

## **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 purchase the advance increases as interest rates fall.

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

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

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
4/8/1998	4/8/2013	7/9/2012	5.490	104.300	104.300	104.300	103.974	103.194	102.428	101.684	100.999
8/19/1998	8/19/2013	8/20/2012	5.490	106.328	106.328	106.328	105.767	104.612	103.481	102.403	101.437
8/19/1998	8/19/2013	8/20/2012	5.490	106.328	106.328	106.328	105.767	104.612	103.481	102.403	101.437
12/14/1998	12/16/2013	9/14/2012	5.390	107.995	107.995	107.995	107.199	105.708	104.264	102.918	101.743
12/14/1998	12/16/2013	9/14/2012	4.890	107.253	107.253	107.253	106.460	104.976	103.552	102.251	101.174
12/15/1998	12/16/2013	9/17/2012	4.880	107.238	107.238	107.238	106.445	104.961	103.537	102.236	101.160
1/7/2000	1/7/2015	7/9/2012	5.950	115.221	115.221	115.221	113.559	110.944	108.467	106.199	104.214
12/5/2002	12/5/2012	9/5/2012	3.790	101.663	101.663	101.663	101.527	101.095	100.668	100.244	99.823
3/6/2003	3/6/2013	9/6/2012	2.990	102.068	102.068	102.068	101.797	101.117	100.491	100.058	99.808
7/2/2004	7/2/2014	7/3/2012	3.990	108.112	108.112	108.112	106.902	104.865	102.878	100.939	99.047
12/13/2004	12/15/2014	9/13/2012	3.320	108.281	108.281	108.281	106.728	104.374	102.392	100.941	100.098
9/1/2005	9/1/2015	9/1/2012	4.130	113.284	113.284	113.284	110.957	107.708	104.572	101.546	98.624
9/19/2005	9/19/2012	9/19/2012	3.820	100.859	100.859	100.859	100.813	100.593	100.374	100.156	99.939
9/26/2005	9/26/2012	9/26/2012	3.890	100.951	100.951	100.951	100.899	100.659	100.421	100.183	99.947
9/30/2005	9/30/2015	9/30/2012	4.440	114.639	114.639	114.639	112.185	108.836	105.606	102.491	99.486
10/26/2005	10/26/2015	7/26/2012	4.540	115.296	115.296	115.296	112.727	109.299	105.996	102.812	99.742
10/28/2005	10/28/2015	7/30/2012	4.140	113.972	113.972	113.972	111.447	108.219	105.403	103.096	101.381
10/28/2005	10/28/2015	7/30/2012	4.310	114.545	114.545	114.545	112.010	108.756	105.890	103.514	101.707
11/21/2005	11/21/2012	8/21/2012	4.290	101.716	101.716	101.716	101.599	101.205	100.815	100.431	100.105
1/17/2006	1/19/2016	7/17/2012	4.080	114.710	114.710	114.710	111.833	108.448	105.529	103.162	101.424
4/19/2006	4/19/2013	7/19/2012	4.630	103.768	103.768	103.768	103.425	102.617	101.826	101.084	100.456
4/24/2006	4/25/2016	7/24/2012	4.440	117.204	117.204	117.204	113.840	110.180	106.980	104.339	102.299
5/5/2006	5/5/2016	8/6/2012	4.350	116.976	116.976	116.976	113.578	109.925	106.752	104.155	102.174
5/5/2006	5/5/2016	8/6/2012	4.530	117.679	117.679	117.679	114.261	110.568	107.332	104.653	102.570
5/15/2006	5/16/2016	8/15/2012	4.350	117.109	117.109	117.109	113.656	109.975	106.780	104.159	102.158
5/15/2006	5/16/2016	8/15/2012	4.520	117.778	117.778	117.778	114.305	110.587	107.330	104.633	102.535
5/19/2006	5/19/2016	8/20/2012	4.510	117.776	117.776	117.776	114.289	110.566	107.306	104.607	102.507
6/12/2006	6/13/2016	9/12/2012	4.620	118.530	118.530	118.530	114.911	111.114	107.780	105.004	102.824
