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

The Federal Home Loan Bank of Boston (Bank) is providing estimated valuations of the specific HLB-Option and Knockout advances set forth below for members' information and convenience only. The estimated valuations are generated by models obtained from external sources which are used for the Bank's own asset/liability management purposes. The models include the use of specific assumptions, for example, market volatility and discount curve adjusted for the Bank's spread, to estimate the value of the advance. The valuations represent theoretical market values only and should not be construed as a liquidation price for the HLB-Option or Knockout advance.

It is expressly understood that in providing this valuation information to members, the Bank is not performing any advisory service. The valuations are being provided without representation or warranty and the member shall be solely responsible for any decision it makes or actions it takes based on the valuations provided. It is recommended that institutions maintain independent capabilities to value their asset/liability positions, including HLB-Option and Knockout advances.

The table depicts valuation estimates resulting from immediate parallel interest-rate movements of plus/minus 400 basis points in 100 basis point increments. In order to rule out negative interest rates, our model applies an effective floor of plus ten basis points to the yield curve for all down-rate scenarios. As a result, large down-rate shocks will reflect valuation at the floor rate of ten basis points in place of any negative interest rates that would otherwise be produced by the indicated basis point shocks. Please note that the valuation estimates are from the Federal Home Loan Bank of Boston's perspective. Since the advance is held by the member as a liability, positive price changes in the table correspond to the advance having a negative impact on the member's estimated market value of portfolio equity (and vice versa). The theoretical argument follows that as interest rates rise, the value of the advance to the Bank falls. In the case of an HLB-Option advance, the Bank would be likely to exercise its option to cancel the advance as the value falls below 100. In the case of a Knockout advance, the Bank would automatically terminate the advance on any specified cancellation date if LIBOR is equal to or greater than a predetermined "strike rate" four London Business days prior to the scheduled cancellation date. In either case, the member's cost to prepay the advance increases as interest rates fall.

To identify your advance, locate the appropriate maturity date and then verify the coupon rate. The report is sorted in ascending order by start date, followed by coupon. Once the appropriate structure is determined, read across to view the sensitivity analysis that has been performed on the advance.

If you have any questions or would like further explanation of this analysis, contact the Money Desk at 1-800-357-3452.

As of: 12/31/2008 **Parallel-Shift Sensitivity Analysis for HLB-Option and Knockout Advances**

