2018	1/9/2012	2.57	116.139	116.139	112.357	107.953	104.513	102.109	100.661	99.932
1/8/2008	1/8/2018	1/9/2012	2.64	116.579	116.579	112.751	108.296	104.799	102.315	100.784	99.987
1/11/2008	1/11/2018	1/11/2012	2.72	117.104	117.104	113.208	108.694	105.126	102.556	100.920	100.041

Start Date	Maturity	Next Call	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Date									
1/14/2008	1/16/2018	1/17/2012	3.24	120.419	120.419	116.203	111.357	107.381	104.341	102.165	100.770
1/16/2008	1/16/2013	1/17/2012	2.55	103.138	103.138	103.138	102.569	101.392	100.462	99.965	99.690
1/16/2008	1/16/2015	1/17/2012	2.64	108.601	108.601	108.601	105.914	103.273	101.406	100.311	99.790
1/16/2008	1/16/2018	1/17/2012	2.38	114.999	114.999	111.302	107.034	103.760	101.564	100.316	99.748
1/17/2008	1/17/2018	1/17/2012	2.25	114.186	114.186	110.583	106.414	103.273	101.222	100.128	99.663
1/18/2008	1/18/2013	1/18/2012	2.55	103.152	103.152	103.152	102.579	101.396	100.463	99.963	99.686
1/18/2008	1/20/2015	1/18/2012	2.35	107.682	107.682	107.682	105.020	102.515	100.863	100.031	99.661
1/18/2008	1/18/2018	1/18/2012	2.29	114.444	114.444	110.804	106.603	103.419	101.321	100.179	99.681
1/24/2008	1/24/2012	10/24/2011	2.44	100.576	100.576	100.576	100.547	100.315	100.085	99.856	99.627
1/24/2008	1/24/2013	1/24/2012	2.50	103.132	103.132	103.132	102.546	101.351	100.425	99.931	99.649
1/25/2008	1/25/2013	1/26/2009	2.25	102.825	102.825	102.825	102.237	101.004	99.792	98.599	97.426
1/25/2008	1/25/2013	1/25/2012	2.65	103.327	103.327	103.327	102.738	101.502	100.286	99.090	97.914
1/28/2008	1/28/2013	1/28/2012	2.99	103.779	103.779	103.779	103.183	101.935	100.709	99.503	98.316
1/30/2008	1/30/2013	1/30/2012	2.67	103.389	103.389	103.389	102.790	101.569	100.574	99.999	99.673
2/7/2008	2/7/2013	11/7/2011	2.49	103.216	103.216	103.216	102.599	101.374	100.442	100.019	99.969
2/13/2008	2/13/2013	11/14/2011	2.92	103.820	103.820	103.820	103.188	101.920	100.857	100.168	99.954
2/14/2008	2/14/2018	2/14/2012	3.19	120.361	120.361	114.521	108.115	103.029	100.708	100.065	99.743
2/19/2008	2/19/2013	2/19/2010	2.59	103.431	103.431	103.431	102.786	101.478	100.192	98.928	97.686
2/25/2008	2/25/2013	11/25/2011	3.09	104.145	104.145	104.145	103.485	102.154	100.846	99.561	98.298
2/25/2008	2/26/2018	11/25/2011	2.42	115.527	115.527	111.595	107.268	103.929	101.666	100.346	99.884
3/7/2008	3/9/2015	12/7/2011	2.89	109.833	109.833	109.833	106.887	104.084	102.006	100.678	100.035
3/7/2008	3/7/2018	3/7/2013	3.55	122.866	122.866	118.210	113.140	108.918	105.535	102.843	100.630
3/10/2008	3/11/2013	12/12/2011	2.39	103.299	103.299	103.299	102.609	101.318	100.375	99.959	99.806
3/12/2008	3/12/2013	12/12/2011	2.01	102.780	102.780	102.780	102.090	100.852	100.105	99.879	99.761
3/14/2008	3/14/2018	12/14/2011	2.40	115.505	115.505	111.525	107.203	103.885	101.649	100.377	99.874
3/17/2008	3/18/2013	12/19/2011	2.69	103.766	103.766	103.766	103.057	101.720	100.655	100.049	99.822
3/17/2008	3/17/2015	12/17/2011	2.62	108.973	108.973	108.973	105.850	102.487	99.248	96.130	93.126
3/17/2008	3/19/2018	3/18/2013	3.30	121.366	121.366	116.763	111.818	107.746	104.534	101.974	99.881
3/28/2008	3/28/2013	12/28/2011	2.82	104.026	104.026	104.026	103.292	101.880	100.493	99.131	97.795
3/28/2008	3/28/2013	12/28/2011	2.80	103.997	103.997	103.997	103.264	101.851	100.465	99.104	97.767
3/28/2008	3/28/2018	12/28/2011	2.77	118.003	118.003	113.676	109.054	105.390	102.721	100.977	100.053
3/28/2008	3/28/2018	12/28/2011	2.02	113.128	113.128	109.419	105.400	102.470	100.698	99.950	99.684
4/14/2008	4/14/2015	1/14/2012	2.75	109.632	109.632	109.632	106.344	102.899	99.585	96.396	93.327