6/26/2006	6/27/2016	9/26/2012	4.730	119.155	119.155	119.155	115.452	111.596	108.197	105.339	103.067
6/28/2006	6/28/2013	9/28/2012	4.950	104.991	104.991	104.991	104.526	103.524	102.547	101.621	100.815
6/30/2006	7/1/2013	10/1/2012	4.890	104.971	104.971	104.971	104.501	103.491	102.508	101.582	100.790
7/14/2006	7/15/2013	7/16/2012	4.890	105.161	105.161	105.161	104.666	103.615	102.591	101.630	100.812
7/24/2006	7/25/2016	7/24/2012	4.660	119.234	119.234	119.234	115.401	111.502	108.080	105.219	102.965
7/28/2006	7/28/2016	7/30/2012	4.490	118.570	118.570	118.570	114.743	110.877	107.506	104.724	102.564
8/1/2006	8/1/2016	8/1/2012	4.890	120.279	120.279	120.279	116.387	112.430	108.942	105.979	103.599
8/21/2006	8/21/2013	8/1/2012	4.750	105.502	105.502	105.502	104.938	103.783	102.645	101.525	100.423
8/25/2006	8/25/2016	8/27/2012	4.350	118.329	118.329	118.329	114.384	110.497	107.139	104.391	102.289
10/10/2006	10/10/2013	7/10/2012	4.250	105.513	105.513	105.513	104.856	103.568	102.342	101.274	100.466
10/12/2006	10/15/2013	7/12/2012	4.500	105.900	105.900	105.900	105.232	103.927	102.674	101.554	100.670
11/6/2006	11/6/2013	8/6/2012	4.290	105.886	105.886	105.886	105.176	103.814	102.517	101.378	100.493
11/10/2006	11/13/2012	8/10/2012	4.390	101.658	101.658	101.658	101.552	101.181	100.812	100.448	100.133
11/17/2006	11/18/2012	8/17/2012	4.350	106.114	106.114	106.114	105.380	103.983	102.653	101.486	100.590
11/24/2006	11/25/2016	8/24/2012	4.190	118.726	118.726	118.701	114.342	110.325	106.902	104.136	102.058
11/30/2006	12/2/2013	8/28/2012	4.350	106.283	106.283	106.283	105.521	104.079	102.663	101.274	100.072
12/1/2006	12/1/2016	9/4/2012	4.090	118.347	118.347	118.314	113.962	109.976	106.608	103.910	101.922
12/4/2006	12/5/2016	9/4/2012	4.080	118.347	118.347	118.302	113.942	109.951	106.582	103.884	101.898
12/5/2006	12/5/2016	9/5/2012	4.260	119.157	119.157	119.112	114.713	110.665	107.210	104.417	102.312
12/6/2006	12/6/2013	9/6/2012	4.400	106.404	106.404	106.404	105.634	104.186	102.813	101.609	100.684
12/8/2006	12/8/2016	9/10/2012	3.990	117.976	117.976	117.922	113.574	109.604	106.271	103.615	101.683
12/12/2006	12/12/2016	9/12/2012	3.990	118.020	118.020	117.954	113.596	109.617	106.276	103.614	101.677
12/12/2006	12/12/2016	9/12/2012	4.050	118.291	118.291	118.225	113.853	109.855	106.486	103.790	101.810
12/19/2006	12/19/2016	9/19/2012	4.190	119.005	119.005	118.917	114.498	110.439	106.988	104.206	102.120
12/20/2006	12/20/2013	9/20/2012	4.500	106.725	106.725	106.725	105.925	104.437	103.020	101.763	100.771
12/28/2006	12/28/2016	9/28/2012	4.250	119.383	119.383	119.268	114.813	110.716	107.217	104.385	102.244
12/28/2006	12/28/2016	9/28/2012	4.400	120.068	120.068	119.952	115.466	111.322	107.756	104.845	102.605
1/12/2007	1/12/2017	7/12/2012	4.420	120.343	120.343	120.182	115.661	111.491	107.905	104.980	102.729
1/16/2007	1/17/2017	7/16/2012	4.790	122.113	122.113	121.936	117.328	113.037	109.303	106.161	103.657
1/23/2007	1/23/2014	7/23/2012	4.490	107.134	107.134	107.134	106.264	104.684	103.184	101.860	100.815