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
2/27/1997	2/27/2012	2/27/2009	6.58	121.0743	120.4595	117.1509	113.9668	111.0715	108.5063	106.2938	104.4364
4/8/1998	4/8/2013	4/8/2009	5.49	123.7747	120.8185	116.5943	112.8058	109.6048	106.9209	104.7333	103.0164
8/19/1998	8/19/2013	2/19/2009	5.49	125.8029	122.0072	117.5545	113.5913	110.2189	107.3925	105.0821	103.2494
8/19/1998	8/19/2013	2/19/2009	5.49	125.8029	122.0072	117.5545	113.5913	110.2189	107.3925	105.0821	103.2494
8/25/1998	8/19/2013	1/26/2009	5.49	125.8029	122.0049	117.5528	113.5892	110.2148	107.3858	105.0748	103.2497
8/27/1998	8/19/2013	1/27/2009	5.49	125.8029	122.0049	117.5528	113.5892	110.2148	107.3858	105.0748	103.2497
9/30/1998	9/30/2013	3/30/2009	5.22	125.1430	121.1705	116.7307	112.8078	109.4728	106.7000	104.4695	102.7401
12/14/1998	12/16/2013	3/15/2009	5.39	127.1146	122.4654	117.8223	113.7253	110.2682	107.3838	105.0421	103.2042
12/14/1998	12/16/2013	3/16/2009	4.89	124.5994	120.0495	115.5594	111.6505	108.4050	105.7608	103.6892	102.1433
12/14/1998	12/16/2013	3/16/2009	5.39	127.1146	122.4654	117.8223	113.7253	110.2682	107.3838	105.0421	103.2042
12/15/1998	12/16/2013	3/16/2009	4.88	124.5490	120.0015	115.5146	111.6094	108.3684	105.7297	103.6634	102.1238
1/15/1999	1/15/2009	1/15/2004	5.16	100.2150	100.2150	100.2150	100.2107	100.1689	100.1272	100.0854	100.0438
1/19/1999	1/20/2009	1/21/2003	4.98	100.2767	100.2767	100.2767	100.2710	100.2152	100.1596	100.1040	100.0485
1/19/1999	1/20/2009	1/21/2003	4.98	100.2767	100.2767	100.2767	100.2710	100.2152	100.1596	100.1040	100.0485
1/29/1999	1/29/2009	1/29/2003	4.98	100.4012	100.4012	100.4012	100.3929	100.3121	100.2314	100.1509	100.0704
2/18/1999	2/18/2009	2/18/2009	5.08	100.6914	100.6914	100.6914	100.6725	100.5441	100.4163	100.2889	100.1617
2/18/1999	2/18/2009	2/18/2009	5.43	100.7391	100.7391	100.7391	100.7201	100.5917	100.4639	100.3363	100.2091
4/23/1999	4/27/2009	1/23/2009	5.19	101.6867	101.6867	101.6867	101.5899	101.2659	100.9442	100.6245	100.3068
4/23/1999	4/27/2009	1/23/2009	5.50	101.7875	101.7875	101.7875	101.6906	101.3664	101.0445	100.7246	100.4067
4/26/1999	4/27/2009	1/26/2009	5.19	101.6867	101.6867	101.6867	101.5899	101.2659	100.9442	100.6245	100.3068
4/26/1999	4/27/2009	1/26/2009	5.50	101.7875	101.7875	101.7875	101.6906	101.3664	101.0445	100.7246	100.4067
5/6/1999	5/6/2009	2/6/2009	5.31	101.8585	101.8585	101.8585	101.6921	101.3408	100.9926	100.6471	100.3505
6/7/1999	6/8/2009	3/9/2009	5.70	102.5175	102.5175	102.5175	102.2555	101.8146	101.3782	100.9489	100.5557
6/7/1999	6/8/2009	3/9/2009	6.04	102.6677	102.6677	102.6677	102.4055	101.9642	101.5275	101.0965	100.6936
7/1/1999	7/1/2009	4/1/2009	6.11	103.0889	103.0889	103.0889	102.7372	102.2294	101.7276	101.2375	100.7864
7/23/1999	7/23/2009	1/23/2009	5.40	103.0600	103.0600	103.0600	102.7024	102.1332	101.5711	101.0331	100.5597
9/8/1999	9/8/2009	3/9/2009	5.62	103.9184	103.9184	103.9184	103.3441	102.6479	101.9649	101.3175	100.7638
10/8/1999	10/8/2009	4/8/2009	5.58	104.3555	104.3555	104.3555	103.6502	102.8690	102.1065	101.3993	100.7970
11/1/1999	11/2/2009	2/2/2009	5.54	104.7090	104.7090	104.7090	103.8637	103.0181	102.1999	101.4475	100.8274
11/8/1999	11/9/2009	2/9/2009	5.96	105.1819	105.1819	105.1819	104.3333	103.4654	102.6205	101.8267	101.1381
11/9/1999	11/9/2009	2/9/2009	5.57	104.8428	104.8428	104.8428	103.9954	103.1295	102.2908	101.5177	100.8731
12/10/1999	12/10/2009	3/10/2009	5.71	105.4562	105.4562	105.4562	104.4509	103.4979	102.5824	101.7425	101.0385
12/17/1999	12/17/2009	3/17/2009	5.91	105.7623	105.7623	105.7623	104.7540	103.7796	102.8385	101.9689	101.2222
12/20/1999	12/21/2009	3/20/2009	5.81	105.7293	105.7293	105.7293	104.7203	103.7350	102.7855	101.9099	101.1640
12/22/1999	12/22/2009	3/23/2009	5.84	105.7751	105.7751	105.7751	104.7657	103.7773	102.8241	101.9441	101.1920
1/7/2000	1/7/2015	4/7/2009	5.95	133.9254	128.2260	122.7607	117.9486	113.8725	110.4254	107.5682	105.2466
1/13/2000	1/13/2010	1/13/2009	5.91	106.2055	106.2055	106.1141	105.0180	103.9716	102.9689	102.0499	101.2704
1/25/2000	1/25/2010	1/26/2009	5.97	106.4675	106.4675	106.3761	105.2762	104.1945	103.1559	102.1999	101.3804
1/27/2000	1/27/2010	1/27/2009	6.08	106.6204	106.6204	106.5291	105.4280	104.3396	103.2916	102.3236	101.4855
1/27/2000	1/27/2010	1/27/2009	6.21	106.7620	106.7620	106.6706	105.5689	104.4794	103.4271	102.4514	101.5979
2/7/2000	2/8/2010	2/9/2009	5.95	106.6772	106.6772	106.5029	105.3269	104.2188	103.1605	102.1932	101.3726
2/16/2000	2/8/2010	2/2/2009	5.95	106.6772	106.6772	106.5029	105.3269	104.2188	103.1605	102.1932	101.3726
2/16/2000	2/16/2010	2/17/2009	6.47	107.4045	107.4045	107.2301	106.0487	104.9122	103.8143	102.7884	101.8791
2/16/2000	2/16/2010	2/17/2009	6.69	107.6563	107.6563	107.4818	106.2992	105.1604	104.0579	103.0214	102.0895
3/6/2000	3/8/2010	3/6/2009	6.39	107.6680	107.6680	107.4014	106.1338	104.9387	103.7956	102.7440	101.8271
3/13/2000	3/15/2010	3/13/2009	6.09	107.4264	107.4264	107.1600	105.8922	104.6807	103.5295	102.4789	101.5859
3/14/2000	3/15/2010	2/17/2009	6.09	107.4264	107.4264	107.1600	105.8926	104.6833	103.5329	102.4868	101.5897
3/15/2000	3/15/2010	3/16/2009	5.95	107.2557	107.2557	106.9893	105.7226	104.5136	103.3675	102.3318	101.4602
3/21/2000	3/22/2010	3/23/2009	6.12	107.5820	107.5820	107.3156	106.0455	104.8132	103.6408	102.5688	101.6516
3/22/2000	3/22/2010	3/23/2009	5.96	107.3838	107.3838	107.1174	105.8485	104.6190	103.4526	102.3964	101.5040
4/5/2000	4/5/2010	4/6/2009	5.95	107.6028	107.6028	107.2468	105.8962	104.6356	103.4463	102.3816	101.4934
4/11/2000	4/12/2010	1/12/2009	5.95	107.7185	107.7185	107.3625	106.0098	104.7288	103.5196	102.4354	101.5280
4/11/2000	4/12/2010	1/12/2009	6.05	107.8482	107.8482	107.4922	106.1386	104.8560	103.6410	102.5465	101.6226
4/11/2000	4/12/2010	1/12/2009	6.47	108.3930	108.3930	108.0367	106.6797	105.3904	104.1563	103.0236	102.0338
4/11/2000	4/12/2010	1/12/2009	6.56	108.5098	108.5098	108.1534	106.7957	105.5050	104.2681	103.1276	102.1270
4/11/2000	4/12/2010	1/12/2009	6.75	108.7563	108.7563	108.3997	107.0405	105.7471	104.5051	103.3490	102.3279
4/12/2000	4/12/2010	1/12/2009	5.99	107.7704	107.7704	107.4144	106.0613	104.7796	103.5679	102.4798	101.5659
4/13/2000	4/13/2010	1/13/2009	6.56	108.5280	108.5280	108.1716	106.8136	105.5200	104.2802	103.1369	102.1336
4/24/2000	4/26/2010	1/26/2009	6.45	108.6179	108.6179	108.2616	106.9006	105.5706	104.2972	103.1269	102.1013
5/3/2000	5/3/2010	2/3/2009	6.24	108.4587	108.4587	108.0095	106.5676	105.2272	103.9621	102.8177	101.8422
5/3/2000	5/3/2010	2/3/2009	6.36	108.6214	108.6214	108.1721	106.7290	105.3864	104.1153	102.9591	101.9660
5/15/2000	5/17/2010	2/17/2009	6.99	109.7471	109.7471	109.2972	107.8439	106.4492	105.1115	103.8652	102.7553
5/30/2000	6/1/2010	3/2/2009	6.49	109.3204	109.3204	108.7803	107.2486	105.8275	104.4765	103.2495	102.1924
8/8/2000	8/9/2010	2/9/2009	5.99	109.7504	109.7504	108.9026	107.2021	105.6246	104.1690	102.8940	101.8357
8/18/2000	8/18/2010	2/18/2009	6.09	110.0654	110.0654	109.2173	107.5122	105.9043	104.4156	103.0992	101.9970
10/5/2000	10/5/2010	4/6/2009	5.71	110.1987	110.1987	109.0474	107.1901	105.4999	103.9753	102.6723	101.6301
10/10/2000	10/12/2010	1/12/2009	5.84	110.5444	110.5444	109.3923	107.5294	105.8097	104.2497	102.9030	101.8086
10/13/2000	10/13/2010	1/13/2009	5.75	110.3979	110.3979	109.2463	107.3855	105.6691	104.1164	102.7843	101.7101
10/23/2000	10/25/2010	1/23/2009	5.64	110.3870	110.3870	109.2361	107.3747	105.6309	104.0584	102.7120	101.6330
12/5/2000	12/6/2010	3/5/2009	5.41	110.5946	110.5946	109.1404	107.1340	105.3377	103.7534	102.4317	101.4109
12/11/2000	12/13/2010	3/11/2009	5.17	110.2251	110.2251	108.7733	106.7769	104.9855	103.4174	102.1317	101.1670
12/12/2000	12/13/2010	3/12/2009	5.11	110.1064	110.1064	108.6553	106.6619	104.8768	103.3178	102.0501	101.1027
12/15/2000	12/15/2010	3/16/2009	5.12	110.1546	110.1546	108.7034	106.7089	104.9169	103.3507	102.0745	101.1188
12/20/2000	12/20/2010	3/20/2009	4.95	109.8862	109.8862	108.4371	106.4517	104.6611	103.1150	101.8741	100.9560
12/21/2000	12/21/2010	3/23/2009	4.86	109.7200	109.7200	108.2720	106.2920	104.5087	102.9819	101.7613	100.8778
1/11/2001	1/11/2011	1/12/2009	5.37	111.0533	111.0533	109.4495	107.3663	105.4965	103.8670	102.5145	101.4743
1/12/2001	1/12/2011	1/12/2009	5.30	110.9239	110.9239	109.3211	107.2412	105.3778	103.7572	102.4199	101.3996
2/5/2001	2/7/2011	2/5/2009	4.82	110.2826	110.2826	108.5487	106.4211	104.5665	102.9964	101.7616	100.8845
2/7/2001	2/7/2011	2/9/2009	4.82	110.2826	110.2826	108.5487	106.4211	104.5665	102.9964	101.7616	100.8845
2/26/2001	2/28/2011	2/26/2009	4.79	110.4981	110.4981	108.7658	106.6372	104.7203	103.0946	101.8118	100.8743
2/26/2001	2/28/2011	2/26/2009	5.06	111.0898	111.0898	109.3531	107.2038	105.2513	103.5644	102.1933	101.1663
2/26/2001	2/28/2011	2/26/2009	5.45	111.9446	111.9446	110.2023	108.0297	106.0243	104.2651	102.7897	101.6300
2/27/2001	2/28/2011	2/27/2009	4.76	110.4323	110.4323	108.7006	106.5742	104.6604	103.0442	101.7693	100.8466
2/27/2001	2/28/2011	2/27/2009	5.02	111.0022	111.0022	109.2661	107.1196	105.1719	103.4907	102.1305	101.1191
3/1/2001	3/1/2011	3/2/2009	5.27	111.5647	111.5647	109.6748	107.4435	105.4891	103.8019	102.4203	101.3759
3/14/2001	3/14/2011	3/16/2009	4.86	110.8405	110.8405	108.9578	106.7533	104.8202	103.1786	101.8878	100.9553
4/23/2001	4/25/2011	4/24/2006	5.35	112.5576	112.5576	110.5114	108.1178	105.7977	103.5404	101.3438	99.2061

As of: 12/31/2008 **Parallel-Shift Sensitivity Analysis for HLB-Option and Knockout Advances**

