

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
1/7/2000	1/7/2015	7/7/2014	5.950	104.165	104.165	104.165	103.961	103.267	102.582	101.907	101.248
7/2/2004	7/2/2014	7/2/2014	3.990	100.698	100.698	100.698	100.675	100.502	100.331	100.159	99.988
12/13/2004	12/15/2014	6/13/2014	3.320	102.112	102.112	102.112	101.936	101.312	100.705	100.191	99.920
9/1/2005	9/1/2015	6/1/2014	4.130	105.610	105.610	105.610	104.958	103.605	102.275	100.969	99.685
9/30/2005	9/30/2015	6/30/2014	4.440	106.388	106.388	106.388	105.651	104.213	102.801	101.415	100.054
10/26/2005	10/26/2015	7/26/2014	4.540	106.860	106.860	106.860	106.041	104.530	103.048	101.595	100.169
1/17/2006	1/19/2016	7/17/2014	4.080	107.128	107.128	107.128	106.022	104.307	102.716	101.363	100.402
4/24/2006	4/25/2016	7/24/2014	4.440	108.953	108.953	108.953	107.469	105.482	103.636	102.034	100.799
5/5/2006	5/5/2016	5/5/2014	4.350	108.893	108.893	108.893	107.369	105.365	103.517	101.934	100.739
5/5/2006	5/5/2016	5/5/2014	4.530	109.261	109.261	109.261	107.734	105.718	103.844	102.213	100.942
5/15/2006	5/16/2016	5/15/2014	4.350	109.026	109.026	109.026	107.455	105.421	103.547	101.939	100.728
5/15/2006	5/16/2016	5/15/2014	4.520	109.378	109.378	109.378	107.804	105.759	103.860	102.207	100.918
5/19/2006	5/19/2016	5/19/2014	4.510	109.395	109.395	109.395	107.808	105.756	103.850	102.193	100.905
6/12/2006	6/13/2016	6/12/2014	4.620	109.945	109.945	109.945	108.244	106.122	104.150	102.428	101.075
6/26/2006	6/27/2016	6/26/2014	4.730	110.366	110.366	110.366	108.597	106.429	104.408	102.631	101.216
7/24/2006	7/25/2016	7/24/2014	4.660	110.575	110.575	110.575	108.668	106.436	104.370	102.573	101.156
7/28/2006	7/28/2016	7/28/2014	4.490	110.227	110.227	110.227	108.310	106.082	104.038	102.282	100.934
8/25/2006	8/25/2016	5/27/2014	4.350	110.246	110.246	110.246	108.187	105.909	103.838	102.091	100.784
11/24/2006	11/25/2016	5/27/2014	4.190	110.940	110.940	110.940	108.370	105.910	103.728	101.938	100.658
12/1/2006	12/1/2016	6/2/2014	4.090	110.747	110.747	110.743	108.154	105.705	103.551	101.810	100.596
12/4/2006	12/5/2016	6/4/2014	4.080	110.766	110.766	110.748	108.149	105.692	103.535	101.793	100.584
12/5/2006	12/5/2016	6/5/2014	4.260	111.241	111.241	111.223	108.609	106.122	103.914	102.094	100.777
12/8/2006	12/8/2016	6/9/2014	3.990	110.562	110.562	110.533	107.934	105.487	103.351	101.646	100.492
12/12/2006	12/12/2016	6/12/2014	3.990	110.606	110.606	110.563	107.953	105.497	103.353	101.643	100.487
12/12/2006	12/12/2016	6/12/2014	4.050	110.766	110.766	110.723	108.108	105.640	103.479	101.738	100.543
12/19/2006	12/19/2016	6/19/2014	4.190	111.219	111.219	111.152	108.506	105.998	103.782	101.972	100.675
12/28/2006	12/28/2016	6/30/2014	4.250	111.486	111.486	111.387	108.712	106.174	103.923	102.075	100.730
12/28/2006	12/28/2016	6/30/2014	4.400	111.892	111.892	111.792	109.106	106.544	104.255	102.346	100.917
1/12/2007	1/12/2017	7/14/2014	4.420	112.130	112.130	111.975	109.252	106.659	104.349	102.425	100.988
1/16/2007	1/17/2017	7/16/2014	4.790	113.212	113.212	113.038	110.274	107.617	105.207	103.140	101.519