1/23/2007	1/23/2017	7/23/2012	4.460	120.663	120.663	120.471	115.909	111.701	108.077	105.108	102.811
1/29/2007	1/29/2014	7/29/2012	4.790	107.690	107.690	107.690	106.806	105.198	103.622	102.077	100.563
2/2/2007	2/2/2017	8/2/2012	4.690	121.859	121.859	121.626	116.755	111.994	107.461	103.143	99.307
2/9/2007	2/9/2017	8/9/2012	4.470	120.921	120.921	120.680	116.076	111.838	108.194	105.210	102.903
2/20/2007	2/21/2017	8/20/2012	4.390	120.693	120.693	120.419	115.796	111.555	107.920	104.962	102.688
2/20/2007	2/21/2017	8/21/2012	4.850	122.861	122.861	122.568	117.620	112.784	108.181	103.799	99.626
2/23/2007	2/23/2017	8/23/2012	4.250	120.056	120.056	119.778	115.180	110.980	107.407	104.519	102.334
2/23/2007	2/23/2017	8/23/2012	4.350	120.528	120.528	120.249	115.629	111.396	107.773	104.831	102.579
3/16/2007	3/16/2017	9/17/2012	4.090	119.540	119.540	119.196	114.592	110.416	106.900	104.089	102.008
3/21/2007	3/21/2017	9/21/2012	4.220	120.220	120.220	119.857	115.208	110.975	107.382	104.489	102.311
3/23/2007	3/23/2017	9/24/2012	4.290	120.579	120.579	120.208	115.537	111.276	107.646	104.710	102.479

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
3/23/2007	3/23/2017	9/24/2012	4.290	120.579	120.579	120.208	115.537	111.276	107.646	104.710	102.479
4/9/2007	4/10/2017	7/9/2012	4.150	120.115	120.115	119.687	115.015	110.779	107.206	104.347	102.213
4/12/2007	4/12/2017	7/12/2012	4.250	120.623	120.623	120.187	115.484	111.207	107.576	104.654	102.447
4/13/2007	4/13/2017	7/13/2012	4.450	121.606	121.606	121.162	116.409	112.060	108.333	105.290	102.942
4/23/2007	4/23/2014	7/23/2012	4.620	108.495	108.495	108.495	107.433	105.595	103.867	102.340	101.123
4/27/2007	4/27/2017	7/27/2012	4.250	120.800	120.800	120.316	115.571	111.261	107.600	104.650	102.414
5/2/2007	5/2/2014	8/2/2012	4.590	108.555	108.555	108.555	107.473	105.613	103.873	102.346	101.143
5/4/2007	5/5/2014	8/6/2012	4.550	108.518	108.518	108.518	107.430	105.564	103.819	102.293	101.095
5/18/2007	5/18/2017	8/20/2012	4.190	120.751	120.751	120.198	115.422	111.102	107.453	104.524	102.321
5/22/2007	5/22/2017	8/22/2012	4.750	123.577	123.577	122.996	118.072	113.546	109.636	106.364	103.766
5/29/2007	5/30/2017	8/29/2012	4.250	121.190	121.190	120.594	115.770	111.405	107.704	104.722	102.458
6/1/2007	6/2/2014	9/4/2012	4.500	108.774	108.774	108.774	107.626	105.685	103.879	102.316	101.098
6/7/2007	6/7/2017	9/7/2012	4.820	124.139	124.139	123.499	118.525	113.954	110.003	106.691	104.046
6/8/2007	6/9/2014	9/10/2012	4.730	109.315	109.315	109.315	108.148	106.179	104.333	102.704	101.397
6/8/2007	6/8/2017	9/10/2012	4.490	122.499	122.499	121.864	116.966	112.505	108.690	105.567	103.148
6/11/2007	6/12/2017	9/11/2012	4.490	122.548	122.548	121.898	116.990	112.521	108.699	105.570	103.147
6/18/2007	6/19/2017	9/18/2012	4.500	122.686	122.686	122.009	117.080	112.592	108.751	105.604	103.161
6/19/2007	6/19/2017	9/19/2012	4.650	123.442	123.442	122.761	117.794	113.253	109.347	106.105	103.552
6/22/2007	6/22/2017	9/24/2012	4.500	122.724	122.724	122.035	117.098	112.603	108.754	105.600	103.150
