

## **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	2/28/2011	6.580	108.298	108.298	108.298	107.566	106.292	105.044	103.833	102.695
4/8/1998	4/8/2013	1/10/2011	5.490	113.114	113.114	113.114	111.091	108.677	106.408	104.380	102.679
8/19/1998	8/19/2013	2/22/2011	5.490	115.143	115.143	115.143	112.566	109.787	107.210	104.933	103.039
8/19/1998	8/19/2013	2/22/2011	5.490	115.143	115.143	115.143	112.566	109.787	107.210	104.933	103.039
8/25/1998	8/19/2013	1/25/2011	5.490	115.143	115.143	115.143	112.566	109.786	107.208	104.927	103.030
8/27/1998	8/19/2013	1/27/2011	5.490	115.143	115.143	115.143	112.566	109.786	107.207	104.925	103.025
9/30/1998	9/30/2013	12/30/2010	5.220	115.007	115.007	115.007	112.248	109.376	106.747	104.464	102.600
12/14/1998	12/16/2013	12/14/2010	5.390	116.648	116.648	116.608	113.512	110.426	107.610	105.163	103.158
12/14/1998	12/16/2013	12/14/2010	4.890	115.104	115.104	115.064	111.989	108.952	106.230	103.936	102.143
12/15/1998	12/16/2013	12/15/2010	4.880	115.073	115.073	115.033	111.958	108.922	106.202	103.910	102.121
1/7/2000	1/7/2015	1/7/2011	5.950	124.774	124.774	123.240	118.919	114.888	111.282	108.154	105.532
12/5/2000	12/6/2010	12/6/2010	5.410	100.090	100.090	100.090	100.086	100.070	100.054	100.038	100.022
12/11/2000	12/13/2010	12/13/2010	5.170	100.187	100.187	100.187	100.178	100.143	100.108	100.073	100.038
12/12/2000	12/13/2010	12/13/2010	5.110	100.185	100.185	100.185	100.176	100.141	100.106	100.071	100.036
12/15/2000	12/15/2010	12/15/2010	5.120	100.213	100.213	100.213	100.204	100.163	100.123	100.082	100.042
12/20/2000	12/20/2010	12/20/2010	4.950	100.275	100.275	100.275	100.262	100.208	100.154	100.100	100.047
12/21/2000	12/21/2010	12/21/2010	4.860	100.283	100.283	100.283	100.270	100.213	100.157	100.100	100.044
1/11/2001	1/11/2011	1/11/2011	5.370	100.626	100.626	100.626	100.599	100.485	100.372	100.259	100.147
1/12/2001	1/12/2011	1/12/2011	5.300	100.633	100.633	100.633	100.604	100.488	100.373	100.257	100.142
2/5/2001	2/7/2011	2/7/2011	4.820	100.924	100.924	100.924	100.875	100.687	100.499	100.313	100.126
2/7/2001	2/7/2011	2/7/2011	4.820	100.924	100.924	100.924	100.875	100.687	100.499	100.313	100.126
2/26/2001	2/28/2011	2/28/2011	5.060	101.265	101.265	101.265	101.197	100.946	100.696	100.447	100.200
2/26/2001	2/28/2011	2/28/2011	5.450	101.362	101.362	101.362	101.294	101.043	100.793	100.544	100.297
2/26/2001	2/28/2011	2/28/2011	4.790	101.197	101.197	101.197	101.129	100.878	100.629	100.380	100.133
2/27/2001	2/28/2011	2/28/2011	5.020	101.255	101.255	101.255	101.187	100.936	100.686	100.437	100.190
2/27/2001	2/28/2011	2/28/2011	4.760	101.190	101.190	101.190	101.122	100.871	100.621	100.373	100.125
3/1/2001	3/1/2011	12/1/2010	5.270	101.332	101.332	101.332	101.263	101.009	100.756	100.505	100.255
3/14/2001	3/14/2011	12/14/2010	4.860	101.404	101.404	101.404	101.321	101.032	100.745	100.459	100.175
4/23/2001	4/25/2011	4/24/2006	5.350	102.170	102.170	102.170	102.036	101.630	101.228	100.829	100.433
6/1/2001	6/1/2011	3/1/2011	4.990	102.536	102.536	102.536	102.348	101.842	101.341	100.848	100.388
12/13/2001	12/13/2011	12/13/2010	4.920	105.166	105.166	105.166	104.634	103.590	102.570	101.604	100.771
6/3/2002	6/4/2012	12/3/2010	4.490	106.884	106.884	106.884	105.910	104.378	102.875	101.402	99.957
6/4/2002	6/4/2012	12/6/2010	4.490	106.884	106.884	106.884	105.910	104.378	102.875	101.402	99.957
12/5/2002	12/5/2012	12/6/2010	3.790	107.748	107.748	107.748	106.201	104.167	102.183	100.246	98.356
3/6/2003	3/6/2013	12/6/2010	2.990	106.868	106.868	106.868	105.014	102.889	101.234	100.228	99.981
2/5/2004	12/14/2010	12/14/2010	5.820	100.226	100.226	100.226	100.217	100.179	100.142	100.104	100.066
6/18/2004	6/20/2011	12/20/2010	4.120	102.312	102.312	102.312	102.093	101.535	100.984	100.438	99.899
7/2/2004	7/2/2014	1/3/2011	3.990	114.518	114.518	113.901	110.172	106.543	103.056	99.704	96.482
12/13/2004	12/15/2014	12/13/2010	3.320	113.611	113.611	112.280	108.453	105.197	102.689	100.986	100.142
9/1/2005	9/1/2015	12/1/2010	4.130	119.914	119.914	116.918	111.950	107.188	102.662	98.358	96.089
9/19/2005	9/19/2012	12/20/2010	3.820	106.992	106.992	106.992	105.690	103.889	102.263	100.987	100.194