2/2/2007	2/2/2017	5/2/2014	4.690	113.144	113.144	112.911	110.063	107.249	104.523	101.881	99.658
2/20/2007	2/21/2017	5/20/2014	4.850	113.849	113.849	113.547	110.633	107.756	104.970	102.272	99.658
2/20/2007	2/21/2017	5/20/2014	4.390	112.535	112.535	112.238	109.408	106.732	104.364	102.404	100.951
2/23/2007	2/23/2017	5/23/2014	4.250	112.159	112.159	111.856	109.033	106.380	104.048	102.142	100.770
2/23/2007	2/23/2017	5/23/2014	4.350	112.445	112.445	112.141	109.309	106.636	104.274	102.327	100.892
3/16/2007	3/16/2017	6/16/2014	4.090	111.940	111.940	111.561	108.702	106.043	103.736	101.892	100.612
3/21/2007	3/21/2017	6/23/2014	4.220	112.378	112.378	111.978	109.092	106.393	104.033	102.120	100.748
3/23/2007	3/23/2017	6/23/2014	4.290	112.607	112.607	112.199	109.299	106.582	104.198	102.249	100.833
3/23/2007	3/23/2017	6/23/2014	4.290	112.607	112.607	112.199	109.299	106.582	104.198	102.249	100.833
4/9/2007	4/10/2017	7/9/2014	4.150	112.403	112.403	111.926	109.002	106.283	103.926	102.035	100.708
4/12/2007	4/12/2017	7/14/2014	4.250	112.726	112.726	112.239	109.298	106.552	104.156	102.216	100.816
4/13/2007	4/13/2017	7/14/2014	4.450	113.337	113.337	112.845	109.877	107.090	104.630	102.598	101.085
4/27/2007	4/27/2017	7/28/2014	4.250	112.903	112.903	112.357	109.376	106.596	104.173	102.213	100.797
5/2/2007	5/2/2014	5/2/2014	4.590	100.025	100.025	100.025	100.025	100.019	100.014	100.009	100.003
5/4/2007	5/5/2014	5/5/2014	4.550	100.063	100.063	100.063	100.062	100.048	100.035	100.021	100.008
5/18/2007	5/18/2017	5/19/2014	4.190	112.965	112.965	112.337	109.311	106.510	104.082	102.130	100.751
5/22/2007	5/22/2017	5/22/2014	4.750	114.751	114.751	114.098	110.996	108.067	105.454	103.252	101.545
5/29/2007	5/30/2017	5/29/2014	4.250	113.292	113.292	112.617	109.548	106.706	104.239	102.250	100.819
6/1/2007	6/2/2014	6/2/2014	4.500	100.412	100.412	100.412	100.401	100.312	100.223	100.134	100.046
6/7/2007	6/7/2017	6/9/2014	4.820	115.182	115.182	114.462	111.312	108.341	105.689	103.448	101.699
6/8/2007	6/8/2017	6/9/2014	4.490	114.155	114.155	113.437	110.321	107.413	104.860	102.753	101.182
6/11/2007	6/12/2017	6/11/2014	4.490	114.205	114.205	113.469	110.342	107.425	104.865	102.753	101.178
6/18/2007	6/19/2017	6/18/2014	4.500	114.324	114.324	113.557	110.410	107.474	104.898	102.771	101.183
6/19/2007	6/19/2017	6/19/2014	4.650	114.802	114.802	114.031	110.866	107.899	105.274	103.082	101.412
6/22/2007	6/22/2017	6/23/2014	4.500	114.362	114.362	113.581	110.426	107.483	104.901	102.769	101.177
6/28/2007	6/28/2017	6/30/2014	4.500	114.437	114.437	113.629	110.458	107.501	104.908	102.768	101.167
7/13/2007	7/13/2017	7/14/2014	4.290	113.942	113.942	113.070	109.895	106.968	104.433	102.387	100.912
7/20/2007	7/20/2017	7/21/2014	4.290	114.025	114.025	113.120	109.928	106.985	104.439	102.383	100.902

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
7/27/2007	7/27/2017	7/28/2014	4.250	113.977	113.977	113.040	109.837	106.889	104.345	102.303	100.838
7/30/2007	1/30/2019	7/30/2014	3.990	119.239	119.239	115.219	110.984	107.347	104.399	102.162	100.677
7/31/2007	7/31/2017	7/31/2014	3.990	113.166	113.166	112.220	109.058	106.181	103.743	101.833	100.548