6/28/2007	6/28/2017	9/28/2012	4.500	122.799	122.799	122.087	117.135	112.626	108.765	105.601	103.142
7/13/2007	7/13/2012	7/13/2012	4.690	100.169	100.169	100.169	100.164	100.129	100.094	100.059	100.024
7/13/2007	7/13/2017	7/13/2012	4.290	121.913	121.913	121.152	116.230	111.782	108.014	104.978	102.672
7/19/2007	7/19/2012	7/19/2012	4.890	100.258	100.258	100.258	100.250	100.199	100.148	100.097	100.046
7/20/2007	7/20/2017	7/20/2012	4.290	121.997	121.997	121.209	116.268	111.805	108.024	104.975	102.656
7/23/2007	7/23/2012	7/23/2012	5.050	100.323	100.323	100.323	100.313	100.251	100.189	100.128	100.066
7/27/2007	7/27/2012	7/27/2012	4.590	100.344	100.344	100.344	100.333	100.261	100.188	100.115	100.043
7/27/2007	7/28/2014	7/27/2012	4.350	109.159	109.159	109.159	107.888	105.799	103.872	102.223	100.961
7/27/2007	7/27/2017	7/27/2012	4.250	121.874	121.874	121.063	116.114	111.652	107.878	104.840	102.539
7/30/2007	1/30/2019	7/30/2012	3.990	126.654	126.654	123.327	117.443	112.354	108.174	104.884	102.452
7/31/2007	7/31/2017	7/31/2012	3.990	120.580	120.580	119.768	114.894	110.534	106.901	104.011	101.886
7/31/2007	7/31/2017	7/31/2012	3.990	120.580	120.580	119.768	114.894	110.534	106.901	104.011	101.886
7/31/2007	7/31/2017	7/31/2012	4.060	120.941	120.941	120.126	115.229	110.841	107.167	104.238	102.061
8/2/2007	8/4/2014	8/2/2012	4.490	109.541	109.541	109.541	108.253	106.142	104.192	102.511	101.208
8/2/2007	8/2/2017	8/2/2012	4.150	121.429	121.429	120.603	115.679	111.261	107.551	104.594	102.384
8/2/2007	8/2/2017	8/2/2012	4.050	120.912	120.912	120.091	115.198	110.820	107.169	104.271	102.134
8/6/2007	8/6/2012	8/6/2012	4.490	100.461	100.461	100.461	100.445	100.346	100.246	100.147	100.047
8/9/2007	8/9/2017	8/9/2012	3.990	120.680	120.680	119.835	114.943	110.577	106.945	104.071	101.965
8/13/2007	8/13/2012	8/13/2012	4.590	100.561	100.561	100.561	100.541	100.422	100.304	100.185	100.068
8/16/2007	8/16/2017	8/16/2012	3.990	120.758	120.758	119.885	114.976	110.595	106.950	104.062	101.944
8/17/2007	8/17/2012	8/17/2012	4.350	100.580	100.580	100.580	100.557	100.428	100.299	100.170	100.042
8/17/2007	8/17/2012	8/17/2012	4.150	100.553	100.553	100.553	100.531	100.401	100.272	100.143	100.015
8/17/2007	8/17/2017	8/17/2012	4.000	120.821	120.821	119.944	115.028	110.642	106.989	104.093	101.965
8/20/2007	8/20/2014	8/20/2012	4.250	109.220	109.220	109.220	107.899	105.738	103.733	101.962	100.664
8/24/2007	8/24/2012	8/24/2012	4.050	100.619	100.619	100.619	100.592	100.443	100.296	100.148	100.001
8/28/2007	8/28/2014	8/28/2012	4.350	109.533	109.533	109.533	108.195	106.023	104.023	102.319	101.008
8/30/2007	8/30/2012	8/30/2012	4.390	100.744	100.744	100.744	100.713	100.549	100.385	100.221	100.058
8/30/2007	9/2/2014	8/30/2012	3.890	108.579	108.579	108.579	107.237	105.082	103.151	101.589	100.516
9/4/2007	9/4/2012	9/4/2012	4.220	100.774	100.774	100.774	100.739	100.561	100.383	100.206	100.030
9/4/2007	9/5/2017	9/4/2012	3.890	120.453	120.453	119.513	114.600	110.240	106.643	103.815	101.780
9/7/2007	9/7/2012	9/7/2012	4.090	100.784	100.784	100.784	100.747	100.560	100.374	100.189	100.004