9/26/2005	9/26/2012	12/27/2010	3.890	107.196	107.196	107.196	105.870	104.047	102.393	101.078	100.229
9/30/2005	9/30/2015	12/30/2010	4.440	121.767	121.767	118.565	113.480	108.608	103.980	99.582	97.063
10/26/2005	10/26/2015	1/26/2011	4.540	122.585	122.585	119.208	114.038	109.087	104.388	99.924	97.300
10/28/2005	10/28/2015	1/28/2011	4.310	121.465	121.465	118.285	113.629	109.577	106.222	103.588	101.673
10/28/2005	10/28/2015	1/28/2011	4.140	120.618	120.618	117.462	112.858	108.878	105.620	103.101	101.315
11/21/2005	11/21/2012	2/22/2011	4.290	108.603	108.603	108.603	107.097	105.109	103.280	101.752	100.646
1/6/2006	1/6/2016	1/6/2011	4.020	120.802	120.802	117.238	112.569	108.576	105.347	102.894	101.187
1/17/2006	1/19/2016	1/18/2011	4.080	121.260	121.260	117.599	112.884	108.843	105.561	103.048	101.279
3/20/2006	3/21/2011	12/21/2010	4.760	101.468	101.468	101.468	101.378	101.070	100.764	100.460	100.158
4/11/2006	4/11/2011	1/11/2011	4.980	101.826	101.826	101.826	101.711	101.345	100.982	100.621	100.272
4/19/2006	4/19/2013	1/19/2011	4.630	111.201	111.201	111.201	109.154	106.750	104.555	102.699	101.279
4/24/2006	4/25/2016	1/24/2011	4.440	124.332	124.332	119.958	114.952	110.627	107.049	104.225	102.129
4/28/2006	4/28/2011	1/28/2011	5.090	102.107	102.107	102.107	101.969	101.555	101.145	100.738	100.335
5/5/2006	5/6/2013	2/7/2011	4.780	111.790	111.790	111.790	109.678	107.221	104.972	103.055	101.567
5/5/2006	5/5/2016	2/7/2011	4.980	127.430	127.430	122.891	117.685	113.118	109.254	106.090	103.618
5/5/2006	5/5/2016	2/7/2011	4.350	123.960	123.960	119.547	114.565	110.281	106.758	104.000	101.986
5/5/2006	5/5/2016	2/7/2011	4.530	124.951	124.951	120.499	115.449	111.078	107.452	104.571	102.423
5/9/2006	5/9/2011	2/9/2011	5.050	102.244	102.244	102.244	102.090	101.647	101.207	100.772	100.363
5/15/2006	5/16/2016	2/15/2011	4.350	124.093	124.093	119.604	114.601	110.299	106.759	103.988	101.960
5/15/2006	5/16/2016	2/15/2011	4.520	125.034	125.034	120.508	115.439	111.055	107.417	104.528	102.374
5/19/2006	5/19/2016	2/22/2011	4.510	125.016	125.016	120.472	115.400	111.015	107.377	104.489	102.337
6/12/2006	6/13/2016	12/13/2010	4.620	125.947	125.925	121.208	116.055	111.592	107.876	104.906	102.661
6/26/2006	6/27/2016	12/27/2010	4.730	126.749	126.703	121.877	116.654	112.117	108.320	105.260	102.912
6/28/2006	6/28/2013	12/28/2010	4.950	112.938	112.938	112.938	110.606	107.995	105.598	103.537	101.898
6/30/2006	7/1/2013	12/30/2010	4.890	112.822	112.822	112.822	110.478	107.866	105.475	103.428	101.807
7/14/2006	7/15/2013	1/14/2011	4.890	113.012	113.012	113.012	110.607	107.958	105.541	103.478	101.853
7/19/2006	7/19/2011	1/19/2011	5.250	103.369	103.369	103.369	103.101	102.462	101.831	101.212	100.630
7/20/2006	7/20/2011	1/20/2011	5.300	103.415	103.415	103.415	103.146	102.504	101.871	101.244	100.626

Start Date	Maturity	Next Call	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Date									
7/24/2006	7/25/2016	1/24/2011	4.660	126.716	126.624	121.659	116.419	111.882	108.100	105.069	102.763
7/28/2006	7/28/2016	1/28/2011	4.490	125.778	125.682	120.742	115.562	111.103	107.414	104.494	102.316
8/1/2006	8/1/2016	2/1/2011	4.890	128.129	128.026	122.977	117.646	113.004	109.106	105.937	103.481
8/11/2006	8/11/2011	2/11/2011	4.790	103.379	103.379	103.379	103.075	102.374	101.684	101.014	100.434
8/21/2006	8/21/2013	2/22/2011	4.750	113.128	113.128	113.128	110.561	107.771	105.068	102.448	99.908
8/25/2006	8/25/2016	2/25/2011	4.350	125.313	125.170	120.123	114.961	110.543	106.916	104.079	101.998
8/28/2006	8/29/2011	2/28/2011	4.890	103.694	103.694	103.694	103.359	102.610	101.871	101.143	100.426
9/22/2006	9/22/2011	12/22/2010	4.790	103.938	103.938	103.938	103.561	102.745	101.943	101.169	100.500
9/29/2006	9/29/2011	12/29/2010	4.590	103.863	103.863	103.863	103.474	102.639	101.819	101.037	100.381
10/10/2006	10/10/2013	1/10/2011	4.250	112.336	112.336	112.336	109.568	106.765	104.318	102.362	100.954
10/12/2006	10/15/2013	1/12/2011	4.500	113.124	113.124	113.124	110.325	107.480	104.961	102.894	101.354
10/30/2006	10/31/2011	1/30/2011	4.850	104.513	104.513	104.513	104.068	103.146	102.239	101.349	100.474
11/3/2006	11/3/2011	2/3/2011	4.690	104.403	104.403	104.403	103.953	103.023	102.109	101.212	100.330