7/31/2007	7/31/2017	7/31/2014	3.990	113.166	113.166	112.220	109.058	106.181	103.743	101.833	100.548
7/31/2007	7/31/2017	7/31/2014	4.060	113.397	113.397	112.449	109.274	106.375	103.909	101.962	100.625
8/2/2007	8/4/2014	5/2/2014	4.490	101.197	101.197	101.197	101.157	100.895	100.634	100.375	100.117
8/2/2007	8/2/2017	5/2/2014	4.150	113.717	113.717	112.757	109.564	106.640	104.142	102.157	100.769
8/2/2007	8/2/2017	5/2/2014	4.050	113.387	113.387	112.430	109.255	106.360	103.902	101.969	100.656
8/9/2007	8/9/2017	5/9/2014	3.990	113.266	113.266	112.278	109.096	106.206	103.760	101.853	100.572
8/16/2007	8/16/2017	5/16/2014	3.990	113.343	113.343	112.322	109.122	106.218	103.760	101.845	100.555
8/17/2007	8/17/2017	5/19/2014	4.000	113.388	113.388	112.362	109.157	106.248	103.784	101.863	100.566
8/20/2007	8/20/2014	5/20/2014	4.250	101.322	101.322	101.322	101.269	100.964	100.661	100.359	100.060
8/28/2007	8/28/2014	5/28/2014	4.350	101.450	101.450	101.450	101.391	101.064	100.739	100.417	100.113
8/30/2007	9/2/2014	5/30/2014	3.890	101.351	101.351	101.351	101.287	100.947	100.609	100.273	100.020
9/4/2007	9/5/2017	6/4/2014	3.890	113.225	113.225	112.119	108.895	105.996	103.567	101.703	100.490
9/10/2007	9/11/2017	6/10/2014	3.690	112.607	112.607	111.484	108.292	105.448	103.108	101.359	100.288
9/11/2007	9/11/2017	6/11/2014	3.590	112.265	112.265	111.150	107.983	105.175	102.884	101.200	100.200
9/12/2007	9/12/2014	6/12/2014	3.690	101.384	101.384	101.384	101.310	100.942	100.577	100.220	99.977
9/13/2007	9/15/2014	6/13/2014	3.990	101.529	101.529	101.529	101.453	101.076	100.703	100.334	100.033
9/13/2007	9/13/2017	6/13/2014	3.990	113.654	113.654	112.501	109.238	106.289	103.803	101.870	100.573
9/27/2007	9/29/2014	9/27/2010	4.490	101.896	101.896	101.896	101.805	101.389	100.976	100.567	100.161
9/27/2007	9/27/2017	6/27/2014	3.650	112.632	112.632	111.433	108.215	105.356	103.011	101.273	100.214
10/11/2007	10/14/2014	7/11/2014	4.180	101.939	101.939	101.939	101.832	101.375	100.923	100.481	100.099
10/11/2007	10/11/2017	7/11/2014	3.990	113.964	113.964	112.670	109.350	106.360	103.846	101.892	100.594
10/15/2007	10/16/2017	7/15/2014	3.990	114.019	114.019	112.698	109.367	106.368	103.848	101.891	100.589
10/25/2007	10/27/2014	7/25/2014	4.360	102.180	102.180	102.180	102.058	101.567	101.079	100.601	100.175
10/26/2007	10/26/2017	7/28/2014	3.390	112.005	112.005	110.683	107.490	104.701	102.476	100.892	100.018
11/2/2007	11/3/2014	5/2/2014	3.990	102.072	102.072	102.072	101.943	101.433	100.928	100.444	100.079
11/2/2007	11/3/2014	5/2/2014	4.190	102.176	102.176	102.176	102.047	101.536	101.031	100.542	100.120
11/5/2007	11/5/2014	5/5/2014	3.990	102.095	102.095	102.095	101.963	101.447	100.937	100.448	100.080
11/5/2007	11/6/2017	5/5/2014	4.390	115.681	115.681	114.228	110.772	107.618	104.908	102.722	101.129
11/6/2007	11/6/2017	5/6/2014	3.480	112.430	112.430	111.049	107.815	104.982	102.706	101.070	100.173
11/9/2007	11/10/2014	5/9/2014	4.330	102.333	102.333	102.333	102.196	101.666	101.141	100.630	100.177
11/13/2007	11/13/2014	5/13/2014	3.350	101.833	101.833	101.833	101.693	101.156	100.630	100.164	99.977