9/10/2007	9/11/2017	9/10/2012	3.690	119.463	119.463	118.511	113.657	109.382	105.889	103.201	101.330
9/11/2007	9/11/2017	9/11/2012	3.590	118.936	118.936	117.990	113.176	108.949	105.516	102.917	101.151
9/12/2007	9/12/2014	9/12/2012	3.690	108.240	108.240	108.240	106.881	104.718	102.819	101.329	100.360
9/13/2007	9/15/2014	9/13/2012	3.990	108.944	108.944	108.944	107.572	105.378	103.405	101.801	100.671
9/13/2007	9/13/2017	9/13/2012	3.990	121.068	121.068	120.087	115.122	110.702	107.028	104.122	101.995
9/17/2007	9/17/2012	9/17/2012	4.220	100.926	100.926	100.926	100.881	100.667	100.453	100.240	100.028
9/27/2007	9/29/2014	9/27/2010	4.490	110.239	110.239	110.239	108.828	106.528	104.289	102.108	99.984
9/27/2007	9/27/2017	9/27/2012	3.650	119.415	119.415	118.399	113.526	109.238	105.739	103.059	101.205
9/28/2007	9/28/2012	9/28/2012	3.850	100.962	100.962	100.962	100.909	100.664	100.420	100.177	99.935
10/3/2007	10/3/2012	7/3/2012	3.830	101.011	101.011	101.011	100.952	100.693	100.436	100.180	100.006
10/9/2007	10/9/2012	10/9/2009	4.400	101.234	101.234	101.234	101.169	100.894	100.620	100.348	100.077
10/11/2007	10/14/2014	7/11/2012	4.180	109.706	109.706	109.706	108.269	105.984	103.914	102.192	100.921
10/11/2007	10/11/2017	7/11/2012	3.990	121.378	121.378	120.283	115.266	110.805	107.104	104.177	102.034
10/15/2007	10/16/2017	7/16/2012	3.990	121.434	121.434	120.318	115.288	110.819	107.110	104.175	102.024
10/22/2007	10/22/2012	7/23/2012	3.990	101.263	101.263	101.263	101.184	100.874	100.566	100.259	100.034
10/25/2007	10/27/2014	7/25/2012	4.360	110.282	110.282	110.282	108.813	106.478	104.344	102.529	101.140
10/26/2007	10/26/2017	7/26/2012	3.390	118.305	118.305	117.203	112.383	108.201	104.850	102.389	100.762
10/29/2007	10/29/2012	7/30/2012	3.990	101.341	101.341	101.341	101.254	100.925	100.598	100.274	100.037
11/2/2007	11/3/2014	8/2/2012	3.990	109.487	109.487	109.487	108.010	105.690	103.616	101.941	100.749

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
11/2/2007	11/3/2014	8/2/2012	4.190	109.962	109.962	109.962	108.482	106.145	104.033	102.279	100.983
11/5/2007	11/5/2014	8/6/2012	3.990	109.509	109.509	109.509	108.028	105.702	103.622	101.942	100.746
11/5/2007	11/6/2017	11/5/2012	4.390	123.839	123.839	122.612	117.408	112.738	108.784	105.582	103.125
11/6/2007	11/6/2017	8/6/2012	3.480	118.897	118.897	117.749	112.878	108.644	105.235	102.703	101.013
11/9/2007	11/10/2014	8/9/2012	4.330	110.379	110.379	110.379	108.881	106.513	104.359	102.539	101.159
11/13/2007	11/13/2012	8/13/2012	3.680	101.390	101.390	101.390	101.284	100.913	100.546	100.201	99.975
11/13/2007	11/13/2014	8/13/2012	3.350	108.058	108.058	108.058	106.574	104.294	102.361	100.933	100.121
11/13/2007	11/13/2014	8/13/2012	3.350	108.058	108.058	108.058	106.574	104.294	102.361	100.933	100.121
11/19/2007	11/19/2014	8/20/2012	4.270	110.342	110.342	110.342	108.824	106.435	104.266	102.444	101.066
11/19/2007	11/19/2014	8/20/2012	3.750	109.083	109.083	109.083	107.576	105.231	103.173	101.550	100.474