11/6/2006	11/6/2013	2/7/2011	4.290	112.774	112.774	112.774	109.887	107.015	104.512	102.507	101.061
11/10/2006	11/13/2012	2/10/2011	4.390	108.706	108.706	108.706	107.225	105.255	103.436	101.902	100.762
11/17/2006	11/18/2013	2/17/2011	4.350	113.098	113.098	113.098	110.154	107.242	104.695	102.640	101.145
11/24/2006	11/25/2016	2/24/2011	4.190	125.453	125.156	119.674	114.447	110.023	106.436	103.668	101.681
11/30/2006	12/2/2013	2/28/2011	4.350	113.267	113.267	113.262	110.245	107.182	104.222	101.360	99.138
12/1/2006	12/1/2016	3/1/2011	4.090	124.913	124.602	119.146	113.968	109.607	106.103	103.425	101.545
12/4/2006	12/5/2016	12/6/2010	4.080	124.898	124.564	119.103	113.924	109.566	106.064	103.388	101.511
12/5/2006	12/5/2016	12/6/2010	4.260	125.996	125.662	120.129	114.864	110.400	106.769	103.956	101.922
12/6/2006	12/6/2013	12/6/2010	4.400	113.468	113.468	113.453	110.434	107.478	104.893	102.803	101.275
12/8/2006	12/8/2016	12/8/2010	3.990	124.382	124.030	118.600	113.462	109.154	105.711	103.108	101.300
12/12/2006	12/12/2016	12/13/2010	3.990	124.426	124.052	118.614	113.468	109.156	105.708	103.100	101.286
12/12/2006	12/12/2016	12/13/2010	4.050	124.793	124.419	118.955	113.779	109.429	105.940	103.279	101.418
12/19/2006	12/19/2011	12/20/2010	4.490	104.789	104.789	104.789	104.243	103.186	102.156	101.203	100.442
12/19/2006	12/19/2016	12/20/2010	4.190	125.732	125.317	119.782	114.524	110.080	106.483	103.704	101.712
12/20/2006	12/20/2013	12/20/2010	4.500	113.949	113.949	113.899	110.829	107.827	105.187	103.030	101.423
12/21/2006	12/21/2011	12/21/2010	4.530	104.857	104.857	104.857	104.306	103.243	102.207	101.245	100.473
12/27/2006	12/27/2013	12/27/2010	4.500	114.037	114.037	113.969	110.875	107.857	105.203	103.032	101.413
12/28/2006	12/28/2016	12/28/2010	4.250	126.207	125.742	120.162	114.858	110.365	106.715	103.881	101.827
12/28/2006	12/28/2016	12/28/2010	4.400	127.132	126.666	121.029	115.654	111.075	107.322	104.377	102.203
1/8/2007	1/9/2012	1/8/2011	4.750	105.343	105.343	105.343	104.745	103.628	102.532	101.456	100.401
1/12/2007	1/12/2017	1/12/2011	4.420	127.439	126.892	121.227	115.827	111.229	107.462	104.505	102.322
1/16/2007	1/17/2017	1/17/2012	4.790	129.803	129.225	123.418	117.838	113.033	109.027	105.774	103.182
1/23/2007	1/23/2014	1/24/2011	4.490	114.342	114.342	114.208	111.027	107.955	105.267	103.071	101.437
1/23/2007	1/23/2017	1/24/2011	4.460	127.824	127.218	121.509	116.070	111.434	107.626	104.625	102.396
1/29/2007	1/29/2014	1/29/2011	4.790	115.380	115.380	115.231	111.996	108.752	105.621	102.600	99.904
2/2/2007	2/2/2017	2/2/2011	4.690	129.389	128.698	122.216	115.712	109.571	104.874	101.815	99.621
2/9/2007	2/9/2012	2/9/2011	4.750	105.752	105.752	105.752	105.076	103.871	102.700	101.623	100.731
2/9/2007	2/9/2017	2/9/2011	4.470	128.097	127.402	121.658	116.194	111.543	107.725	104.717	102.486
2/12/2007	2/13/2012	2/14/2011	4.880	105.964	105.964	105.964	105.276	104.058	102.874	101.777	100.852
2/15/2007	2/15/2012	2/15/2011	4.990	106.126	106.126	106.126	105.433	104.208	103.006	101.827	100.669
2/20/2007	2/21/2017	2/22/2011	4.390	127.741	126.984	121.236	115.791	111.169	107.388	104.425	102.244
2/20/2007	2/21/2017	2/21/2012	4.850	130.648	129.830	123.269	116.751	111.105	106.778	103.738	101.539
2/23/2007	2/23/2017	2/23/2011	4.250	126.879	126.117	120.417	115.042	110.499	106.809	103.950	101.882
2/23/2007	2/23/2017	2/23/2011	4.350	127.512	126.746	121.007	115.579	110.976	107.219	104.283	102.132
3/2/2007	3/2/2012	12/2/2010	4.490	105.712	105.712	105.712	104.978	103.711	102.492	101.397	100.551
3/9/2007	3/10/2014	12/9/2010	4.450	114.783	114.783	114.526	111.195	108.037	105.299	103.085	101.455
3/16/2007	3/16/2017	12/16/2010	4.090	126.106	125.235	119.571	114.251	109.791	106.211	103.471	101.542
3/20/2007	3/20/2012	12/20/2010	4.550	106.016	106.016	106.016	105.237	103.918	102.625	101.355	100.110
3/21/2007	3/21/2017	12/21/2010	4.220	126.994	126.090	120.356	114.959	110.410	106.728	103.882	101.829
3/23/2007	3/23/2017	12/23/2010	4.290	127.466	126.548	120.779	115.344	110.749	107.013	104.110	101.996
3/23/2007	3/23/2017	12/23/2010	4.290	127.466	126.548	120.779	115.344	110.749	107.013	104.110	101.996
3/30/2007	3/30/2012	12/30/2010	4.670	106.304	106.304	106.304	105.500	104.152	102.830	101.533	100.261