11/19/2007	11/19/2014	5/19/2014	4.270	102.408	102.408	102.408	102.261	101.705	101.156	100.623	100.156
11/19/2007	11/19/2014	5/19/2014	3.750	102.114	102.114	102.114	101.968	101.413	100.866	100.356	100.025
11/19/2007	11/20/2017	5/19/2014	4.290	115.491	115.491	113.900	110.214	106.627	103.178	99.861	96.671
11/20/2007	11/20/2017	5/20/2014	3.740	113.505	113.505	112.028	108.682	105.720	103.285	101.463	100.308
11/23/2007	11/24/2017	5/19/2014	3.990	114.452	114.452	112.841	109.159	105.580	102.139	98.831	95.650
11/23/2007	11/24/2017	5/24/2014	3.990	114.452	114.452	112.841	109.159	105.580	102.139	98.831	95.650
11/29/2007	11/29/2017	5/29/2014	2.950	110.726	110.726	109.315	106.210	103.598	101.629	100.372	99.916
11/30/2007	11/30/2017	5/30/2014	3.190	111.607	111.607	110.153	106.953	104.219	102.097	100.670	100.003
12/10/2007	12/11/2017	6/10/2014	3.450	112.659	112.659	111.113	107.816	104.952	102.664	101.023	100.113
12/24/2007	12/26/2017	6/24/2014	3.990	114.806	114.806	113.008	109.237	105.574	102.056	98.676	95.428
1/3/2008	1/5/2015	7/3/2014	3.650	102.535	102.535	102.535	102.335	101.652	100.985	100.386	99.991
1/4/2008	1/4/2018	7/7/2014	3.360	112.552	112.552	110.896	107.595	104.748	102.496	100.915	100.059
1/7/2008	1/7/2015	7/7/2014	3.490	102.443	102.443	102.443	102.241	101.554	100.884	100.307	99.934
1/7/2008	1/8/2018	7/7/2014	2.590	109.704	109.704	108.182	105.214	102.788	101.062	100.101	99.743
1/8/2008	1/8/2018	7/8/2014	2.570	109.629	109.629	108.112	105.154	102.740	101.029	100.088	99.734
1/8/2008	1/8/2018	7/8/2014	2.640	109.892	109.892	108.357	105.362	102.902	101.141	100.136	99.751
1/11/2008	1/11/2018	7/11/2014	2.720	110.214	110.214	108.645	105.605	103.090	101.266	100.191	99.760
1/14/2008	1/16/2018	7/14/2014	3.240	112.212	112.212	110.510	107.231	104.426	102.236	100.738	99.976
1/16/2008	1/16/2018	7/16/2014	2.380	108.970	108.970	107.467	104.607	102.307	100.740	99.968	99.651
1/17/2008	1/17/2018	7/17/2014	2.250	108.487	108.487	107.020	104.238	102.029	100.575	99.897	99.614
1/18/2008	1/20/2015	7/18/2014	2.350	101.730	101.730	101.730	101.513	100.802	100.207	99.854	99.630
1/18/2008	1/18/2018	7/18/2014	2.290	108.644	108.644	107.159	104.350	102.112	100.620	99.914	99.618
2/14/2008	2/14/2018	5/14/2014	3.190	112.280	112.280	110.194	106.328	102.591	99.006	95.567	92.267
2/25/2008	2/26/2018	5/27/2014	2.420	109.397	109.397	107.723	104.766	102.410	100.787	100.033	99.882

As of: **4/30/2014** 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
3/7/2008	3/9/2015	6/9/2014	2.890	102.512	102.512	102.512	102.232	101.381	100.604	100.066	99.877
3/7/2008	3/7/2018	6/9/2014	3.550	113.874	113.874	111.876	108.392	105.378	102.965	101.220	100.200
3/14/2008	3/14/2018	6/16/2014	2.400	109.426	109.426	107.691	104.740	102.388	100.780	100.011	99.789
3/17/2008	3/19/2018	6/17/2014	3.300	113.006	113.006	110.990	107.577	104.670	102.400	100.826	100.031
4/14/2008	4/14/2015	7/14/2014	2.750	102.666	102.666	102.666	102.330	101.376	100.440	99.521	98.619
4/28/2008	4/28/2015	7/28/2014	3.250	103.277	103.277	103.277	102.917	101.926	101.000	100.269	99.832