11/19/2007	11/19/2014	8/20/2012	3.750	109.083	109.083	109.083	107.576	105.231	103.173	101.550	100.474
11/19/2007	11/20/2017	11/19/2012	4.290	123.462	123.462	122.020	116.291	110.781	105.924	102.439	100.623
11/20/2007	11/20/2017	8/20/2012	3.740	120.454	120.454	119.222	114.211	109.809	106.210	103.416	101.445
11/23/2007	11/24/2017	8/23/2012	3.990	121.866	121.866	120.406	114.701	109.213	104.028	99.128	94.496
11/23/2007	11/24/2017	8/23/2012	3.990	121.866	121.866	120.406	114.701	109.213	104.028	99.128	94.496
11/29/2007	11/29/2017	8/29/2012	2.950	116.207	116.207	115.039	110.372	106.419	103.396	101.293	100.133
11/30/2007	11/30/2017	8/30/2012	3.190	117.535	117.535	116.328	111.538	107.437	104.221	101.900	100.481
12/7/2007	12/7/2012	9/7/2012	3.450	101.533	101.533	101.533	101.394	100.958	100.528	100.157	99.896
12/10/2007	12/11/2017	9/10/2012	3.450	119.069	119.069	117.784	112.865	108.603	105.180	102.649	100.975
12/11/2007	12/11/2012	9/11/2012	3.760	101.713	101.713	101.713	101.568	101.120	100.677	100.275	99.973
12/20/2007	12/20/2012	8/29/2012	3.750	101.802	101.802	101.802	101.644	101.172	100.705	100.242	99.783
12/20/2007	12/20/2012	9/20/2012	3.600	101.730	101.730	101.730	101.572	101.100	100.635	100.221	99.912
12/24/2007	12/26/2017	12/24/2012	3.990	122.221	122.221	120.595	114.796	109.296	104.661	101.829	100.341
12/26/2007	12/26/2012	9/26/2012	3.960	101.969	101.969	101.969	101.802	101.314	100.831	100.376	100.016
12/26/2007	12/26/2012	9/26/2012	3.460	101.720	101.720	101.720	101.554	101.066	100.588	100.168	99.856
1/2/2008	1/2/2013	10/2/2012	3.490	101.803	101.803	101.803	101.626	101.120	100.626	100.195	99.997
1/3/2008	1/5/2015	10/3/2012	3.650	109.317	109.317	109.317	107.709	105.261	103.148	101.516	100.435
1/4/2008	1/4/2018	7/5/2012	3.360	118.796	118.796	117.422	112.514	108.279	104.909	102.452	100.845
1/7/2008	1/7/2013	7/9/2012	2.990	101.586	101.586	101.586	101.403	100.884	100.389	100.054	99.974
1/7/2008	1/7/2013	7/9/2012	3.590	101.905	101.905	101.905	101.721	101.201	100.691	100.241	99.997
1/7/2008	1/7/2015	7/9/2012	3.490	108.928	108.928	108.928	107.320	104.886	102.815	101.246	100.293
1/7/2008	1/8/2018	7/9/2012	2.590	114.517	114.517	113.259	108.776	105.071	102.369	100.702	100.031
1/8/2008	1/8/2013	7/9/2012	3.150	101.680	101.680	101.680	101.495	100.973	100.472	100.090	99.978
1/8/2008	1/8/2018	7/9/2012	2.570	114.405	114.405	113.152	108.681	104.991	102.311	100.666	100.017
1/8/2008	1/8/2018	7/9/2012	2.640	114.797	114.797	113.530	109.012	105.267	102.510	100.789	100.064
1/11/2008	1/11/2018	7/11/2012	2.720	115.268	115.268	113.973	109.399	105.586	102.743	100.923	100.109
1/14/2008	1/16/2018	7/16/2012	3.240	118.232	118.232	116.826	111.952	107.772	104.482	102.111	100.597
1/16/2008	1/16/2013	7/16/2012	2.550	101.417	101.417	101.417	101.220	100.679	100.197	99.978	99.935
1/16/2008	1/16/2018	7/16/2012	2.380	113.393	113.393	112.155	107.800	104.251	101.783	100.352	99.927
1/17/2008	1/17/2018	7/17/2012	2.250	112.667	112.667	111.458	107.199	103.768	101.438	100.220	99.917
1/18/2008	1/18/2013	7/18/2012	2.550	101.431	101.431	101.431	101.231	100.685	100.198	99.975	99.927