4/2/2007	4/2/2012	1/3/2011	4.590	106.234	106.234	106.234	105.423	104.069	102.766	101.598	100.671
4/9/2007	4/10/2017	1/10/2011	4.150	126.777	125.766	120.034	114.653	110.136	106.500	103.706	101.716
4/12/2007	4/12/2017	1/12/2011	4.250	127.446	126.420	120.637	115.198	110.615	106.902	104.029	101.950
4/13/2007	4/13/2017	1/13/2011	4.450	128.750	127.710	121.841	116.296	111.589	107.735	104.706	102.462
4/23/2007	4/23/2012	1/25/2011	4.650	106.587	106.587	106.587	105.721	104.305	102.915	101.553	100.215
4/23/2007	4/23/2014	1/24/2011	4.620	115.912	115.912	115.543	112.052	108.772	105.909	103.565	101.786
4/27/2007	4/27/2012	1/27/2011	4.550	106.496	106.496	106.496	105.620	104.195	102.826	101.602	100.639
4/27/2007	4/27/2017	1/27/2011	4.250	127.623	126.517	120.696	115.231	110.626	106.895	104.002	101.904
5/2/2007	5/2/2014	2/2/2011	4.590	115.924	115.924	115.531	112.016	108.728	105.871	103.546	101.799
5/4/2007	5/5/2014	2/4/2011	4.550	115.823	115.823	115.423	111.901	108.613	105.763	103.449	101.720
5/14/2007	5/16/2011	2/14/2011	4.500	102.087	102.087	102.087	101.923	101.461	101.004	100.555	100.165
5/18/2007	5/18/2017	2/18/2011	4.190	127.478	126.271	120.433	114.979	110.397	106.696	103.846	101.802
5/22/2007	5/22/2012	2/22/2011	4.690	107.022	107.022	107.022	106.082	104.585	103.146	101.859	100.821
5/22/2007	5/22/2012	2/22/2011	4.690	107.022	107.022	107.022	106.082	104.585	103.146	101.859	100.821

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
5/22/2007	5/22/2012	2/22/2011	4.710	107.052	107.052	107.052	106.112	104.615	103.175	101.885	100.842
5/22/2007	5/22/2017	5/22/2012	4.750	131.203	129.948	123.863	118.102	113.174	109.077	105.720	102.966
5/25/2007	5/25/2012	2/25/2011	4.650	107.000	107.000	107.000	106.053	104.549	103.103	101.813	100.779
5/29/2007	5/30/2017	2/28/2011	4.250	128.013	126.747	120.848	115.343	110.705	106.947	104.034	101.922
6/1/2007	6/1/2012	12/2/2010	5.230	107.975	107.975	107.975	107.007	105.474	103.971	102.497	101.051
6/1/2007	6/2/2014	3/1/2011	4.500	115.999	115.999	115.524	111.919	108.582	105.711	103.389	101.668
6/7/2007	6/7/2012	12/7/2010	4.940	107.615	107.615	107.615	106.629	105.084	103.598	102.249	101.147
6/7/2007	6/7/2017	12/7/2010	4.820	131.877	130.531	124.391	118.577	113.599	109.470	106.137	103.574
6/8/2007	6/8/2012	12/8/2010	5.300	108.185	108.185	108.185	107.193	105.640	104.116	102.623	101.158
6/8/2007	6/9/2014	12/8/2010	4.730	116.909	116.909	116.400	112.756	109.365	106.404	103.971	102.110
6/8/2007	6/8/2017	12/8/2010	4.490	129.707	128.372	122.363	116.718	111.935	108.015	104.927	102.630
6/11/2007	6/12/2017	12/13/2010	4.490	129.757	128.396	122.379	116.728	111.939	108.015	104.923	102.621
6/15/2007	6/16/2014	12/15/2010	5.550	119.948	119.948	119.404	115.640	111.957	108.415	105.008	101.730
6/18/2007	6/19/2017	12/20/2010	4.500	129.911	128.504	122.467	116.798	111.993	108.053	104.945	102.627
6/18/2007	6/19/2017	12/20/2010	4.840	132.171	130.746	124.570	118.724	113.718	109.560	106.197	103.603
6/19/2007	6/19/2017	12/20/2010	4.650	130.908	129.493	123.392	117.643	112.748	108.706	105.487	103.037
6/20/2007	6/20/2012	12/20/2010	4.890	107.715	107.715	107.715	106.688	105.106	103.587	102.215	101.094
6/20/2007	6/20/2012	12/20/2010	4.960	107.825	107.825	107.825	106.798	105.215	103.693	102.311	101.176
6/22/2007	6/22/2017	12/22/2010	4.500	129.948	128.523	122.478	116.803	111.993	108.048	104.935	102.615
6/26/2007	6/26/2012	12/27/2010	5.130	108.179	108.179	108.179	107.131	105.529	103.984	102.566	101.380
6/28/2007	6/28/2017	12/28/2010	4.500	130.023	128.560	122.501	116.816	111.996	108.043	104.925	102.598
7/13/2007	7/13/2012	1/13/2011	4.690	107.699	107.699	107.699	106.601	104.959	103.395	102.013	100.915
7/13/2007	7/13/2017	1/13/2011	4.290	128.801	127.267	121.282	115.701	111.006	107.201	104.251	102.104
7/13/2007	7/13/2017	7/13/2011	4.900	132.896	131.321	125.077	119.169	114.104	109.890	106.475	103.818
7/18/2007	7/18/2017	1/18/2011	4.780	132.157	130.559	124.349	118.491	113.489	109.344	106.013	103.450
7/19/2007	7/19/2012	1/19/2011	4.890	108.109	108.109	108.109	106.991	105.329	103.739	102.312	101.150
7/20/2007	7/20/2017	1/20/2011	4.290	128.884	127.310	121.308	115.715	111.010	107.196	104.238	102.082