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
6/1/2001	6/1/2011	3/2/2009	4.99	112.2255	112.2255	109.8981	107.4570	105.3665	103.6020	102.2021	101.1835
12/13/2001	12/13/2011	3/13/2009	4.92	114.7190	114.3791	111.3305	108.4934	106.0729	104.0735	102.4967	101.3439
6/3/2002	6/4/2012	3/3/2009	4.49	115.6027	114.4685	111.0334	107.9783	105.4940	103.5143	102.0367	101.0154
6/4/2002	6/4/2012	3/4/2009	4.49	115.6027	114.4685	111.0334	107.9783	105.4940	103.5143	102.0367	101.0154
12/5/2002	12/5/2012	3/5/2009	3.79	115.1074	113.0613	109.4412	106.3884	104.0303	102.2924	101.1050	100.3762
3/6/2003	3/6/2013	3/6/2009	2.99	112.6742	110.2578	106.8038	104.0749	102.1647	100.9153	100.2319	99.8513
1/27/2004	1/27/2009	1/27/2009	2.89	100.2167	100.2167	100.2167	100.2091	100.1340	100.0590	100.0158	99.8513
2/5/2004	4/26/2010	1/26/2009	6.20	108.2839	108.2839	107.9278	106.5690	105.2456	103.9913	102.8500	101.8721
2/5/2004	12/14/2010	3/16/2009	5.82	111.5268	111.5268	110.0685	108.0431	106.1818	104.5150	103.0831	101.9259
2/9/2004	2/9/2009	2/9/2009	3.11	100.3456	100.3456	100.3456	100.3292	100.2262	100.1237	100.0337	99.9572
2/17/2004	2/17/2009	2/17/2009	2.91	100.3880	100.3880	100.3880	100.3694	100.2441	100.1194	100.0158	99.9073
3/4/2004	3/4/2009	3/4/2009	2.97	100.5198	100.5198	100.5198	100.4841	100.3089	100.1384	100.0320	99.9463
3/12/2004	3/12/2009	3/12/2009	2.69	100.5305	100.5305	100.5305	100.4926	100.2952	100.1101	100.0037	99.9572
4/1/2004	4/1/2009	1/1/2009	2.77	100.7002	100.7002	100.7002	100.6111	100.3613	100.1353	100.0236	99.9073
5/24/2004	5/26/2009	2/24/2009	3.58	101.4519	101.4519	101.4519	101.2802	100.8742	100.4820	100.1769	99.9572
5/28/2004	5/28/2009	3/2/2009	3.70	101.5211	101.5211	101.5211	101.3488	100.9371	100.5375	100.1937	99.9073
6/11/2004	6/11/2009	3/11/2009	3.75	101.6875	101.6875	101.6875	101.4256	100.9788	100.5540	100.2079	99.9463
6/18/2004	6/20/2011	3/18/2009	4.12	110.3114	110.3114	108.0178	105.6902	103.7429	102.2190	101.1184	100.4010
7/2/2004	7/2/2014	4/2/2009	3.99	121.2164	116.5298	112.1157	108.4428	105.5888	103.4148	101.8610	100.8137
8/5/2004	8/5/2009	2/5/2009	3.47	102.0917	102.0917	102.0917	101.6368	101.0406	100.5154	100.1781	99.9827
12/13/2004	12/15/2014	3/13/2009	3.32	118.2715	113.6982	109.4943	106.1406	103.6383	101.8726	100.7649	100.1086
12/17/2004	12/17/2009	3/17/2009	3.71	103.6173	103.6173	103.6173	102.6189	101.6880	100.9011	100.3433	99.9754
5/5/2005	5/5/2010	5/5/2006	4.19	105.7031	105.7031	105.2563	103.8424	102.5901	101.5363	100.7590	100.2983
5/17/2005	5/17/2010	2/17/2009	4.07	105.6754	105.6754	105.2288	103.8142	102.5380	101.4724	100.6993	100.2372
6/6/2005	6/7/2010	3/6/2009	3.89	105.6513	105.6513	105.1155	103.6270	102.3334	101.2897	100.5667	100.1132
7/18/2005	7/19/2010	1/20/2009	4.16	106.5289	106.5289	105.8417	104.2710	102.8643	101.6958	100.8364	100.3149
9/1/2005	9/1/2015	3/2/2009	4.13	124.2471	118.8931	113.9887	109.9136	106.7277	104.2646	102.4616	101.2314
9/19/2005	9/19/2012	3/19/2009	3.82	114.4098	112.8242	109.3393	106.3644	104.0234	102.2662	101.0622	100.3204
9/26/2005	9/26/2012	3/26/2009	3.89	114.7495	113.1592	109.6594	106.6563	104.2569	102.4449	101.1788	100.3799
9/30/2005	9/30/2015	3/30/2009	4.44	126.5920	121.0757	115.9953	111.7182	108.2212	105.4487	103.3367	101.8128
10/26/2005	10/26/2015	1/26/2009	4.54	127.3559	121.7458	116.5799	112.2181	108.6567	105.8174	103.6350	102.0528
10/28/2005	10/28/2015	1/28/2009	4.14	124.7202	119.3311	114.3844	110.2654	106.9665	104.3992	102.5026	101.1785
10/28/2005	10/28/2015	1/28/2009	4.31	125.8346	120.3505	115.3039	111.0760	107.6548	104.9614	102.9320	101.4839
11/4/2005	11/4/2010	2/4/2009	4.52	108.4499	108.4499	107.1587	105.2768	103.6457	102.2854	101.2412	100.5685
11/21/2005	11/21/2012	2/23/2009	4.29	116.9335	114.9933	111.2942	108.0733	105.4512	103.3956	101.8792	100.8817
1/6/2006	1/6/2016	4/6/2009	4.02	124.1739	118.7169	113.7484	109.6484	106.4492	103.9946	102.2198	101.0386
1/17/2006	1/19/2016	1/20/2009	4.08	124.7214	119.2267	114.2204	110.0737	106.7909	104.2525	102.3957	101.1150
3/20/2006	3/21/2011	3/21/2009	4.76	110.7100	110.7100	108.8183	106.5263	104.3145	102.1608	100.0633	99.9754
4/11/2006	4/11/2011	1/12/2009	4.98	111.4955	111.4955	109.4644	107.1710	105.1669	103.4641	102.1060	101.1061
4/19/2006	4/19/2013	1/20/2009	4.63	120.1920	117.3202	113.2831	109.7594	106.8527	104.5201	102.7253	101.4230
4/24/2006	4/25/2016	1/26/2009	4.44	127.9617	122.0441	116.6727	112.1785	108.5298	105.6470	103.4441	101.8516
4/28/2006	4/28/2011	1/28/2009	5.09	111.9898	111.9898	109.9468	107.5592	105.2374	102.9786	100.7808	100.2983
5/5/2006	5/6/2013	2/5/2009	4.78	121.0718	117.9934	113.8701	110.2619	107.3005	104.9085	103.0447	101.6988
5/5/2006	5/5/2016	2/5/2009	4.35	127.3374	121.4030	116.0416	111.5805	108.0363	105.2583	103.1616	101.6907
5/5/2006	5/5/2016	2/5/2009	4.53	128.5999	122.5566	117.0790	112.4937	108.8203	105.9051	103.6771	102.0695
5/5/2006	5/5/2016	5/5/2009	4.98	131.7796	125.4757	119.7237	114.8450	110.8712	107.6427	105.0891	103.1336
5/9/2006	5/9/2011	2/9/2009	5.05	112.0498	112.0498	109.8672	107.4958	105.4269	103.6729	102.2638	101.2265
5/15/2006	5/16/2016	2/17/2009	4.35	127.4703	121.5359	116.1745	111.7099	108.1327	105.3235	103.1966	101.6961
5/15/2006	5/16/2016	2/17/2009	4.52	128.6677	122.6302	117.1590	112.5769	108.8778	105.9381	103.6872	102.0581
5/19/2006	5/19/2016	2/19/2009	4.51	128.6348	122.6030	117.1384	112.5622	108.8612	105.9200	103.6680	102.0390
6/12/2006	6/13/2016	3/12/2009	4.62	129.6357	123.4452	117.8537	113.1662	109.3762	106.3523	104.0194	102.3050
6/26/2006	6/27/2016	3/26/2009	4.73	130.6093	124.3517	118.6900	113.9237	110.0158	106.8754	104.4176	102.5881
6/28/2006	6/28/2013	12/28/2006	4.95	122.5499	119.2619	115.0404	111.3277	108.1948	105.6298	103.6055	102.0847
6/28/2006	6/28/2013	3/30/2009	4.95	122.5499	119.2619	115.0404	111.3277	108.1948	105.6298	103.6055	102.0847
6/30/2006	7/1/2013	3/30/2009	4.89	122.3174	118.8225	114.5678	110.8493	107.7937	105.3109	103.3737	101.9501
7/14/2006	7/15/2013	1/14/2009	4.89	122.5075	119.0109	114.7573	111.0329	107.9368	105.4134	103.4348	101.9664
7/19/2006	7/19/2011	1/20/2009	5.25	113.5625	113.5059	111.0463	108.5060	106.2543	104.3387	102.7748	101.5804
7/20/2006	7/20/2011	1/20/2009	5.30	113.7064	113.6498	111.1734	108.5209	105.9684	103.4908	101.0852	100.0000
7/24/2006	7/25/2016	1/26/2009	4.66	130.3259	124.0490	118.3810	113.6228	109.7399	106.6328	104.2199	102.4265
7/28/2006	7/28/2016	1/28/2009	4.49	129.1272	122.9597	117.3985	112.7604	108.9869	105.9941	103.7048	102.0279
8/1/2006	8/1/2016	8/3/2009	4.89	131.9788	125.4792	119.6139	114.6693	110.6722	107.4438	104.8918	102.9049
8/11/2006	8/11/2011	2/11/2009	4.79	112.6802	112.5665	110.0013	107.4451	105.2631	103.4553	102.0491	101.0431
8/21/2006	8/21/2013	2/23/2009	4.75	122.3514	118.6760	114.4197	110.7205	107.6500	105.1704	103.2449	101.8421
8/25/2006	8/25/2016	2/25/2009	4.35	128.3345	122.1845	116.6667	112.0925	108.4071	105.5146	103.3180	101.7590
8/28/2006	8/29/2011	3/2/2009	4.89	113.1894	113.0757	110.5100	107.9434	105.6938	103.8193	102.3319	101.2369
9/22/2006	9/22/2011	3/23/2009	4.79	113.2390	113.0700	110.3874	107.7601	105.4997	103.6167	102.1497	101.0923
9/29/2006	9/29/2011	3/30/2009	4.59	112.7754	112.6065	109.9344	107.3360	105.0992	103.2648	101.8648	100.8858
10/10/2006	10/10/2013	1/12/2009	4.25	120.5889	116.5949	112.3974	108.8259	105.9773	103.7509	102.1155	100.9883
10/12/2006	10/15/2013	1/12/2009	4.50	121.8624	117.8108	113.5307	109.8513	106.8552	104.4724	102.6618	101.3646
10/20/2006	10/20/2009	1/20/2009	4.93	104.0125	104.0125	104.0125	103.3051	102.4917	101.6916	100.9044	100.1300
10/30/2006	10/31/2011	1/31/2009	4.85	113.9303	113.7038	110.8532	107.9535	105.1400	102.4162	101.0532	100.4874
11/3/2006	11/3/2011	2/3/2009	4.69	113.5098	113.2276	110.2563	107.2875	104.4827	101.7678	101.0532	100.4874
11/6/2006	11/6/2013	2/6/2009	4.29	121.1043	116.9033	112.6500	109.0322	106.1480	103.8932	102.2207	101.0980
11/10/2006	11/13/2012	2/10/2009	4.39	117.2308	115.2841	111.5634	108.3103	105.6707	103.5858	102.0328	100.9926
11/17/2006	11/18/2013	2/17/2009	4.35	121.5445	117.3282	113.0554	109.4055	106.4545	104.1299	102.3844	101.1822
11/24/2006	11/25/2016	2/24/2009	4.19	127.9036	121.6393	116.0841	111.5223	107.8897	105.0690	102.9597	101.4896
11/30/2006	12/2/2013	3/2/2009	4.35	121.7137	117.3124	113.0060	109.3390	106.4199	104.1309	102.4229	101.2388
12/1/2006	12/1/2016	3/2/2009	4.09	127.1319	120.8546	115.3252	110.8147	107.3196	104.6233	102.6571	101.3256
12/4/2006	12/5/2016	3/4/2009	4.08	127.1019	120.8324	115.3107	110.8070	107.3085	104.6088	102.6405	101.3079
12/5/2006	12/5/2016	12/7/2009	4.26	128.4626	122.0530	116.3993	111.7531	108.0887	105.2074	102.9306	101.1288
12/6/2006	12/6/2013	12/7/2009	4.40	122.0123	117.5885	113.2521	109.5513	106.5813	104.1904	102.2764	100.7211
12/8/2006	12/8/2016	3/9/2009	3.99	126.4567	120.2572	114.8068	110.3764	106.9424	104.3127	102.4158	101.1546
12/11/2006	12/11/2009	3/11/2009	4.69	104.4946	104.4946	104.4946	103.4930	102.5503	101.6779	100.9525	100.4202
12/12/2006	12/12/2016	3/12/2009	3.99	126.5010	120.3015	114.8512	110.4195	106.9736	104.3326	102.4248	101.1528
12/12/2006	12/12/2016	3/12/2009	4.05	126.9543	120.7083	115.2101	110.7284	107.2344	104.5399	102.5784	101.2550
12/13/2006	12/14/2009	3/13/2009	4.83	104.6690	104.6690	104.6690	103.6658	102.7104	101.8156	101.0532	100.4874
12/19/2006	12/19/2011	3/19/2009	4.49	113.5074	113.1680	110.1497	107.3850	105.0693	103.2016	101.8010	100.8431