1/18/2008	1/20/2015	7/18/2012	2.350	106.096	106.096	106.096	104.511	102.310	100.752	100.053	99.917
1/18/2008	1/18/2018	7/18/2012	2.290	112.899	112.899	111.677	107.385	103.913	101.539	100.254	99.914
1/24/2008	1/24/2013	7/24/2012	2.500	101.444	101.444	101.444	101.236	100.674	100.176	99.964	99.899
1/25/2008	1/25/2013	1/26/2009	2.250	101.306	101.306	101.306	101.097	100.531	99.971	99.418	98.871
1/25/2008	1/25/2013	1/25/2011	2.650	101.538	101.538	101.538	101.329	100.762	100.202	99.648	99.100
1/28/2008	1/28/2013	1/28/2011	2.990	101.761	101.761	101.761	101.546	100.971	100.402	99.840	99.284
1/30/2008	1/30/2013	7/30/2012	2.670	101.587	101.587	101.587	101.370	100.792	100.264	99.969	99.888
2/7/2008	2/7/2013	8/7/2012	2.490	101.535	101.535	101.535	101.307	100.707	100.198	99.945	99.838
2/13/2008	2/13/2013	8/13/2012	2.920	101.849	101.849	101.849	101.611	100.991	100.414	100.033	99.867
2/14/2008	2/14/2018	8/14/2012	3.190	118.208	118.208	116.324	110.481	104.899	99.639	94.680	90.003
2/19/2008	2/19/2013	2/19/2010	2.590	101.683	101.683	101.683	101.436	100.797	100.167	99.544	98.929
2/25/2008	2/25/2013	8/25/2012	3.090	102.060	102.060	102.060	101.803	101.146	100.496	99.856	99.223
2/25/2008	2/26/2018	8/27/2012	2.420	113.893	113.893	112.513	108.064	104.441	101.891	100.398	99.805
3/7/2008	3/9/2015	9/7/2012	2.890	107.883	107.883	107.883	106.157	103.695	101.759	100.517	99.902
3/7/2008	3/7/2018	3/7/2013	3.550	120.470	120.470	118.820	113.708	109.284	105.716	103.005	101.043
3/10/2008	3/11/2013	9/10/2012	2.390	101.686	101.686	101.686	101.408	100.724	100.175	99.869	99.666
3/12/2008	3/12/2013	9/12/2012	2.010	101.424	101.424	101.424	101.144	100.476	100.022	99.777	99.577
3/14/2008	3/14/2018	9/14/2012	2.400	113.885	113.885	112.450	108.011	104.401	101.880	100.402	99.750
3/17/2008	3/18/2013	9/17/2012	2.690	101.950	101.950	101.950	101.661	100.952	100.335	99.944	99.697
3/17/2008	3/19/2018	3/18/2013	3.300	119.138	119.138	117.473	112.465	108.176	104.780	102.264	100.467
3/28/2008	3/28/2013	9/28/2012	2.820	102.123	102.123	102.123	101.817	101.077	100.347	99.627	98.918
4/14/2008	4/14/2015	7/14/2012	2.750	107.776	107.776	107.776	105.932	103.133	100.422	97.797	95.254
4/28/2008	4/28/2015	7/30/2012	3.250	109.316	109.316	109.316	107.446	104.782	102.580	100.984	100.148
4/28/2008	4/30/2018	7/30/2012	2.150	112.719	112.719	111.200	106.903	103.496	101.212	100.125	99.845
4/30/2008	4/30/2018	4/30/2013	3.740	122.127	122.127	119.815	113.699	108.220	104.216	101.626	100.028
5/2/2008	5/4/2015	8/2/2012	3.990	111.504	111.504	111.504	109.589	106.801	104.355	102.390	100.986
5/5/2008	5/5/2015	8/6/2012	3.170	109.148	109.148	109.148	107.266	104.615	102.452	100.926	100.109
5/8/2008	5/8/2015	8/8/2012	2.960	108.567	108.567	108.567	106.688	104.081	102.010	100.648	100.009

As of: 6/30/2012

## 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
5/19/2008	5/19/2015	8/21/2012	4.700	113.747	113.747	113.747	111.759	108.782	105.901	103.113	100.414
5/23/2008	5/23/2013	8/23/2012	4.040	103.669	103.669	103.669	103.269	102.372	101.505	100.727	100.170