7/23/2007	7/23/2012	1/24/2011	5.050	108.430	108.430	108.430	107.298	105.623	104.014	102.554	101.348
7/24/2007	7/24/2012	1/24/2011	4.820	108.060	108.060	108.060	106.926	105.252	103.653	102.225	101.070
7/27/2007	7/27/2012	1/27/2011	4.590	107.713	107.713	107.713	106.573	104.894	103.301	101.904	100.802
7/27/2007	7/28/2014	1/27/2011	4.350	116.142	116.142	115.413	111.686	108.280	105.377	103.060	101.371
7/27/2007	7/27/2017	1/27/2011	4.250	128.697	127.087	121.088	115.505	110.817	107.024	104.089	101.959
7/30/2007	1/30/2019	1/31/2011	3.990	133.059	128.161	121.390	115.363	110.437	106.550	103.623	101.585
7/31/2007	7/31/2017	1/31/2011	3.990	126.986	125.378	119.509	114.077	109.561	105.963	103.249	101.369
7/31/2007	7/31/2017	1/31/2011	3.990	126.986	125.378	119.509	114.077	109.561	105.963	103.249	101.369
7/31/2007	7/31/2017	1/31/2011	4.060	127.459	125.844	119.940	114.465	109.900	106.248	103.471	101.523
8/2/2007	8/4/2014	2/2/2011	4.490	116.749	116.749	115.988	112.233	108.792	105.843	103.473	101.716
8/2/2007	8/2/2017	2/2/2011	4.150	128.091	126.460	120.513	114.992	110.376	106.671	103.831	101.811
8/2/2007	8/2/2017	2/2/2011	4.050	127.414	125.792	119.895	114.435	109.888	106.259	103.504	101.576
8/6/2007	8/6/2012	2/7/2011	4.490	107.670	107.670	107.670	106.499	104.797	103.193	101.807	100.747
8/9/2007	8/11/2014	8/9/2011	4.860	118.224	118.224	117.428	113.615	110.083	106.998	104.445	102.433
8/9/2007	8/9/2017	2/9/2011	3.990	127.086	125.432	119.549	114.112	109.599	106.009	103.297	101.416
8/13/2007	8/13/2012	2/14/2011	4.590	107.930	107.930	107.930	106.737	105.013	103.383	101.963	100.853
8/16/2007	8/16/2017	2/16/2011	3.990	127.163	125.473	119.571	114.123	109.599	106.002	103.280	101.392
8/17/2007	8/17/2012	2/17/2011	4.350	107.564	107.564	107.564	106.360	104.631	103.011	101.627	100.610
8/17/2007	8/17/2012	2/17/2011	4.150	107.216	107.216	107.216	106.014	104.290	102.692	101.358	100.432
8/17/2007	8/17/2017	2/17/2011	4.000	127.243	125.546	119.636	114.180	109.648	106.041	103.310	101.412
8/20/2007	8/20/2014	8/22/2011	4.250	116.043	116.043	115.201	111.402	107.941	104.985	102.661	100.955
8/24/2007	8/24/2012	2/24/2011	4.050	107.121	107.121	107.121	105.898	104.158	102.554	101.235	100.335
8/28/2007	8/28/2014	2/28/2011	4.350	116.517	116.517	115.652	111.853	108.392	105.454	103.109	101.400
8/30/2007	8/30/2012	2/28/2011	4.390	107.792	107.792	107.792	106.547	104.782	103.125	101.703	100.640
8/30/2007	9/2/2014	2/28/2011	3.890	114.824	114.824	113.944	110.202	106.861	104.104	102.026	100.653
8/31/2007	8/31/2012	2/28/2011	4.370	107.768	107.768	107.768	106.521	104.754	103.096	101.677	100.622
9/4/2007	9/4/2012	12/6/2010	4.220	107.549	107.549	107.549	106.290	104.517	102.875	101.501	100.523
9/4/2007	9/4/2012	12/6/2010	4.190	107.495	107.495	107.495	106.237	104.464	102.827	101.460	100.496
9/4/2007	9/5/2017	12/6/2010	3.890	126.699	124.917	119.039	113.634	109.173	105.651	103.022	101.219
9/7/2007	9/7/2012	12/7/2010	4.090	107.350	107.350	107.350	106.083	104.306	102.673	101.331	100.403
9/10/2007	9/11/2017	12/10/2010	3.690	125.387	123.591	117.822	112.543	108.225	104.860	102.412	100.829
9/11/2007	9/11/2017	12/13/2010	3.590	124.699	122.917	117.209	112.000	107.757	104.482	102.135	100.650
9/12/2007	9/12/2014	12/13/2010	3.690	114.164	114.164	113.243	109.512	106.224	103.578	101.644	100.420
9/13/2007	9/15/2014	12/13/2010	3.990	115.349	115.349	114.407	110.623	107.239	104.433	102.295	100.840
9/13/2007	9/13/2017	12/13/2010	3.990	127.474	125.629	119.678	114.197	109.652	106.042	103.310	101.412
9/14/2007	9/14/2011	12/14/2010	4.090	103.272	103.272	103.272	102.910	102.119	101.343	100.632	100.127
9/14/2007	9/14/2012	12/14/2010	4.390	107.975	107.975	107.975	106.682	104.876	103.190	101.752	100.680
9/17/2007	9/17/2012	12/17/2010	4.220	107.701	107.701	107.701	106.401	104.591	102.916	101.512	100.511
9/27/2007	9/29/2014	9/27/2010	4.490	117.448	117.448	116.416	112.397	108.495	104.753	101.164	97.721
9/27/2007	9/27/2017	12/27/2010	3.650	125.274	123.386	117.610	112.336	108.028	104.682	102.261	100.699
9/28/2007	9/28/2012	12/28/2010	3.850	107.143	107.143	107.143	105.812	103.985	102.332	101.027	100.205
10/3/2007	10/3/2012	1/3/2011	3.830	107.159	107.159	107.159	105.813	103.976	102.327	101.039	100.230

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