As of: 12/31/2008 **Parallel-Shift Sensitivity Analysis for HLB-Option and Knockout Advances**

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
12/19/2006	12/19/2016	3/19/2009	4.19	128.0961	121.7396	116.1359	111.5402	107.9017	105.0798	102.9728	101.5043
12/20/2006	12/20/2013	3/20/2009	4.50	122.6874	118.2371	113.8681	110.1182	107.0566	104.6190	102.7586	101.4258
12/21/2006	12/21/2011	3/23/2009	4.53	113.6529	113.3134	110.2919	107.5179	105.1869	103.2974	101.8726	100.8882
12/27/2006	12/27/2013	3/27/2009	4.50	122.7749	118.3246	113.9556	110.2035	107.1212	104.6638	102.7841	101.4324
12/28/2006	12/28/2016	3/30/2009	4.25	128.6585	122.2565	116.6097	111.9640	108.2449	105.3503	103.1658	101.6253
12/28/2006	12/28/2016	3/30/2009	4.40	129.8029	123.2918	117.5391	112.7782	108.9336	105.9077	103.6044	101.9497
1/8/2007	1/9/2012	4/8/2009	4.75	114.5667	114.0904	110.9829	108.1283	105.7322	103.7840	102.2747	101.1782
1/12/2007	1/12/2017	1/12/2009	4.42	130.0018	123.4121	117.5941	112.7838	108.9461	105.9263	103.6405	101.9892
1/16/2007	1/17/2017	1/17/2012	4.79	132.9160	126.0717	119.9186	114.6133	110.0129	105.9253	102.2278	98.8482
1/23/2007	1/23/2014	1/23/2009	4.49	122.8838	118.3824	113.9774	110.2013	107.1094	104.6492	102.7736	101.4242
1/23/2007	1/23/2017	1/23/2009	4.46	130.4450	123.8261	117.9794	113.1353	109.2335	106.1513	103.8007	102.0900
1/29/2007	1/29/2014	1/29/2009	4.79	124.5272	119.9375	115.4412	111.5448	108.2956	105.6595	103.6013	102.0783
2/2/2007	2/2/2017	2/2/2009	4.69	132.2767	125.4239	119.3533	114.3153	110.2889	107.0769	104.5940	102.7608
2/9/2007	2/9/2012	2/9/2009	4.75	114.9757	114.3676	111.1845	108.2654	105.8189	103.8246	102.2842	101.1849
2/9/2007	2/9/2017	2/9/2009	4.47	130.6256	123.9219	118.0171	113.1311	109.2356	106.1654	103.8255	102.1441
2/12/2007	2/13/2012	2/12/2009	4.88	115.4397	114.8310	111.6368	108.6920	106.1951	104.1439	102.5320	101.3592
2/15/2007	2/15/2012	2/17/2009	4.99	115.8155	115.2091	112.0085	109.0526	106.5267	104.4396	102.7921	101.5844
2/20/2007	2/21/2017	2/20/2009	4.39	130.1523	123.5080	117.6616	112.8332	108.9659	105.9250	103.6170	101.9692
2/20/2007	2/21/2017	2/21/2012	4.85	132.7972	125.4841	118.9629	113.5271	108.8816	104.8064	101.1425	97.8381
2/23/2007	2/23/2017	2/23/2009	4.25	129.0894	122.5511	116.8079	112.0889	108.3315	105.4066	103.2071	101.6653
2/23/2007	2/23/2017	2/23/2009	4.35	129.8660	123.2518	117.4345	112.6365	108.7957	105.7839	103.5017	101.8787
2/28/2007	3/1/2010	3/1/2009	4.89	105.7729	105.7729	105.5070	104.2511	103.0817	101.9342	100.8078	100.2271
3/2/2007	3/2/2012	3/2/2009	4.49	114.4304	113.6922	110.4640	107.5492	105.1756	103.2728	101.8570	100.8960
3/9/2007	3/10/2014	3/9/2009	4.45	122.9785	118.3448	113.8777	110.0633	106.9886	104.5523	102.7059	101.3963
3/16/2007	3/16/2017	3/16/2009	4.09	128.0046	121.5079	115.8395	111.2205	107.6078	104.8185	102.7695	101.3647
3/20/2007	3/20/2012	3/20/2009	4.55	114.8507	114.1132	110.8832	107.9607	105.5225	103.5565	102.0686	101.0237
3/21/2007	3/21/2017	3/23/2009	4.22	129.0786	122.4766	116.7084	111.9842	108.2338	105.3261	103.1427	101.6128
3/23/2007	3/23/2017	3/23/2009	4.29	129.6501	122.9937	117.1731	112.3928	108.5718	105.5985	103.3487	101.7633
3/23/2007	3/23/2017	3/23/2009	4.29	129.6501	122.9937	117.1731	112.3928	108.5718	105.5985	103.3487	101.7633
3/23/2007	3/23/2017	6/23/2009	4.29	129.6501	122.9937	117.1731	112.3928	108.5718	105.5985	103.3487	101.7633
3/30/2007	3/30/2012	3/30/2009	4.67	115.3721	114.6185	111.2503	107.9379	104.7407	101.6577	100.8078	100.2271
4/2/2007	4/2/2012	4/2/2009	4.59	115.1470	114.2730	110.9617	107.9712	105.5210	103.5500	102.0642	101.0219
4/9/2007	4/9/2009	1/9/2009	4.75	101.3062	101.3062	101.3062	101.2147	100.9415	100.6703	100.4007	100.1735
4/9/2007	4/10/2017	1/9/2009	4.15	128.6266	122.0227	116.2594	111.5599	107.8789	105.0385	102.9398	101.4781
4/12/2007	4/12/2017	1/12/2009	4.25	129.4379	122.7523	116.9112	112.1279	108.3521	105.4210	103.2256	101.6774
4/13/2007	4/13/2017	4/13/2009	4.45	131.0284	124.1877	118.1940	113.2495	109.3030	106.1960	103.8342	102.1250
4/18/2007	4/20/2009	1/20/2009	4.94	101.5094	101.5094	101.5094	101.4147	101.1105	100.8085	100.5083	100.2271
4/23/2007	4/23/2012	1/23/2009	4.65	115.6161	114.7455	111.4327	108.4357	105.9121	103.8722	102.3035	101.1914
4/23/2007	4/23/2014	4/23/2010	4.62	124.2564	119.5211	114.9484	111.0181	107.7534	105.0572	102.7911	100.8739
4/27/2007	4/27/2012	4/27/2009	4.55	115.3310	114.4574	111.1509	108.1618	105.6523	103.6260	102.0927	101.0011
4/27/2007	4/27/2017	1/27/2009	4.25	129.6150	122.9294	117.0883	112.3002	108.4794	105.5057	103.2693	101.6808
5/2/2007	5/2/2014	5/3/2010	4.59	124.0558	119.2661	114.6665	110.7252	107.5065	104.8372	102.5899	100.6736
5/4/2007	5/5/2014	5/4/2009	4.55	123.8787	119.1015	114.5177	110.5990	107.4317	104.9124	102.9836	101.5763