4/28/2008	4/30/2018	7/28/2014	2.150	108.724	108.724	106.877	104.054	101.855	100.462	99.820	99.536
4/30/2008	4/30/2018	7/30/2014	3.740	115.177	115.177	112.628	108.516	104.544	100.743	97.103	93.617
5/2/2008	5/4/2015	5/2/2014	3.990	104.089	104.089	104.089	103.717	102.702	101.724	100.846	100.186
5/5/2008	5/5/2015	5/5/2014	3.170	103.258	103.258	103.258	102.885	101.878	100.950	100.237	99.989
5/19/2008	5/19/2015	5/21/2014	4.700	105.013	105.013	105.013	104.611	103.547	102.501	101.473	100.461
5/23/2008	5/23/2018	5/23/2014	3.270	113.479	113.479	111.134	107.627	104.666	102.367	100.789	100.049
6/24/2008	6/24/2015	6/24/2014	3.830	104.468	104.468	104.468	103.992	102.835	101.728	100.763	100.106
6/30/2008	7/2/2018	6/30/2014	3.690	115.620	115.620	112.673	108.389	104.261	100.316	96.544	92.938
7/10/2008	7/10/2014	7/10/2014	4.800	100.947	100.947	100.947	100.919	100.725	100.531	100.339	100.146
7/11/2008	7/11/2018	7/11/2014	3.750	115.968	115.968	112.960	108.647	104.491	100.520	96.725	93.097
7/14/2008	7/14/2015	7/15/2014	4.900	105.989	105.989	105.989	105.463	104.238	103.033	101.848	100.682
7/14/2008	7/16/2018	7/14/2014	2.500	110.679	110.679	108.341	105.199	102.696	100.964	100.048	99.692
7/14/2008	7/16/2018	7/14/2014	3.250	113.884	113.884	111.259	107.687	104.686	102.375	100.799	99.993
7/17/2008	7/17/2018	7/17/2014	3.750	116.030	116.030	112.983	108.653	104.483	100.498	96.690	93.051
8/15/2008	8/15/2018	5/15/2014	3.830	116.681	116.681	113.734	109.859	106.510	103.795	101.769	100.465
5/13/2009	5/13/2014	5/13/2014	4.000	100.144	100.144	100.144	100.140	100.105	100.070	100.035	100.000
5/11/2010	5/11/2015	5/11/2015	3.700	103.864	103.864	103.864	103.479	102.436	101.327	99.963	97.998
5/24/2010	5/26/2015	5/26/2014	2.250	102.443	102.443	102.443	102.032	100.963	99.911	98.876	97.857
6/15/2010	6/15/2015	5/15/2014	2.280	102.603	102.603	102.603	102.150	101.025	99.917	98.827	97.753
10/8/2010	10/8/2015	10/9/2012	2.250	103.287	103.287	103.287	102.534	101.097	99.688	98.305	96.947
12/27/2011	12/27/2021	12/29/2014	3.550	127.589	121.846	113.889	106.354	97.205	84.928	73.606	63.163
4/27/2012	4/27/2016	4/27/2013	1.430	102.891	102.891	102.891	101.425	99.460	97.542	95.671	93.845
4/30/2012	5/2/2016	4/30/2013	1.380	102.809	102.809	102.809	101.324	99.346	97.417	95.535	93.698
5/15/2012	5/15/2017	5/15/2014	-0.224	105.917	105.917	105.288	102.239	100.081	99.989	99.988	99.986
5/15/2012	5/15/2017	11/17/2014	-0.224	106.104	106.104	105.475	102.580	100.740	99.958	99.787	99.773
6/20/2012	6/20/2017	6/22/2015	1.630	105.193	105.193	104.409	101.113	96.153	91.389	86.813	82.417
7/16/2012	7/17/2017	7/16/2014	-0.221	105.252	105.252	104.342	101.233	99.842	99.565	99.357	99.151
7/18/2012	7/18/2018	7/20/2015	-0.222	107.845	107.845	104.818	101.618	100.015	99.196	98.790	98.523
7/19/2012	7/19/2017	7/21/2014	-0.222	105.161	105.161	104.242	101.163	99.834	99.550	99.329	99.110
10/1/2012	10/1/2019	4/1/2015	-0.127	110.025	109.323	103.905	100.858	99.742	99.374	99.182	99.028
10/5/2012	10/5/2017	10/6/2014	-0.120	104.917	104.917	103.601	100.819	99.854	99.575	99.396	99.224
3/8/2013	3/8/2018	3/9/2015	-0.035	105.238	105.238	103.042	100.577	99.803	99.563	99.440	99.342