4/28/2008	4/28/2015	1/30/2012	3.25	111.509	111.509	111.509	108.273	105.264	102.913	101.251	100.239
4/28/2008	4/30/2018	1/30/2012	2.15	114.170	114.170	110.176	106.035	102.953	100.988	100.006	99.565
4/30/2008	4/30/2018	4/30/2013	3.74	124.651	124.651	118.116	112.010	107.342	104.075	101.604	99.617
5/2/2008	5/4/2015	2/2/2012	3.99	114.197	114.197	114.197	110.847	107.642	104.972	102.897	101.392
5/5/2008	5/5/2015	11/7/2011	3.17	111.288	111.288	111.288	108.032	105.056	102.760	101.171	100.281
5/8/2008	5/8/2015	11/8/2011	2.96	110.565	110.565	110.565	107.326	104.423	102.248	100.821	100.141
5/19/2008	5/19/2015	5/21/2012	4.70	116.919	116.919	116.919	113.335	109.671	106.213	103.163	100.563
5/23/2008	5/23/2013	11/23/2011	4.04	106.396	106.396	106.396	105.515	103.948	102.513	101.330	100.467
5/23/2008	5/23/2018	11/23/2011	3.27	121.762	121.736	116.793	111.803	107.712	104.570	102.309	100.814
5/27/2008	5/28/2013	5/27/2011	3.49	105.574	105.574	105.574	104.683	103.094	101.537	100.012	98.517
6/6/2008	6/6/2013	12/6/2011	3.99	106.472	106.472	106.472	105.554	103.934	102.346	100.791	99.266
6/10/2008	6/11/2012	6/10/2010	3.94	102.451	102.451	102.451	102.259	101.643	101.034	100.433	99.838
6/16/2008	6/17/2013	12/16/2011	4.07	106.726	106.726	106.726	105.779	104.126	102.507	100.921	99.367
6/24/2008	6/24/2015	12/27/2011	3.83	114.170	114.170	114.162	110.560	107.301	104.618	102.560	101.091
6/30/2008	7/1/2013	12/30/2011	2.92	104.939	104.939	104.939	103.963	102.362	101.071	100.244	99.857
6/30/2008	7/1/2013	12/30/2011	3.45	105.836	105.836	105.836	104.855	103.214	101.795	100.715	100.066
6/30/2008	6/30/2015	12/30/2011	3.37	112.524	112.524	112.514	108.948	105.819	103.363	101.584	100.470
6/30/2008	7/2/2018	12/30/2011	3.69	124.967	124.739	117.843	110.963	104.494	98.456	92.817	87.550
7/1/2008	7/1/2015	1/1/2012	4.60	117.108	117.108	117.095	113.255	109.480	105.854	102.370	99.022
7/7/2008	7/8/2013	1/7/2012	4.59	107.854	107.854	107.854	106.846	105.126	103.443	101.794	100.180
7/8/2008	7/8/2013	1/8/2012	4.25	107.272	107.272	107.272	106.266	104.552	102.873	101.230	99.620
7/10/2008	7/10/2014	7/10/2012	4.80	113.106	113.106	113.106	111.019	108.238	105.554	103.085	100.986
7/11/2008	7/11/2018	7/11/2012	3.75	125.467	125.183	118.253	111.445	106.074	102.879	101.057	99.928
7/14/2008	7/14/2015	7/15/2013	4.90	118.401	118.401	118.341	114.459	110.738	107.232	103.733	100.347
7/14/2008	7/16/2018	1/17/2012	2.50	117.012	116.767	112.342	107.859	104.389	101.993	100.566	99.859
7/14/2008	7/16/2018	1/17/2012	3.25	122.116	121.853	116.857	111.829	107.724	104.580	102.325	100.860
7/17/2008	7/17/2018	7/17/2013	3.75	125.529	125.207	118.310	112.286	107.687	104.323	101.691	99.509
7/21/2008	7/22/2013	1/23/2012	3.00	105.250	105.250	105.250	104.215	102.482	100.949	100.131	99.779
8/15/2008	8/15/2018	11/15/2011	3.83	126.383	125.988	120.576	115.163	110.623	106.995	104.192	102.164
8/19/2008	8/19/2013	8/19/2010	3.44	106.287	106.287	106.287	105.173	103.356	101.579	99.841	98.141
9/8/2008	9/9/2013	12/8/2011	2.89	105.450	105.450	105.450	104.287	102.531	101.151	100.287	99.921
5/13/2009	5/13/2014	5/13/2013	4.00	110.277	110.277	110.277	108.390	105.714	102.800	99.565	96.409
9/28/2009	9/30/2013	9/28/2012	2.92	105.677	105.677	105.677	104.249	101.780	99.597	97.915	96.665
5/11/2010	5/11/2015	5/11/2015	3.70	113.237	113.237	113.237	109.623	105.529	100.972	96.063	90.941
5/24/2010	5/26/2015	11/24/2011	2.25	108.143	108.143	108.143	104.627	101.104	97.719	94.465	92.117
6/15/2010	6/15/2015	12/15/2011	2.28	108.378	108.378	108.373	104.738	101.161	98.798	97.726	94.425