5/14/2007	5/16/2011	2/17/2009	4.50	110.8250	110.8250	108.6577	106.3410	104.3557	102.7374	101.5078	100.7010
5/18/2007	5/18/2017	2/18/2009	4.19	129.2789	122.5662	116.7271	111.9567	108.1909	105.2760	103.0999	101.5898
5/22/2007	5/22/2012	5/22/2009	4.69	116.1284	115.1181	111.7250	108.6579	106.0764	103.9835	102.3704	101.1774
5/22/2007	5/22/2012	5/22/2009	4.69	116.1284	115.1181	111.7250	108.6579	106.0764	103.9835	102.3704	101.1774
5/22/2007	5/22/2012	5/22/2009	4.71	116.1972	115.1866	111.7910	108.7194	106.1311	104.0306	102.4069	101.2048
5/22/2007	5/22/2017	5/22/2012	4.75	133.8249	126.6672	120.2529	114.7025	109.8457	105.5057	101.5683	97.9385
5/25/2007	5/25/2012	2/25/2009	4.65	116.0295	115.0199	111.6318	108.5730	105.9968	103.9112	102.3098	101.1647
5/29/2007	5/30/2017	3/2/2009	4.25	129.8966	123.1350	117.2486	112.4260	108.5685	105.5662	103.3073	101.7197
6/1/2007	6/1/2010	3/2/2009	4.99	107.1662	107.1662	106.6285	105.1154	103.7429	102.5153	101.5031	100.7629
6/1/2007	6/2/2014	3/2/2009	4.50	123.8293	118.9849	114.3766	110.4476	107.2930	104.7970	102.8952	101.5458
6/7/2007	6/7/2012	3/9/2009	4.94	117.2077	116.0622	112.5649	109.3934	106.7282	104.5531	102.8351	101.5764
6/7/2007	6/7/2017	6/8/2009	4.82	134.5071	127.2240	120.8199	115.5041	111.2322	107.8045	105.1246	103.0878
6/8/2007	6/9/2014	3/9/2009	4.73	125.1731	120.2527	115.5555	111.5188	108.2137	105.5546	103.4947	101.9885
6/8/2007	6/8/2017	3/9/2009	4.49	131.8506	124.8057	118.6688	113.6181	109.6004	106.4336	104.0202	102.2775
6/11/2007	6/12/2017	3/11/2009	4.49	131.9004	124.8555	118.7187	113.6667	109.6369	106.4586	104.0342	102.2807
6/18/2007	6/19/2017	3/18/2009	4.50	132.0689	125.0164	118.8711	113.8088	109.7498	106.5433	104.0913	102.3105
6/18/2007	6/19/2017	6/18/2009	4.84	134.8309	127.5330	121.1144	115.7781	111.4547	107.9766	105.2466	103.1643
6/19/2007	6/19/2017	3/19/2009	4.65	133.2860	126.1238	119.8509	114.6734	110.4927	107.1646	104.5900	102.6884
6/20/2007	6/20/2012	3/20/2009	4.89	117.2100	116.0656	112.5741	109.4101	106.7235	104.5303	102.7996	101.5255
6/20/2007	6/20/2012	3/20/2009	4.96	117.4564	116.3105	112.8110	109.6308	106.9206	104.7007	102.9383	101.6369
6/22/2007	6/22/2017	3/23/2009	4.50	132.1064	125.0539	118.9086	113.8454	109.7772	106.5622	104.1019	102.3131
6/26/2007	6/26/2012	6/26/2009	5.13	118.1402	116.9907	113.4717	110.2511	107.4746	105.1648	103.3159	101.8866
6/28/2007	6/28/2017	3/30/2009	4.50	132.1814	125.1289	118.9836	113.9184	109.8321	106.5998	104.1231	102.3182
7/13/2007	7/13/2012	1/13/2009	4.69	116.8058	115.4970	111.9672	108.8032	106.1757	104.0523	102.4214	101.2473
7/13/2007	7/13/2017	1/13/2009	4.29	130.5223	123.5747	117.5532	112.6298	108.7334	105.7063	103.4282	101.8162
7/13/2007	7/13/2017	7/13/2011	4.90	135.5174	128.1014	121.5697	116.0524	111.4010	107.3808	103.8368	100.6589
7/18/2007	7/18/2017	7/19/2010	4.78	134.5993	127.2719	120.8413	115.5071	111.1600	107.5738	104.5842	102.0308
7/19/2007	7/19/2012	7/20/2009	4.89	117.6040	116.2895	112.7317	109.5190	106.8002	104.5803	102.8234	101.4618
7/20/2007	7/20/2017	1/20/2009	4.29	130.6057	123.6581	117.6366	112.7110	108.7935	105.7465	103.4492	101.8184
7/24/2007	7/24/2012	7/24/2009	4.82	117.4189	116.1062	112.5580	109.3601	106.6524	104.4433	102.7053	101.3587
7/27/2007	7/27/2012	1/27/2009	4.59	116.6259	115.3201	111.8044	108.6601	106.0289	103.9085	102.2913	101.1328
7/27/2007	7/28/2014	1/27/2009	4.35	123.4820	118.6626	114.0806	110.1944	107.0305	104.5348	102.6543	101.3145
7/27/2007	7/27/2017	1/27/2009	4.18	129.7922	122.9372	117.0045	112.1710	108.3349	105.3629	103.1487	101.5868
7/27/2007	7/27/2017	1/27/2009	4.25	130.3625	123.4485	117.4598	112.5650	108.6633	105.6325	103.3511	101.7322
7/30/2007	1/30/2019	1/30/2009	3.99	132.4444	124.4395	117.7869	112.5222	108.4205	105.2956	103.0171	101.4431
7/31/2007	7/31/2017	2/2/2009	3.99	128.2892	121.5989	115.8257	111.1506	107.4785	104.6653	102.6120	101.2271
7/31/2007	7/31/2017	2/2/2009	3.99	128.2892	121.5989	115.8257	111.1506	107.4785	104.6653	102.6120	101.2271
7/31/2007	7/31/2017	2/2/2009	4.06	128.8593	122.1066	116.2745	111.5379	107.7993	104.9244	102.8077	101.3579
8/2/2007	8/4/2014	8/3/2009	4.49	124.1710	119.2488	114.5726	110.5962	107.3975	104.8616	102.9000	101.4068
8/2/2007	8/2/2017	2/2/2009	4.05	128.6962	121.8781	116.0078	111.2592	107.5932	104.7927	102.7447	101.3754
8/2/2007	8/2/2017	2/2/2009	4.15	129.5106	122.6036	116.6493	111.8134	108.0538	105.1627	103.0232	101.5575
8/6/2007	8/6/2012	2/6/2009	4.49	116.3885	114.9200	111.3601	108.2080	105.6432	103.6030	102.0710	101.0301
8/6/2007	8/6/2012	2/6/2009	4.49	116.3885	114.9200	111.3601	108.2080	105.6432	103.6030	102.0710	101.0301
8/9/2007	8/11/2014	8/9/2011	4.86	126.3361	121.2860	116.4356	112.1431	108.3977	105.0333	101.9605	99.1171