10/9/2007	10/9/2012	10/9/2009	4.400	108.298	108.298	108.298	106.927	105.040	103.196	101.395	99.634
10/11/2007	10/14/2014	1/11/2011	4.180	116.417	116.417	115.340	111.461	107.977	105.061	102.789	101.174
10/11/2007	10/11/2017	1/11/2011	3.990	127.784	125.773	119.780	114.269	109.704	106.077	103.338	101.431
10/15/2007	10/16/2017	1/18/2011	3.990	127.839	125.800	119.796	114.278	109.707	106.074	103.329	101.417
10/22/2007	10/22/2012	1/24/2011	3.990	107.669	107.669	107.669	106.262	104.367	102.644	101.259	100.342
10/25/2007	10/27/2014	10/25/2011	4.360	117.281	117.281	116.142	112.203	108.643	105.630	103.207	101.338
10/26/2007	10/26/2017	1/26/2011	3.390	123.747	121.746	116.103	110.988	106.872	103.755	101.590	100.332
10/29/2007	10/29/2012	1/31/2011	3.990	107.747	107.747	107.747	106.318	104.403	102.664	101.264	100.336
11/2/2007	11/3/2014	2/2/2011	3.990	115.892	115.892	114.731	110.842	107.386	104.542	102.378	100.911
11/2/2007	11/3/2014	2/2/2011	4.190	116.689	116.689	115.523	111.600	108.085	105.150	102.861	101.241
11/5/2007	11/5/2014	2/7/2011	3.990	115.915	115.915	114.744	110.851	107.391	104.541	102.372	100.900
11/5/2007	11/6/2017	11/5/2012	4.390	130.887	128.682	122.428	116.638	111.768	107.742	104.396	101.570
11/6/2007	11/6/2017	2/7/2011	3.480	124.484	122.416	116.701	111.517	107.329	104.133	101.886	100.526
11/9/2007	11/10/2014	11/9/2011	4.330	117.331	117.331	116.129	112.166	108.596	105.588	103.173	101.299
11/13/2007	11/14/2011	2/14/2011	3.760	103.645	103.645	103.645	103.177	102.220	101.298	100.506	100.006
11/13/2007	11/13/2012	2/14/2011	3.680	107.298	107.298	107.298	105.825	103.889	102.184	100.891	100.101
11/13/2007	11/13/2014	2/14/2011	3.350	113.436	113.436	112.253	108.474	105.236	102.735	101.026	100.077
11/19/2007	11/19/2014	2/22/2011	3.750	115.103	115.103	113.878	109.996	106.593	103.842	101.817	100.525
11/19/2007	11/19/2014	2/22/2011	3.750	115.103	115.103	113.878	109.996	106.593	103.842	101.817	100.525
11/19/2007	11/19/2014	11/21/2011	4.270	117.198	117.198	115.956	111.979	108.408	105.409	103.004	101.151
11/19/2007	11/20/2017	11/19/2012	4.290	130.350	127.755	120.476	114.081	109.088	105.386	102.462	100.042
11/20/2007	11/20/2017	2/22/2011	3.740	126.459	124.273	118.348	112.957	108.546	105.098	102.569	100.907
11/23/2007	11/24/2017	11/23/2011	3.990	128.272	125.654	118.333	111.419	106.201	103.031	101.105	99.832
11/23/2007	11/24/2017	11/23/2011	3.990	128.272	125.654	118.333	111.419	106.201	103.031	101.105	99.832
11/29/2007	11/29/2017	2/28/2011	2.950	120.943	118.878	113.526	108.738	104.995	102.315	100.650	99.840
11/30/2007	11/30/2017	2/28/2011	3.190	122.656	120.531	114.980	109.993	106.029	103.089	101.124	100.035
12/7/2007	12/7/2012	12/7/2010	3.450	107.072	107.072	107.072	105.524	103.545	101.856	100.639	100.069
12/10/2007	12/10/2010	12/10/2010	3.870	100.107	100.107	100.107	100.101	100.074	100.047	100.020	99.993
12/10/2007	12/11/2017	12/10/2010	3.450	124.608	122.360	116.609	111.415	107.227	104.038	101.810	100.443
12/11/2007	12/11/2012	12/13/2010	3.760	107.749	107.749	107.749	106.183	104.170	102.394	101.036	100.208
12/14/2007	12/14/2010	12/14/2010	3.690	100.143	100.143	100.143	100.134	100.097	100.059	100.021	99.984
12/20/2007	12/20/2012	12/21/2009	3.750	107.822	107.822	107.822	106.224	104.150	102.127	100.154	98.229
12/20/2007	12/20/2012	12/20/2010	3.600	107.509	107.509	107.509	105.914	103.889	102.129	100.817	100.115
12/24/2007	12/26/2017	12/24/2012	3.990	128.626	125.779	118.499	112.399	107.790	104.262	101.513	99.158
12/26/2007	12/26/2012	12/27/2010	3.960	108.326	108.326	108.326	106.705	104.640	102.789	101.319	100.323
12/26/2007	12/26/2012	12/27/2010	3.460	107.275	107.275	107.275	105.661	103.632	101.897	100.636	100.039
1/2/2008	1/2/2013	1/3/2011	3.490	107.406	107.406	107.406	105.767	103.723	101.980	100.714	100.065
1/3/2008	1/5/2015	1/3/2011	3.650	115.177	115.177	113.721	109.779	106.363	103.643	101.675	100.476
1/4/2008	1/4/2018	1/4/2011	3.360	124.190	121.822	116.114	110.968	106.847	103.745	101.606	100.379
1/7/2008	1/7/2013	1/7/2011	2.990	106.386	106.386	106.386	104.739	102.741	101.163	100.220	99.891
1/7/2008	1/7/2013	1/7/2011	3.590	107.668	107.668	107.668	106.010	103.944	102.162	100.844	100.097