5/23/2008	5/23/2018	8/23/2012	3.270	119.555	119.555	117.624	112.523	108.180	104.756	102.274	100.704
5/27/2008	5/28/2013	5/27/2011	3.490	103.218	103.218	103.218	102.810	101.901	101.009	100.131	99.269
6/6/2008	6/6/2013	9/6/2012	3.990	103.779	103.779	103.779	103.355	102.419	101.500	100.597	99.711
6/16/2008	6/17/2013	9/16/2012	4.070	103.979	103.979	103.979	103.535	102.568	101.620	100.688	99.774
6/24/2008	6/24/2015	9/24/2012	3.830	111.585	111.585	111.585	109.528	106.636	104.124	102.154	100.787
6/30/2008	7/1/2013	10/1/2012	2.920	102.968	102.968	102.968	102.502	101.515	100.652	100.114	99.994
6/30/2008	7/1/2013	10/1/2012	3.450	103.507	103.507	103.507	103.040	102.043	101.115	100.394	100.034
6/30/2008	6/30/2015	10/1/2012	3.370	110.250	110.250	110.250	108.198	105.370	103.032	101.308	100.306
6/30/2008	7/2/2018	9/30/2012	3.690	122.477	122.477	119.789	113.477	107.465	101.817	96.511	91.523
7/1/2008	7/1/2015	7/1/2012	4.600	114.004	114.004	114.004	111.885	108.789	105.796	102.902	100.105
7/7/2008	7/8/2013	7/7/2012	4.590	104.755	104.755	104.755	104.273	103.244	102.233	101.241	100.267
7/8/2008	7/8/2013	7/8/2012	4.250	104.403	104.403	104.403	103.922	102.894	101.886	100.895	99.923
7/10/2008	7/10/2014	7/10/2012	4.800	109.866	109.866	109.866	108.629	106.553	104.528	102.552	100.819
7/11/2008	7/11/2018	7/11/2012	3.750	122.936	122.936	120.191	113.844	107.799	102.187	100.021	99.992
7/14/2008	7/14/2015	7/15/2013	4.900	115.094	115.094	115.094	112.920	109.742	106.610	103.601	100.681
7/14/2008	7/16/2018	7/16/2012	2.500	115.325	115.325	113.397	108.747	104.960	102.249	100.595	99.967
7/14/2008	7/16/2018	7/16/2012	3.250	119.923	119.923	117.757	112.601	108.224	104.785	102.303	100.704
7/17/2008	7/17/2018	7/17/2013	3.750	122.998	122.998	120.217	113.920	108.479	104.549	101.847	100.024
7/21/2008	7/22/2013	7/23/2012	3.000	103.225	103.225	103.225	102.721	101.660	100.617	100.003	99.935
8/15/2008	8/15/2018	8/15/2012	3.830	123.797	123.797	121.356	115.836	111.051	107.146	104.102	101.908
8/19/2008	8/19/2013	8/19/2010	3.440	103.965	103.965	103.965	103.409	102.268	101.145	100.039	98.951
9/8/2008	9/9/2013	9/10/2012	2.890	103.500	103.500	103.500	102.907	101.738	100.744	100.098	99.784
5/13/2009	5/13/2014	5/13/2013	4.000	107.577	107.577	107.577	106.445	104.375	102.117	99.848	97.946
9/28/2009	9/30/2013	9/28/2012	2.920	103.706	103.706	103.706	103.072	101.743	100.517	99.661	99.232
5/11/2010	5/11/2015	5/11/2015	3.700	110.740	110.740	110.740	108.761	105.564	101.911	97.637	93.223
5/24/2010	5/26/2015	8/24/2012	2.250	106.624	106.624	106.624	104.676	101.784	98.987	98.665	96.281
6/15/2010	6/15/2015	9/15/2012	2.280	106.839	106.839	106.839	104.831	101.884	99.113	99.035	96.280
4/27/2012	4/27/2016	4/29/2013	0.006	104.333	104.333	104.333	101.838	100.495	100.119	99.987	99.905
4/30/2012	5/2/2016	4/30/2013	0.006	104.209	104.209	104.209	101.735	100.446	100.112	99.989	99.910
5/15/2012	5/15/2017	5/15/2014	0.007	105.936	105.936	105.376	101.832	100.180	99.417	99.056	98.844
5/15/2012	5/15/2017	11/17/2014	0.007	106.288	106.288	105.727	102.089	100.317	99.396	98.906	98.599