As of: 12/31/2008 **Parallel-Shift Sensitivity Analysis for HLB-Option and Knockout Advances**

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
8/9/2007	8/9/2017	2/9/2009	3.99	128.2869	121.5226	115.7013	111.0054	107.3752	104.6113	102.6010	101.2725
8/9/2007	8/9/2017	2/9/2009	3.99	128.2869	121.5226	115.7013	111.0054	107.3752	104.6113	102.6010	101.2725
8/13/2007	8/13/2012	8/13/2009	4.59	116.8427	115.3708	111.7945	108.6125	105.9886	103.8800	102.2402	100.9667
8/16/2007	8/16/2017	2/17/2009	3.99	128.3645	121.6002	115.7789	111.0808	107.4298	104.6461	102.6167	101.2693
8/17/2007	8/17/2012	2/17/2009	4.15	115.2743	113.8196	110.3199	107.2697	104.8085	102.9012	101.5260	100.6713
8/17/2007	8/17/2012	2/17/2009	4.35	116.0104	114.5472	111.0111	107.8967	105.3532	103.3486	101.8637	100.8840
8/17/2007	8/17/2017	2/17/2009	4.00	128.4571	121.6836	115.8542	111.1467	107.4831	104.6874	102.6456	101.2854
8/20/2007	8/20/2010	8/20/2009	4.59	107.6117	107.6117	106.7688	105.1021	103.5842	102.2767	101.1911	100.2943
8/20/2007	8/20/2014	8/20/2009	4.25	122.8851	118.0548	113.4437	109.5385	106.3569	103.9144	102.0750	100.7187
8/20/2007	8/20/2014	8/20/2009	4.25	122.8851	118.0548	113.4437	109.5385	106.3569	103.9144	102.0750	100.7187
8/24/2007	8/24/2010	2/24/2009	4.46	107.4457	107.4457	106.6033	104.9402	103.4257	102.1349	101.1378	100.4882
8/24/2007	8/24/2012	2/24/2009	4.05	114.9850	113.5356	110.0566	107.0372	104.5958	102.7225	101.3850	100.5705
8/28/2007	8/28/2014	8/28/2009	4.35	123.6776	118.8080	114.1929	110.2791	107.0939	104.5738	102.6289	101.1390
8/30/2007	8/30/2012	8/31/2009	4.39	116.3162	114.8508	111.3077	108.1775	105.5801	103.5111	101.9124	100.6698
8/30/2007	9/2/2014	3/2/2009	3.89	120.9879	116.2350	111.8027	108.1335	105.2896	103.1485	101.6482	100.6987
8/31/2007	8/31/2012	8/31/2009	4.37	116.2539	114.7888	111.2483	108.1231	105.5294	103.4667	101.8736	100.6372
9/4/2007	9/4/2012	3/4/2009	4.19	115.6310	114.0216	110.4572	107.3554	104.8788	102.9623	101.5908	100.6981
9/4/2007	9/4/2012	3/4/2009	4.22	115.7429	114.1318	110.5609	107.4495	104.9617	103.0297	101.6404	100.7309
9/4/2007	9/5/2017	3/4/2009	3.89	127.6814	120.9179	115.1368	110.4965	106.9492	104.2681	102.3546	101.1009
9/6/2007	9/7/2010	3/6/2009	4.16	107.1067	107.1067	106.1201	104.4068	102.9221	101.7025	100.8230	100.2633
9/7/2007	9/7/2012	3/9/2009	4.09	115.2921	113.6884	110.1461	107.0770	104.6333	102.7658	101.4345	100.5917
9/10/2007	9/11/2017	3/10/2009	3.69	126.1057	119.5360	113.9328	109.4939	106.1118	103.6055	101.8684	100.7691
9/11/2007	9/13/2010	9/11/2009	4.43	107.6417	107.6417	106.6532	104.9219	103.3887	102.0779	100.9955	100.0869
9/11/2007	9/11/2017	3/11/2009	3.59	125.2900	118.8155	113.3142	108.9716	105.6860	103.2759	101.6330	100.6202
9/12/2007	9/12/2014	3/12/2009	3.69	119.9686	115.3144	110.9837	107.4327	104.6953	102.6769	101.2925	100.4456
9/13/2007	9/15/2014	9/14/2009	3.99	121.6978	116.9055	112.4194	108.6852	105.7392	103.4682	101.7464	100.4171
9/13/2007	9/13/2017	9/13/2010	3.99	128.5907	121.7339	115.8607	111.0931	107.2913	104.1619	101.5235	99.2224
9/13/2007	9/13/2017	9/13/2010	3.99	128.5907	121.7339	115.8607	111.0931	107.2913	104.1619	101.5235	99.2224
9/14/2007	9/14/2011	3/16/2009	4.09	111.2134	111.0446	108.4056	105.9008	103.8490	102.2525	101.1140	100.3955
9/14/2007	9/14/2012	9/14/2010	4.39	116.4991	114.8784	111.2700	108.0717	105.3595	102.9962	100.8969	98.9901
9/17/2007	9/17/2012	9/17/2009	4.22	115.8953	114.2842	110.7133	107.5979	105.0718	103.0858	101.5626	100.3605
9/27/2007	9/27/2010	3/27/2009	4.25	107.4965	107.4965	106.5092	104.7845	103.2322	101.9352	100.9681	100.3280
9/27/2007	9/29/2014	9/27/2010	4.49	124.4023	118.4861	113.4216	109.2717	106.0131	103.3427	101.1051	99.1136
9/27/2007	9/27/2017	3/27/2009	3.65	125.9410	119.4094	113.8453	109.4422	106.0514	103.5389	101.7945	100.6882
9/28/2007	9/28/2010	3/30/2009	4.29	107.5790	107.5790	106.5914	104.8640	103.3041	101.9952	101.0119	100.3568
9/28/2007	9/28/2012	3/30/2009	3.85	114.6193	113.0316	109.5403	106.5513	104.1679	102.3698	101.1237	100.3407
10/3/2007	10/3/2012	4/3/2009	3.83	114.5965	112.8470	109.3093	106.3003	103.9747	102.2416	101.0594	100.4363
10/9/2007	10/9/2012	10/9/2009	4.40	116.8423	114.9634	110.9919	107.3794	104.5473	102.5785	101.1367	100.0346
10/11/2007	10/14/2014	4/13/2009	4.18	122.9094	118.0107	113.4000	109.5282	106.4528	104.0589	102.2996	101.0838
10/11/2007	10/11/2017	1/12/2009	3.99	128.7691	121.8564	115.9430	111.1773	107.4921	104.6846	102.6485	101.2571
10/15/2007	10/16/2017	1/15/2009	3.99	128.8245	121.9118	115.9984	111.2312	107.5311	104.7094	102.6597	101.2548
10/22/2007	10/22/2012	1/22/2009	3.99	115.4169	113.6559	110.0799	107.0039	104.5377	102.6658	101.3329	100.5485
10/25/2007	10/27/2014	10/25/2011	4.36	124.1028	119.1290	114.3818	110.1900	106.4661	103.0943	99.9942	97.1112