1/7/2008	1/7/2015	1/7/2011	3.490	114.531	114.531	113.073	109.166	105.812	103.184	101.338	100.276
1/7/2008	1/8/2018	1/7/2011	2.590	118.675	116.498	111.475	106.993	103.616	101.369	100.189	99.852
1/8/2008	1/8/2013	1/10/2011	3.150	106.737	106.737	106.737	105.083	103.060	101.414	100.361	99.928
1/8/2008	1/8/2018	1/10/2011	2.570	118.531	116.361	111.358	106.895	103.540	101.317	100.162	99.836
1/8/2008	1/8/2018	1/10/2011	2.640	119.035	116.843	111.766	107.237	103.806	101.495	100.249	99.847
1/10/2008	1/10/2011	1/10/2011	3.100	100.353	100.353	100.353	100.326	100.215	100.105	99.995	99.886
1/11/2008	1/11/2018	1/11/2011	2.720	119.635	117.401	112.238	107.630	104.113	101.700	100.353	99.869
1/14/2008	1/16/2018	1/14/2011	3.240	123.434	121.026	115.391	110.328	106.302	103.308	101.288	100.183
1/16/2008	1/16/2013	1/18/2011	2.690	105.813	105.813	105.813	104.142	102.176	100.732	100.022	99.811
1/16/2008	1/16/2013	1/18/2011	2.550	105.510	105.510	105.510	103.843	101.910	100.546	99.967	99.789
1/16/2008	1/16/2015	1/18/2011	2.640	111.058	111.058	109.627	105.978	103.072	101.105	100.089	99.809
1/16/2008	1/16/2018	1/18/2011	2.380	117.213	115.075	110.270	105.988	102.842	100.864	100.005	99.770
1/17/2008	1/17/2018	1/18/2011	2.250	116.279	114.189	109.536	105.389	102.399	100.605	99.934	99.748
1/18/2008	1/18/2013	1/18/2011	2.550	105.524	105.524	105.524	103.851	101.913	100.546	99.967	99.789
1/18/2008	1/20/2015	1/18/2011	2.350	109.869	109.869	108.461	104.934	102.242	100.575	99.941	99.762
1/18/2008	1/18/2018	1/18/2011	2.290	116.575	114.463	109.760	105.570	102.531	100.676	99.955	99.755
1/24/2008	1/24/2012	1/24/2011	2.440	102.846	102.846	102.846	102.218	101.096	100.237	99.898	99.746
1/24/2008	1/24/2013	1/24/2011	2.500	105.458	105.458	105.458	103.765	101.827	100.484	99.937	99.756
1/25/2008	1/25/2013	1/26/2009	2.250	104.918	104.918	104.918	103.216	101.080	98.998	96.970	94.994
1/25/2008	1/25/2013	1/25/2011	2.650	105.793	105.793	105.793	104.085	101.939	100.280	99.926	99.774
1/28/2008	1/28/2013	1/28/2011	2.990	106.561	106.561	106.561	104.838	102.675	100.746	99.993	99.818
1/30/2008	1/30/2013	1/31/2011	2.670	105.873	105.873	105.873	104.155	102.162	100.716	100.002	99.757
2/7/2008	2/7/2013	2/7/2011	2.490	105.533	105.533	105.533	103.792	101.837	100.500	99.923	99.684
2/13/2008	2/13/2013	2/14/2011	2.920	106.537	106.537	106.537	104.761	102.692	101.093	100.154	99.756
2/14/2008	2/14/2018	2/14/2012	3.190	123.329	120.126	112.745	106.874	103.353	101.273	99.814	98.573
2/19/2008	2/19/2013	2/19/2010	2.590	105.841	105.841	105.841	104.042	101.825	99.668	97.567	95.521
2/22/2008	2/22/2011	2/23/2009	2.500	100.583	100.583	100.583	100.521	100.289	100.058	99.828	99.599
2/25/2008	2/25/2013	2/25/2011	3.090	107.021	107.021	107.021	105.190	102.943	100.964	100.020	99.726

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
2/25/2008	2/26/2018	2/25/2011	2.420	117.778	115.445	110.541	106.198	102.987	100.943	99.966	99.579
3/7/2008	3/9/2015	3/7/2011	2.890	112.522	112.522	110.815	107.004	103.904	101.686	100.377	99.734
3/7/2008	3/7/2018	3/7/2013	3.550	126.169	123.416	117.468	112.118	107.736	104.139	101.104	98.451
3/10/2008	3/11/2013	12/10/2010	2.390	105.523	105.523	105.523	103.673	101.690	100.398	99.979	99.952
3/11/2008	3/11/2011	12/13/2010	2.090	100.586	100.586	100.586	100.507	100.228	99.997	99.962	99.927
3/12/2008	3/12/2013	12/13/2010	2.010	104.650	104.650	104.650	102.822	101.004	100.081	99.959	99.925
3/14/2008	3/14/2018	12/14/2010	2.400	117.738	115.333	110.450	106.123	102.938	100.922	100.061	99.934
3/17/2008	3/18/2013	3/17/2011	2.690	106.269	106.269	106.269	104.383	102.293	100.779	99.967	99.559
3/17/2008	3/17/2015	3/17/2011	2.620	111.410	111.410	109.483	105.118	101.487	100.194	99.813	99.521
3/17/2008	3/19/2018	3/18/2013	3.300	124.436	121.675	115.905	110.736	106.540	103.109	100.191	97.621
3/25/2008	3/27/2023	3/25/2013	3.150	132.688	120.115	112.088	107.246	103.818	101.135	98.774	96.577
3/26/2008	3/26/2018	3/26/2012	2.980	122.124	118.628	111.255	105.932	102.811	100.883	99.401	98.094
3/28/2008	3/28/2013	3/28/2011	2.820	106.650	106.650	106.650	104.715	102.400	100.593	99.904	99.540
3/28/2008	3/28/2013	3/28/2011	2.800	106.603	106.603	106.603	104.668	102.354	100.560	99.894	99.533