10/26/2007	10/26/2017	1/26/2009	3.39	123.9580	117.6430	112.3050	108.1320	104.9918	102.7318	101.2300	100.4534
10/29/2007	10/29/2009	1/29/2009	4.25	103.5653	103.5653	103.5653	102.8569	102.0233	101.2440	100.6070	100.2149
10/29/2007	10/29/2012	10/29/2009	3.99	115.4944	113.7335	110.1574	107.0793	104.5894	102.6616	101.1520	99.9403
11/2/2007	11/3/2014	11/2/2009	3.99	121.8690	117.0081	112.4599	108.6801	105.7310	103.4419	101.6663	100.2434
11/2/2007	11/3/2014	11/2/2010	4.19	123.0266	118.0745	113.4220	109.4720	106.2161	103.4258	100.9813	98.7838
11/5/2007	11/5/2014	11/5/2009	3.99	121.8912	117.0303	112.4820	108.7016	105.7467	103.4519	101.6709	100.2427
11/5/2007	11/6/2017	11/5/2012	4.39	132.3298	124.8934	118.2642	112.5124	107.4769	102.9345	98.7904	94.9730
11/6/2007	11/6/2017	2/6/2009	3.48	124.7138	118.2321	112.7567	108.4702	105.2722	102.9589	101.4190	100.5586
11/8/2007	11/9/2009	2/9/2009	4.10	103.5647	103.5647	103.5647	102.7217	101.8683	101.0950	100.4965	100.1604
11/9/2007	11/10/2014	11/9/2011	4.33	123.9231	118.9096	114.1318	109.9085	106.1917	102.8151	99.7065	96.8149
11/13/2007	11/14/2011	2/13/2009	3.76	110.9457	110.6644	107.8282	105.2851	103.2774	101.7758	100.7766	100.2405
11/13/2007	11/13/2012	2/13/2009	3.68	114.4439	112.5545	109.0047	106.0192	103.7205	102.0296	100.9058	100.2990
11/13/2007	11/13/2014	2/13/2009	3.35	118.2761	113.7454	109.5552	106.1947	103.6923	101.9159	100.8090	100.2127
11/19/2007	11/19/2014	11/19/2009	3.75	120.6513	115.9057	111.4828	107.8491	105.0136	102.8361	101.1531	99.8090
11/19/2007	11/19/2014	11/19/2009	3.75	120.6513	115.9057	111.4828	107.8491	105.0136	102.8361	101.1531	99.8090
11/19/2007	11/19/2014	11/21/2011	4.27	123.6806	118.6933	113.9415	109.7382	106.0195	102.6364	99.5168	96.6166
11/19/2007	11/20/2017	11/19/2012	4.29	130.8676	123.4373	116.7469	110.9678	105.9715	101.5301	97.5059	93.7873
11/20/2007	11/20/2017	11/22/2010	3.74	127.0143	120.2706	114.5293	109.9038	106.1747	103.0790	100.4370	98.1087
11/23/2007	11/24/2017	11/23/2011	3.99	128.0105	120.5216	114.2418	109.2530	105.1000	101.5087	98.3005	95.3842
11/23/2007	11/24/2017	11/23/2011	3.99	128.0105	120.5216	114.2418	109.2530	105.1000	101.5087	98.3005	95.3842
11/29/2007	11/29/2017	3/2/2009	2.95	120.5495	114.6800	109.7782	106.0650	103.3813	101.5861	100.5180	99.8915
11/30/2007	11/30/2017	11/30/2009	3.19	122.5537	116.3715	111.2092	107.2189	104.2485	102.0479	100.3903	99.0708
12/6/2007	12/6/2017	12/7/2009	3.25	123.0090	116.6983	111.4305	107.3544	104.3675	102.1307	100.4323	99.0847
12/7/2007	12/7/2012	12/7/2009	3.45	113.7712	111.7585	108.2285	105.3223	103.1139	101.4245	100.0801	98.9457
12/10/2007	12/10/2010	12/10/2009	3.87	107.6218	107.6218	106.1921	104.2969	102.6923	101.3541	100.2029	99.1758
12/10/2007	12/11/2017	12/10/2010	3.45	124.7207	118.1926	112.6914	108.2936	104.7677	101.8274	99.2807	97.0257
12/11/2007	12/11/2012	12/11/2009	3.76	115.0504	113.0042	109.3824	106.3281	103.9518	102.0905	100.6088	99.3809
12/14/2007	12/14/2010	3/16/2009	3.69	107.3082	107.3082	105.8839	104.0087	102.4601	101.2797	100.5114	100.0398
12/20/2007	12/20/2012	12/21/2009	3.60	114.4999	112.4703	108.8915	105.9054	103.5896	101.7799	100.3422	99.1297
12/20/2007	12/20/2012	12/21/2009	3.75	115.1041	112.8804	108.8622	105.5482	103.1400	101.4582	100.1501	99.0742
12/24/2007	12/26/2017	12/24/2012	3.99	128.6082	121.4407	114.8616	109.2848	104.3804	99.9764	95.9504	92.2501
12/26/2007	12/26/2012	3/26/2009	3.46	113.9937	111.9799	108.4461	105.5305	103.2927	101.6895	100.6743	100.0586
12/26/2007	12/26/2012	12/27/2010	3.96	116.0160	113.9490	110.2649	107.0334	104.2428	101.7806	99.5429	97.4718
1/2/2008	1/2/2013	1/4/2010	3.49	114.1830	111.9841	108.4028	105.4473	103.2005	101.4499	100.0346	98.8238
1/3/2008	1/5/2015	1/3/2011	3.65	120.1945	115.4210	110.9839	107.2571	104.1713	101.4951	99.1029	96.9188
1/4/2008	1/4/2018	1/4/2011	3.36	124.0654	117.5878	112.1354	107.7812	104.3009	101.3753	98.8267	96.5431
1/7/2008	1/7/2013	4/7/2009	2.99	112.1925	110.0742	106.6850	103.9996	102.1113	100.8836	100.2798	99.9918
1/7/2008	1/7/2013	1/7/2011	3.59	114.6391	112.4269	108.7949	105.6499	102.9834	100.6071	98.4353	96.4055
1/7/2008	1/7/2015	1/7/2011	3.49	119.2712	114.5885	110.2435	106.6091	103.6014	100.9863	98.6449	96.4916
1/7/2008	1/8/2018	4/7/2009	2.59	117.7233	112.2169	107.6917	104.3764	102.1707	100.8265	100.2256	99.9664
1/8/2008	1/8/2013	1/8/2010	3.15	112.8537	110.7072	107.2526	104.4693	102.3950	100.7884	99.4744	98.3361
1/8/2008	1/8/2018	4/8/2009	2.57	117.5597	112.0810	107.5836	104.2944	102.1130	100.7917	100.2093	99.9660
1/8/2008	1/8/2018	4/8/2009	2.64	118.1324	112.5569	107.9633	104.5878	102.3155	100.9143	100.2685	99.9675
1/10/2008	1/10/2011	1/12/2009	3.10	106.3722	106.3722	104.8261	102.9866	101.5849	100.6498	100.1816	99.9721

As of: 12/31/2008 **Parallel-Shift Sensitivity Analysis for HLB-Option and Knockout Advances**

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
1/11/2008	1/11/2018	1/12/2009	2.72	118.8097	113.1258	108.4295	104.9549	102.5729	101.0665	100.3374	99.9746
1/14/2008	1/16/2018	1/14/2011	3.24	123.1651	116.8234	111.5052	107.2610	103.8447	100.9619	98.4440	96.1701
1/16/2008	1/16/2013	1/16/2009	2.55	110.4621	108.4393	105.2655	102.8733	101.2940	100.3859	100.0325	99.9311
1/16/2008	1/16/2013	1/16/2009	2.69	111.0364	108.9795	105.7334	103.2401	101.5436	100.5285	100.0930	99.9373
1/16/2008	1/16/2015	1/16/2009	2.64	114.3726	110.2620	106.5318	103.7209	101.8116	100.6559	100.1419	99.9351
1/16/2008	1/16/2018	1/16/2009	2.38	116.0753	110.8799	106.6342	103.5931	101.6248	100.5101	100.0556	99.9236
1/17/2008	1/17/2018	1/20/2009	2.25	115.0421	110.0470	105.9738	103.1134	101.3163	100.3704	99.9897	99.9127
1/18/2008	1/18/2013	1/20/2009	2.55	110.4762	108.4534	105.2797	102.8869	101.3019	100.3884	100.0294	99.9225
1/18/2008	1/20/2015	1/20/2009	2.35	112.7183	108.8522	105.3679	102.8370	101.2135	100.3382	99.9845	99.9029
1/18/2008	1/18/2018	1/20/2009	2.29	115.3673	110.3101	106.1830	103.2673	101.4106	100.4107	100.0062	99.9096
1/24/2008	1/24/2012	7/24/2009	2.44	107.5843	107.1182	104.4135	102.3440	100.9652	100.0714	99.4010	98.8193
1/24/2008	1/24/2013	1/25/2010	2.50	110.3125	108.3021	105.1560	102.7779	101.0524	99.6943	98.5284	97.4621
1/25/2008	1/25/2013	1/26/2009	2.25	109.2875	106.8686	102.7698	100.4136	100.0796	100.0102	99.9409	99.8717
1/25/2008	1/25/2013	1/25/2011	2.65	110.9386	108.5850	105.3284	102.6059	100.2557	98.1196	96.1117	94.1868
1/28/2008	1/28/2010	1/28/2009	2.63	102.8711	102.8711	102.7800	101.6949	100.6226	100.0933	99.9634	99.8859
1/28/2008	1/28/2013	1/28/2011	2.99	112.3669	109.9844	106.5321	103.6296	101.1644	98.9409	96.8657	94.9104
1/30/2008	1/30/2013	2/1/2010	2.67	111.0582	109.0058	105.7688	103.2636	101.3809	99.8849	98.5939	97.4195
2/7/2008	2/7/2013	2/8/2010	2.49	110.3680	108.2207	105.0536	102.6592	100.9421	99.5714	98.3833	97.2896
2/13/2008	2/13/2013	2/14/2011	2.92	112.2071	109.9524	106.5110	103.5758	101.0549	98.7748	96.6543	94.6433
2/14/2008	2/14/2018	2/14/2012	3.19	121.6006	115.1972	109.6361	105.1711	101.3728	97.9955	94.9026	92.0139
2/15/2008	2/16/2010	2/17/2009	2.35	102.6894	102.6894	102.5159	101.3579	100.4291	100.0589	99.9227	99.8015
2/19/2008	2/19/2013	2/19/2010	2.59	110.8709	108.2526	104.7575	102.4324	100.8183	99.5419	98.3970	97.3137
2/22/2008	2/22/2011	2/23/2009	2.50	105.4375	105.4375	103.7182	101.5953	100.4206	100.0704	99.9323	99.7945
2/25/2008	2/25/2013	2/25/2011	3.09	113.0209	110.4569	106.9372	103.9564	101.3966	99.0931	96.9549	94.9262
2/25/2008	2/26/2018	2/25/2009	2.42	116.5908	111.2815	106.9534	103.8449	101.7834	100.6008	100.0308	99.7758
3/7/2008	3/9/2015	3/7/2011	2.89	115.9801	111.5999	107.5784	104.2261	101.4105	98.9067	96.6125	94.4632
3/7/2008	3/7/2018	3/7/2013	3.55	126.1032	118.9971	112.6796	107.1638	102.2929	97.8590	93.7807	89.9921
3/10/2008	3/11/2013	3/10/2010	2.39	110.1641	107.9196	104.7848	102.4282	100.7023	99.2835	98.0250	96.8503
3/11/2008	3/11/2011	3/11/2009	2.09	104.6444	104.6444	102.9702	101.3904	100.4466	100.0143	99.7904	99.5970
3/12/2008	3/12/2013	3/12/2009	2.01	108.5536	106.4584	103.6001	101.6266	100.5205	100.0203	99.7735	99.5758
3/14/2008	3/14/2018	3/15/2010	2.40	116.4808	111.1339	106.8089	103.6674	101.4187	99.6864	98.2483	96.9717
3/17/2008	3/18/2013	3/17/2011	2.69	111.4922	109.1507	105.7678	102.8677	100.3408	98.0307	95.8621	93.7979
3/17/2008	3/17/2015	3/17/2011	2.62	113.2751	108.6930	105.3643	102.4589	99.9917	97.7339	95.6123	93.5765
3/17/2008	3/19/2018	3/18/2013	3.30	124.0762	117.2103	111.0977	105.7435	100.9710	96.6173	92.5928	88.8451
3/25/2008	3/27/2023	3/25/2013	3.15	127.6863	118.1420	110.5235	104.5374	99.5213	95.1450	91.2147	87.5855
3/26/2008	3/26/2018	3/26/2012	2.98	120.0377	113.9483	108.5995	104.1988	100.4140	97.0317	93.9168	90.9916
3/28/2008	3/28/2013	3/28/2011	2.80	112.0400	109.3358	105.9525	103.0614	100.5321	98.2178	96.0393	93.9556
3/28/2008	3/28/2013	3/28/2011	2.82	112.1260	109.4187	106.0249	103.1229	100.5880	98.2691	96.0871	94.0014
3/28/2008	3/28/2018	3/30/2009	2.02	113.4947	108.7636	104.9893	102.4273	100.8862	100.1297	99.7466	99.4880
3/28/2008	3/28/2018	3/28/2011	2.77	119.6529	113.7742	108.8929	105.0119	101.8145	99.0559	96.5830	94.3106
3/31/2008	3/31/2011	3/31/2009	1.99	104.5328	104.5328	102.8840	101.3499	100.4162	99.9781	99.7087	99.4616
4/14/2008	4/14/2015	4/14/2011	2.75	114.0475	109.4235	105.9131	102.8794	100.2882	97.9338	95.7213	93.6066
4/28/2008	4/28/2015	4/28/2011	3.25	118.3641	113.7294	109.4481	105.8364	102.7332	99.9811	97.4749	95.1477
4/28/2008	4/30/2018	1/28/2009	2.15	114.6096	109.6489	105.6487	102.8838	101.1597	100.2868	99.9182	99.8325
4/30/2008	4/30/2018	4/30/2013	3.74	127.5454	120.1739	113.4970	107.7514	102.6695	98.0972	93.9125	90.0301
5/2/2008	5/4/2015	5/2/2011	3.99	123.4881	119.1084	114.6610	110.3317	105.9554	101.8753	98.1039	94.6303
5/5/2008	5/5/2015	5/5/2011	3.17	117.7750	113.1632	108.9042	105.3038	102.2496	99.5274	97.0336	94.7138
5/8/2008	5/8/2015	5/10/2010	2.96	116.5302	112.0682	108.0185	104.8431	102.4162	100.4644	98.7995	97.3260
5/19/2008	5/19/2015	5/21/2012	4.70	126.9225	122.1883	116.7863	111.3014	105.7261	100.5283	95.6470	91.0895
5/19/2008	5/21/2018	5/20/2013	3.89	129.0510	121.3979	114.4751	108.5584	103.3444	98.6548	94.3685	90.4015
5/23/2008	5/23/2013	5/23/2011	4.04	117.9995	115.4798	111.7947	108.0018	104.0573	100.3012	96.8110	93.5000
5/23/2008	5/23/2018	5/23/2011	3.27	124.1929	117.5630	112.0320	107.5711	103.8847	100.7141	97.9058	95.3434
5/27/2008	5/27/2010	5/27/2009	2.79	103.9680	103.9680	103.5227	102.1086	100.9629	100.2458	99.7701	99.3576
5/27/2008	5/27/2011	5/27/2010	3.22	107.8442	107.8442	105.7194	103.5782	101.7617	100.1844	98.7329	97.3597
5/27/2008	5/28/2013	5/27/2011	3.49	115.5984	112.4519	108.6538	105.3783	102.4960	99.8827	97.4489	95.1402
5/29/2008	5/29/2018	5/31/2011	3.46	124.5138	116.6682	110.8800	106.4060	102.9449	100.0189	97.4264	95.0738
6/6/2008	6/6/2013	6/6/2011	3.99	117.9319	114.9887	111.3097	107.6368	103.9795	100.4349	97.0972	93.9256
6/10/2008	6/11/2012	6/10/2010	3.94	113.7674	112.6856	109.4762	106.3747	103.4542	100.7621	98.4624	96.3195
6/16/2008	6/17/2013	6/16/2011	4.07	118.4167	115.0230	110.9684	107.4061	104.2990	101.5099	98.9389	96.5141
6/24/2008	6/24/2015	6/24/2011	3.83	122.1779	117.0948	112.4055	108.3828	104.9162	101.8320	99.0263	96.4393
6/30/2008	7/1/2013	6/30/2009	2.92	113.3265	110.2801	106.7406	103.9830	102.0813	100.8210	100.0077	99.4299
6/30/2008	7/1/2013	6/30/2010	3.45	115.7453	112.5347	108.7474	105.6383	103.2109	101.1935	99.4527	97.8870
6/30/2008	6/30/2015	6/30/2010	3.37	119.3767	114.5677	110.1970	106.6763	103.8782	101.5816	99.6249	97.8852
6/30/2008	7/2/2018	6/30/2011	3.69	126.8002	118.5414	112.2618	107.4819	103.7544	100.6705	97.9820	95.5359
7/1/2008	7/1/2015	7/1/2011	4.44	126.2580	120.9760	116.1062	111.3712	106.7667	102.5476	98.2476	94.2247
7/7/2008	7/8/2013	7/7/2011	3.92	121.0365	117.8348	113.8726	109.8524	105.8326	101.9226	97.9336	94.1453
7/8/2008	7/8/2013	7/8/2011	3.76	119.4782	116.3351	112.4968	108.6804	104.9101	101.2217	97.6299	94.1021
7/10/2008	7/10/2014	7/10/2012	4.25	125.7737	121.3363	116.2728	111.1320	106.0431	100.9795	96.0851	91.3594
7/11/2008	7/11/2018	7/11/2012	3.75	127.7170	120.1897	113.6299	108.2305	103.6528	99.6278	95.9917	92.6367
7/14/2008	7/14/2015	7/15/2013	3.76	129.1418	123.7108	117.4366	111.1267	104.9705	98.9315	93.0426	87.5479
7/14/2008	7/16/2018	7/14/2009	2.50	117.7689	112.0917	107.5170	104.2153	102.0208	100.6128	99.6737	98.9770
7/14/2008	7/16/2018	7/14/2011	3.25	124.3025	117.5763	111.9630	107.4204	103.6475	100.3799	97.4680	94.8038
7/17/2008	7/17/2018	7/17/2013	3.75	128.2926	120.5098	113.5437	107.5513	102.2775	97.5318	93.1919	89.1718
7/21/2008	7/22/2013	7/21/2009	3.00	113.8666	110.1288	105.6587	102.7035	101.1977	100.3336	99.6969	99.1318
8/15/2008	8/15/2018	8/15/2011	3.83	129.6994	122.2118	115.9339	110.7910	106.5151	102.8311	99.5754	96.6411
8/19/2008	8/19/2013	8/19/2010	3.44	116.1679	112.1946	108.1833	105.0671	102.6137	100.5774	98.7818	97.1182
9/8/2008	9/9/2013	9/8/2009	2.89	113.7516	110.3863	106.8079	104.0291	102.0862	100.7101	99.6960	98.8762