3/28/2008	3/28/2018	12/28/2010	2.020	115.008	112.720	108.315	104.394	101.684	100.226	99.913	99.838
3/28/2008	3/28/2018	3/28/2011	2.770	120.581	117.943	112.640	107.933	104.326	101.824	100.360	99.629
3/31/2008	3/31/2011	12/31/2010	1.990	100.669	100.669	100.669	100.569	100.236	99.985	99.902	99.819
4/14/2008	4/14/2015	4/14/2011	2.750	112.191	112.191	110.102	105.652	101.933	100.347	99.819	99.440
4/28/2008	4/28/2015	4/28/2011	3.250	114.534	114.534	112.527	108.510	105.151	102.600	100.880	99.876
4/28/2008	4/30/2018	1/28/2011	2.150	116.171	113.668	109.061	104.979	102.088	100.434	99.858	99.681
4/30/2008	4/30/2018	4/30/2013	3.740	128.131	124.353	117.072	111.370	106.981	103.536	100.646	98.097
5/2/2008	5/4/2015	5/2/2011	3.990	117.909	117.909	115.802	111.561	107.867	104.845	102.414	100.557
5/5/2008	5/5/2015	5/5/2011	3.170	114.237	114.237	112.212	108.220	104.910	102.429	100.790	99.819
5/8/2008	5/8/2015	2/8/2011	2.960	113.319	113.319	111.310	107.391	104.201	101.892	100.501	99.871
5/19/2008	5/19/2015	5/21/2012	4.700	121.292	121.292	118.976	114.275	109.907	105.922	102.104	98.674
5/19/2008	5/21/2018	5/20/2013	3.890	129.486	125.551	118.172	112.322	107.734	104.154	101.140	98.484
5/23/2008	5/23/2013	5/23/2011	4.040	110.155	110.155	110.155	108.000	105.549	103.372	101.517	100.037
5/23/2008	5/23/2018	5/23/2011	3.270	124.804	121.703	115.863	110.667	106.542	103.468	101.362	100.046
5/27/2008	5/27/2011	5/27/2010	3.220	101.592	101.592	101.592	101.412	100.922	100.437	99.957	99.481
5/27/2008	5/28/2013	5/27/2011	3.490	108.821	108.821	108.821	106.657	104.152	101.919	100.500	99.708
5/29/2008	5/29/2018	5/31/2011	3.460	126.303	122.324	114.540	107.244	102.539	100.818	100.096	99.591
6/6/2008	6/6/2013	6/6/2011	3.990	110.185	110.185	110.185	107.973	105.423	103.032	101.167	99.715
6/10/2008	6/11/2012	6/10/2010	3.940	106.118	106.118	106.118	105.125	103.578	101.994	100.190	98.007
6/16/2008	6/17/2013	6/16/2011	4.070	110.513	110.513	110.513	108.250	105.667	103.246	101.414	100.220
6/24/2008	6/24/2015	6/24/2011	3.830	117.734	117.734	115.356	111.065	107.367	104.389	102.167	100.627
6/30/2008	7/1/2013	12/30/2010	2.920	107.656	107.656	107.656	105.375	103.018	101.234	100.195	99.902
6/30/2008	7/1/2013	12/30/2010	3.450	109.046	109.046	109.046	106.744	104.278	102.242	100.792	100.077
6/30/2008	6/30/2015	12/30/2010	3.370	115.660	115.660	113.304	109.154	105.679	103.005	101.156	100.169
6/30/2008	7/2/2018	6/30/2011	3.690	128.401	124.143	116.219	108.773	103.583	101.294	100.300	99.655
7/1/2008	7/1/2015	7/1/2011	4.600	121.389	121.389	118.793	113.955	109.336	105.321	102.240	100.019
7/7/2008	7/8/2013	7/7/2011	4.590	112.125	112.125	112.125	109.755	107.094	104.544	102.202	100.208
7/8/2008	7/8/2013	7/8/2011	4.250	111.226	111.226	111.226	108.865	106.218	103.723	101.638	100.014
7/10/2008	7/10/2014	7/10/2012	4.800	117.572	117.572	116.917	113.125	109.498	106.097	102.719	99.341
7/11/2008	7/11/2018	7/11/2012	3.750	128.956	124.626	116.787	110.431	105.985	103.027	100.805	98.980
7/14/2008	7/14/2015	7/15/2013	4.900	122.961	122.961	120.281	115.544	111.138	106.812	102.275	97.623
7/14/2008	7/16/2018	1/14/2011	2.500	119.338	116.278	111.180	106.688	103.350	101.177	100.092	99.809
7/14/2008	7/16/2018	7/14/2011	3.250	125.140	121.730	115.856	110.644	106.514	103.443	101.322	99.930
7/17/2008	7/17/2018	7/17/2013	3.750	129.019	124.643	117.405	111.690	107.250	103.647	100.581	97.852
7/21/2008	7/22/2013	1/21/2011	3.000	108.041	108.041	108.041	105.650	103.007	100.729	99.997	99.841
8/15/2008	8/15/2018	8/15/2011	3.830	129.946	126.162	119.767	114.041	109.373	105.722	103.000	101.061
8/19/2008	8/19/2013	8/19/2010	3.440	109.488	109.488	109.488	106.965	104.231	101.581	99.013	96.523
9/8/2008	9/9/2013	12/8/2010	2.890	108.139	108.139	108.139	105.574	103.103	101.272	100.219	99.973
5/13/2009	5/13/2014	5/13/2013	4.000	113.999	113.999	113.580	110.048	106.367	102.130	97.594	93.493
9/28/2009	9/30/2013	9/28/2012	2.920	108.394	108.394	108.394	105.580	101.822	98.128	95.067	92.668
5/11/2010	5/11/2015	5/11/2015	3.700	116.680	116.680	114.224	109.041	103.586	97.780	91.690	85.823
5/24/2010	5/26/2015	5/24/2011	2.250	110.236	110.236	107.917	103.396	99.071	94.952	94.101	92.623
6/15/2010	6/15/2015	6/15/2011	2.280	110.499	110.499	108.052	103.475	99.099	98.390	96.173	95.308